MC2018-Ver.5

MAIN CATALOGUE

SELUX

NC TOOLING SYSTEM

FOR MACHINING CENTER

SEKWANG SELUX CO., LTD.

SEKWANG SELUX CO., LTD. as a manufacturer specialized in the production of machining center tool has pursued customer emotion through a competitive technology and quality. Also, we will try constantly to develop 21th century Tooling System through persistent technical improvements with new challenge and target named Global Market Leader.

(주) 세광세럭스는 머시닝센터 툴 전문 메이커로서
기술경쟁력, 품질경쟁력을 통하여 고객 감동을 추구하는 서비스로
Global Market Leader 기업 달성의 새로운 도전과 목표를 향하여 지속적인
기술 혁신을 통한 21세기 툴링 시스템 개발을 위해 부단히노력할 것입니다.

COMPANY HISTORY

1979 04 세광정밀 설립	Mar 1979 Established Sekwang Precision Manufacture.
1986 04 Straight Collet 생산	Apr 1986 Products Straight Collet.
2001 05 Tooling System 생산	May 2001 Products Tooling System.
2003 10 부천공장 이전	Oct 2003 Moved in Bucheon Factory.
2007 04 (주)세광으로 상호변경	Apr 2007 Changed the firm name as Sekwang co., Ltd
2008 05 SC Collet 개발 생산	May 2008 Developed & Produced SC Collet.
2009 12 ISO/TS 16949 : 2009 인증취득	Dec 2009 Acquired ISO/TS 16949 : 2009 certificate.
2010 02 HSK Tooling System 개발생산	Feb 2010 Products HSK Tooling System.
2011 05 연구소설립	May 2011 Estaldished Laboratory.
2011 09 SELUX 상표등록	Sep 2011 Register SELUX Brand.
2012 06 부천 도당동 공장으로 확장 이전	June 2012 Moved in Extended Factory.
2014 04 국내/외 전시회 출품시작	Apr 2014 Join the Local and oversea exhibition.
2014 12 GBT 이면구속 Tooling System 개발생산	Dec 2014 Products GBT two face contact Tooling System.
2015 04 열박음척 개발생산	Apr 2015 Products SHRINK FIT Tooling System.
2017 11 현 공장으로 확장이전	Nov 2017 Moved in Extended Factory.
2017 12 (주)세광 세록스로 사명변경	Dec 2017 Changed the firm name as Sekwang selux co.,Ltd

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HSK SHANK 78,79
SK SHANK 96

MILLING CHUCK

Powerful Chucking Force

MAX
520kg f.m

K p134

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HIGH SPEED MILLING CHUCK

Excellent Run-out Accuracy

K p134

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Ø3.0 ~ Ø32.0

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Excellent Run-out Accuracy

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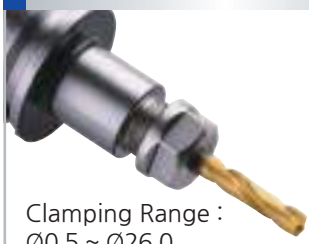
ER COLLET CHUCK



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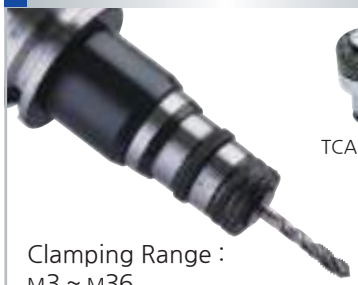
NC TOTAL TOOLING SYSTEM SELUX

TAPPING CHUCK



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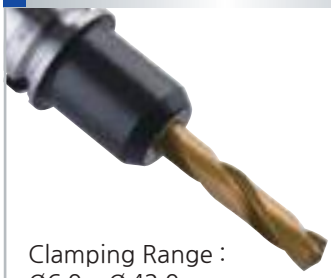

Clamping Range :
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JACOBS TAPER ARBOR

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■for Morse taper shank with tang.

TAPER 접촉율 80% 이상 진동없음.

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NC TOTAL TOOLING SYSTEM SELUX

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※ CNC 편심조정!!

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Ø0.5 ~ Ø16.0

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※ CNC 선반 TAP작업시 능률 UP!!

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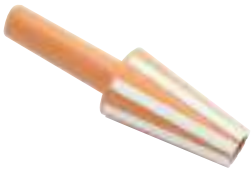
ACCESSORY



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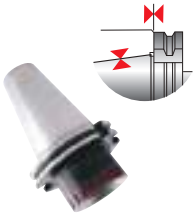
SK FACE CONTACT

BT FACE CONTACT

DIN 69871

MAS403 BT

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Rough/Super finishing

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GBT TOOLING SYSTEM

Excellent Precision, Excellent Quality

SELUX
NC TOOLING SYSTEM

SELUX
Dual Contact System

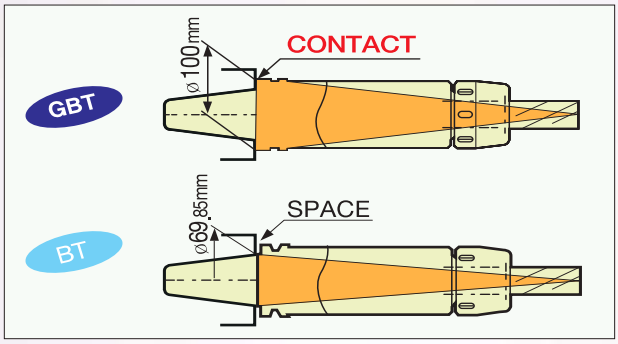
	BT	GBT
BT 50	ø69.85	Ø100
BT 40	ø44.45	Ø 63
BT 30	ø31.75	Ø 46

Basic Concept

GBT 이면구속 시스템은 표준 BT타입을 기반으로한 가장최신 기술입니다.
The GBT Dual Contact System is based on the most current available standards in BT(JIS B6339).

일반 테이퍼 홀더는 게이지 라인의 직경을 기준으로 스핀들에 접촉되어 사용되지만 GBT 홀더는 플랜지 면의 직경을 기준으로 접촉되어 스핀들 장착에 기존 테이퍼의 홀더보다 우수한 내구성 및 가공성의 효과를 가지고 있습니다.
A conventional steep taper toolholder is supported on a refeence diameter called the gauge face. On the contrary, a GBT toolhorder is supported on the flange face, which brings remarkable improvement to rigidity.

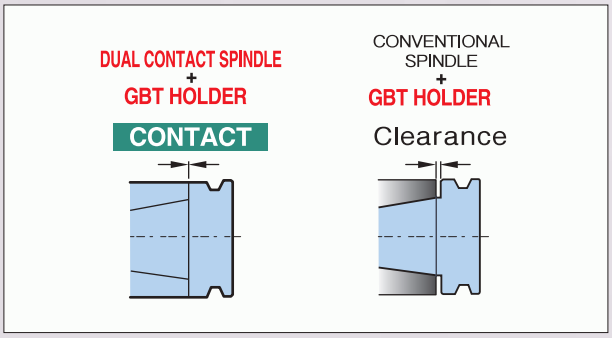
INCREASED CONTACT DIAMETER (Example of BT)

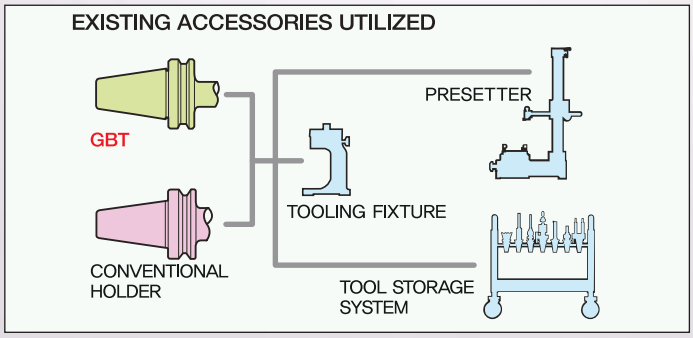


Perfect Interchangeability

GBT는 일반 표준 스핀들의 장비에서 사용될수 있습니다.
GBT toolholder can be used on existing standard machine spindles.
표준 툴 홀더들은 이면구속 스핀들에서 사용 될수 있습니다.
Existing standard toolholders can also be used on dual contact spindles.
이러한 경우, 동시 접촉 즉 이면구속의 효과는 없습니다.
In this case, simultaneous contact cannot be attained.

다른 동시 접촉 시스템은 이면구속 툴 홀더, 툴프리셋터, 툴크램프 등의 별도의 악세사리들을 요구하지만 **GBT** 이면구속 스핀들은 현재 사용중인 BT 타입의 악세사리들을 사용가능하며 사용중인 머신닝센터의 툴 메거진과 ATC를 개조할 필요 없이 사용가능합니다.
Although other simultaneous contact systems require exclusive new accessories, the dual contact spindle uses existing accessories such as a presetter and toolholder fixture. It is not necessary to modify tool magazines and ATC devices of existing machines.





HSK TOOLING SYSTEM

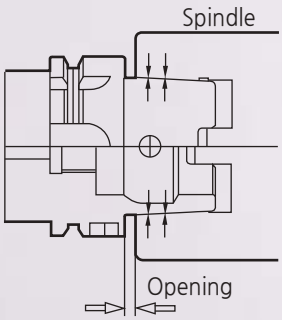
Excellent Precision, Excellent Quality

SELUX
NC TOOLING SYSTEM

HSK Shank perfect two-surface constrained system

2면 구속형 HSK Shank

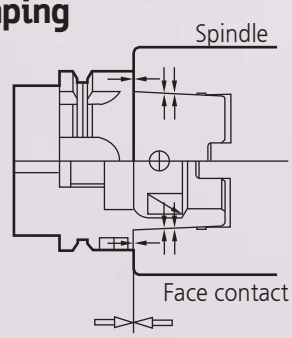
Connecting



Elastic deformation of taper makes flange surface closely contact the spindle.

Taper의 탄성변형이 Flange 단면에 Spindle에 밀착시킴

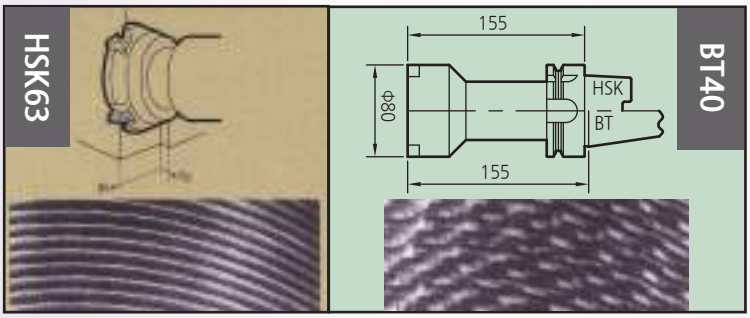
Clamping

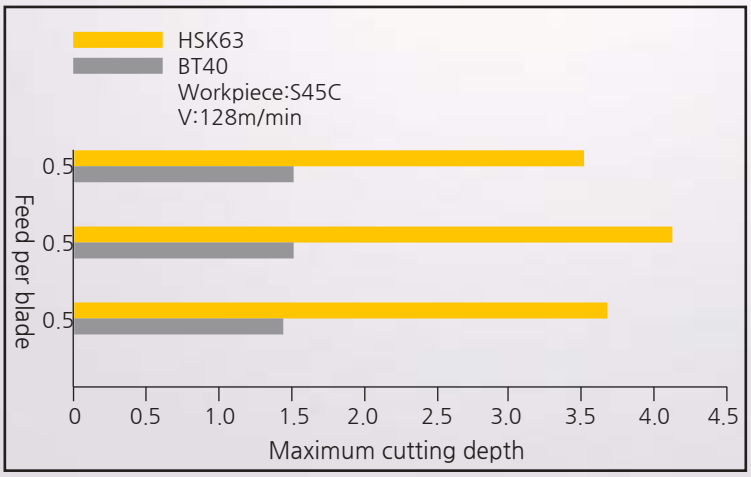


HIGH RIGIDITY AGAINST BENDING LOAD

Holder의 Taper가 Spindle의 형상 측면에 따라 유연하게 변경되므로 Spindle과 Holder 사이에 편심력이 없게 한다.

Two surface (taper and flange) constrained tool interface utilizing appropriate contact pressure distribution and elastic deformation of the taper has an extraordinary bending, strength and stand with heavy cutting with long projection length.



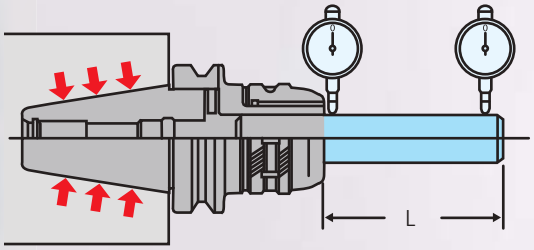


MILLING CHUCK

Excellent Precision, Excellent Quality

SELUX
NC TOOLING SYSTEM

Excellent Runout Accuracy



3.5D 선단에서 5㎛(T.I.R)이내의 흔들림 정도. 단면 밀착으로 진동을 흡수하여 최적의 절삭을 할수 있도록 제작되었습니다.

5㎛(T.I.R) RUN-OUT at 3.5D away from shank nose. Two face contact cause to be the optimal cutting operation because of vibrational absorption.

Clamping Torque Test Data

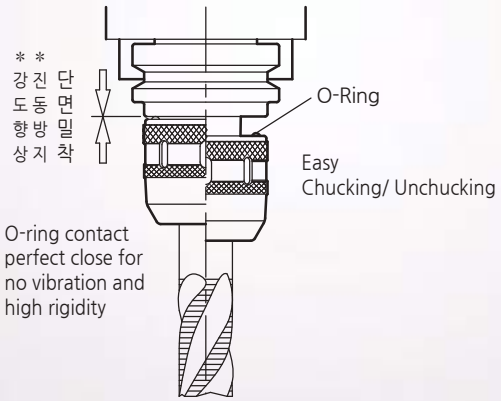
Model	Troque kg f.m
MC20	120
MC25	170
MC4032	250
MC5032	350
MC5042	500

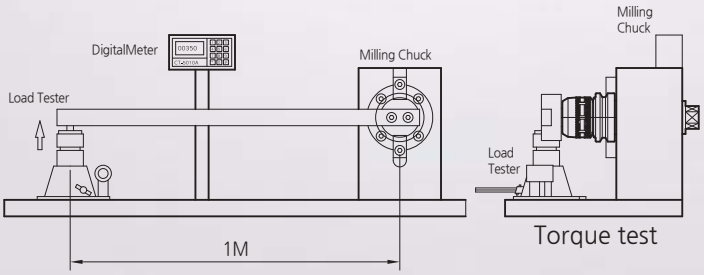
(SKP)	When oil removed completely with thinner cleanly
MC20	130kg f.m
MC25	180kg f.m
MC4032	260kg f.m
MC5032	360kg f.m
MC5042	520kg f.m

High Chucking Accuracy

SELUX 밀링척은 평균 2회전 안으로 척킹/언척킹이 가능하도록 제작되었습니다.
SELUX MILLING CHUCK is chucking and unchucking just whith 2 revolution

바디와 CAP부분 O-RING을 부착하여 진동을 방지하고 CAP내부 Retainer와 Roller를 보호하여 뛰어난 내구성을 자랑합니다.
As it has "O-RING" between body of milling chuck and CAP, SELUX MILLING CHUCK do not have vibration and has extreme rigidity.





Torque test

HYDRAULIC CHUCK

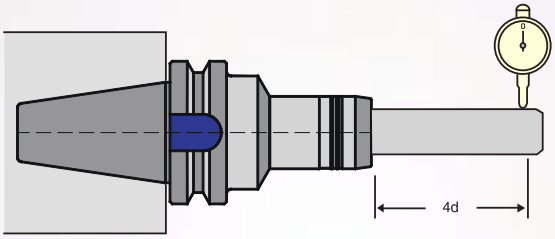
Excellent Precision, Excellent Quality

SELUX
NC TOOLING SYSTEM

Excellent Runout Accuracy

SELUX 유압척은 4D x 3㎛(T.I.R) 이내의 흔들림 정도를 보장하며 고속가공에 최적화되어 설계되었습니다.
(max. G2.5 at 25000rpm)

SELUX HYDRAULIC CHUCK ensure high precision runout accuracy is less than 3 ㎛ at 4D (T.I.R) and has been designed and optimized for high speed machining.
(Max G2.5 at 25,000 rpm)



Easy chucking system

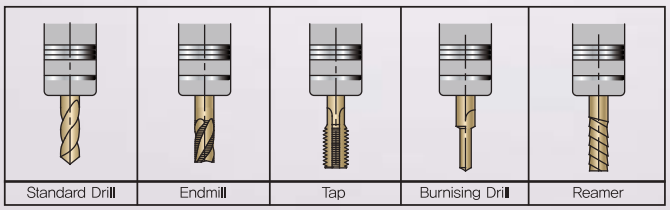
SELUX 유압척은 T-Wrench 하나로 쉽게 클램핑/언클램핑이 가능하며 사용시 공구교환이 쉽고 빠르게 하여 작업성 향상에 적합한 제품입니다.

SELUX HYDRAULIC CHUCK can be easy clamp and unclamp using just one T-Wrench and very convenient to exchage cutting tools.

Variety Use

SELUX 유압척은 정밀 정삭/사상 작업에 적합한 공구로 다양한 사용범위를 자랑합니다.

SELUX HYDRAULIC CHCUK boast a wide variety of uses as holder for precision finishing operation.



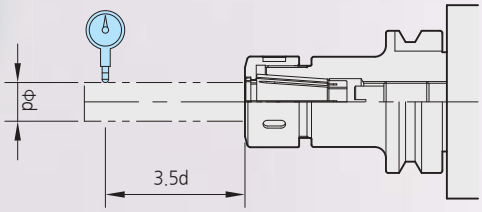
SSK COLLET CHUCK

Excellent Precision, Excellent Quality

SELUX
NC TOOLING SYSTEM

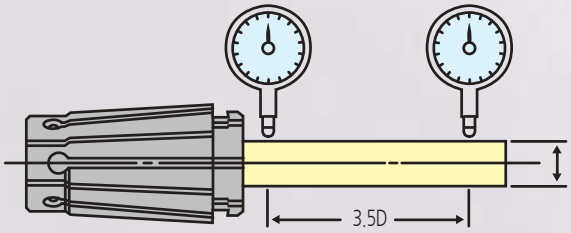
Excellent Run-out Accuracy

(All grounded collet chuck for speed and high accuracy.)



Style & ød	T.I.R(㎛)	
	Stanted	P class
SC 6 - ød	0.005	0.003
SC10 - ød		
SC13 - ød		
SC16 - ød		
SC20 - ød		
SC25 - ød		

정직한 RUN-OUT 결과를 보증하는 SELUX SSK COLLET CHUCK은 정밀가공에 최적화된 제품입니다.
SELUX SSK COLLET CHUCK that garrantee accuracy RUN-OUT is optimal product for precision operation.



3.5D 선단에서 표준 5㎛, 정밀급 3㎛을 전수검사로 보증합니다.
The standard is 5㎛(T.I.R) RUN-OUT and P CLASS is 3㎛(T.I.R)
RUN-OUT at 3.5D away from shank nose.
(We inspect all of the collet)

SELUX SSK COLLET CHUCK은 엔드밀, 드릴, 리머등 다양한 가공에 적합하게 제작되었습니다.
SELUX SSK COLLET CHUCK is suitable for a various operation using drill, endmill and reamer

GSK COLLET CHUCK

MAX 40,000 min^{-1}

Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

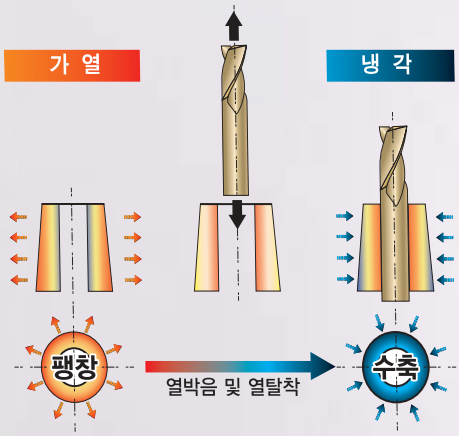
- 고속가공에서 높은 정도
- 8Taper의 강력한 파지력
- 원형 너트로 컴팩트한 디자인
- 스패너는 PH스패너 사용(별매)
- G2.5X max 40.000 RPM
- 고속형GSK척에는 P CLASS 콜렛 사용을 권장

SHRINK FIT HOLDER

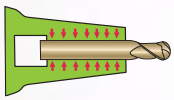
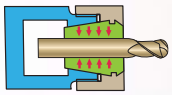
Excellent Precision, Excellent Quality

SELUX
NC TOOLING SYSTEM

Easy chucking

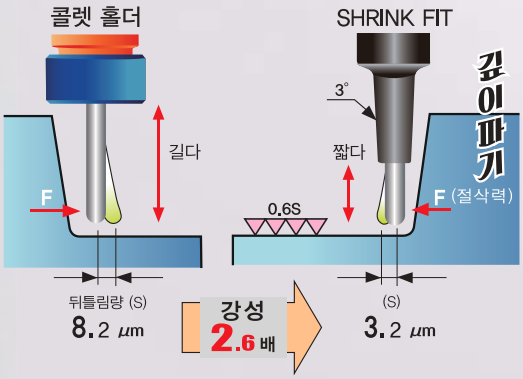


Power Clamping

	SHRINK FIT	Collet Holder
Chucking System 척킹원리	홀더의 열팽창을 이용한 열박음 시스템 The shrink fit system is based on Thermal expansion of the shrink fit holder	콜렛의 탄성으로 공구를 고정하는 시스템 The system to Clamp cutting tool using elastic collet
Chanking force 열팽창율(ø6)	6.2 kgf.m	2.1kgf.m
	 열팽창율▶수축력	 탄성변형

Optimal operation with slim and symmetrical design

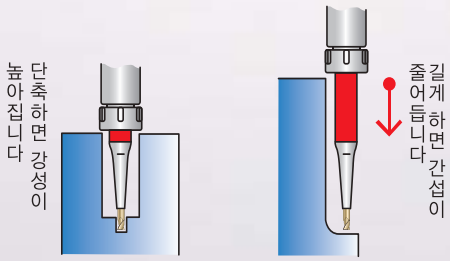
공구 돌출부분을 최단으로!
Set The shortest lenth of cuting tool



길이조정 자유자재, 완벽한 접근성.

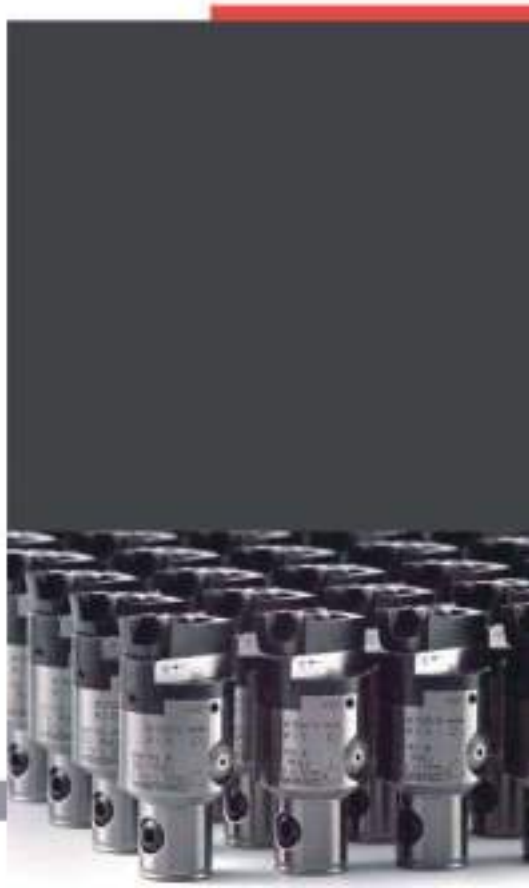
Easy to adjust tool lenth, perfect operation accssiblity

스트레이트 타입은 필요에 따라 길이를 조정할 수 있습니다.

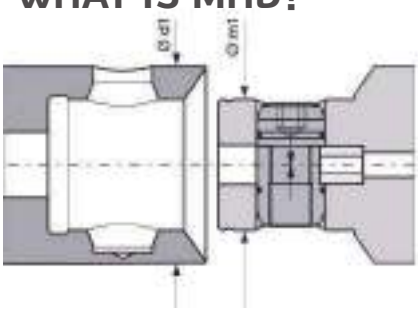


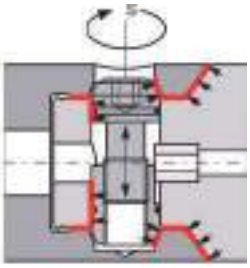
Straight Type

D'ANDREA BORING SYSTEM



WHAT IS MHD?





- Excellent Runout Accuracy
  연결부위 TAPER 방식으로 최적의 RUN-OUT 구현
  It is achieved extreme pricison RUN-OUT by cylindrical-conical fit when extending

- Powerful chacking System
  강력한 체결력으로 다양한 길이조절에도 일체형같은 성능 발휘
  It is achieved utmost rigidity and concentricity with powerful clamping although.
  it is a various extention with many elenments that is extension, reduction, adapter etc.

- Self centering System
  연결시 정확하게 중심을 잡아주는 방식으로 최적의 RUN-OUT 실현
  It is achieved extreme pricison RUN-OUT by a radial expending bolt for clamping and driving

- Various Boring Range
  최소 Ø2.5~Ø2,800까지 넓은 보링 범위
  A wide range of Boring systme(Ø2.5~Ø2,800)

MADE IN ITALY

various BASIC HOLDER

HSK-A

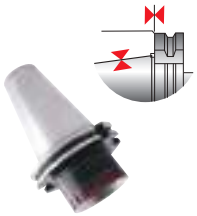
HSK-E

HSK-F

HSK-A

CAPTO

KM



SK FACE CONTACT

BT FACE CONTACT

DIN 69871

MAS403 BT

ST

BORING HEAD

TS-ROUGH

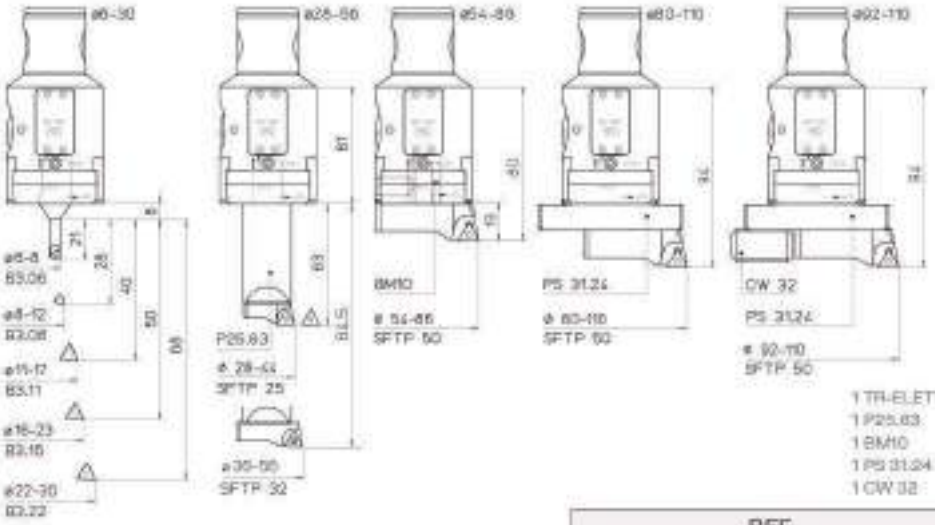
TRD-Rough/Semi finishing

TRC-finishing

TRM-Super finishing

TR-Super finishing

KIT



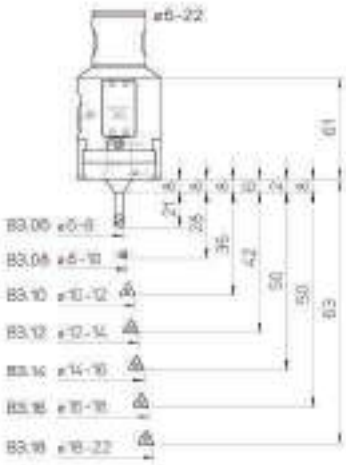
KIT K01
Ø 6 - 110

1 TR-ELETTRA 50 MHD'50

1 P25.83	1 B3.06	1 B3.22	6 TPGX 090202L DC100
1 BM10	1 B3.08	1 SFTP25	1 TPGX 110302L DC100
1 PS 31.24	1 B3.11	1 SFTP32	2 WCGT 020102L DC100
1 CW 32	1 B3.16	1 SFTP50	

REF.	CODE	Ø
KIT K01 TR-ELETTRA 50 MHD'50	655200500500	6 - 110

KIT



KIT K00
Ø 6 ~ 22

1 TR-ELETTRA 50 MHD'50
1 B3.08 1 B3.12 1 B3.16
1 B3.08 1 B3.14 5 TPGX 090202L DC100
1 B3.10 1 B3.18 2 WCGT 020102L DC100

REF.	CODE	Ø
KIT K00 TR-ELETTRA 50 MHD'50	655200500501	6 ~ 22

119 120 116 241

BPS
Large Bore boring
Rough/Super finishing

HSK and CAPTO TURNING SYSTEM

Excellent Precision
Excellent Quality

SELUX
NC TOOLING SYSTEM

GBT

CHUCK & Item

HYDRAULIC CHUCK
MILLING CHUCK
HIGH SPEED MILLING CHUCK
SHRINK FIT HOLDER
SSK COLLET CHUCK
HIGH SPEED GSK CHUCK
ER COLLET CHUCK
NC DRILL CHUCK
TAPPING CHUCK HOLDER
SIDE LOCK HOLDER
MOLD SIDE LOCK HOLDER
MORSE TAPER HOLDER
FACE MILL ARBOR
PRO MILL ARBOR
PRO MILL ARBOR CUTTER
SIDE CUTTER ARBOR

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.
GBT50 SHC20 140
Shank Chucking Dia Length

SELUX Dual Contact System

MAX 25,000 min-1

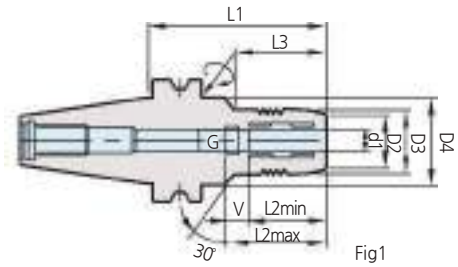


Fig1

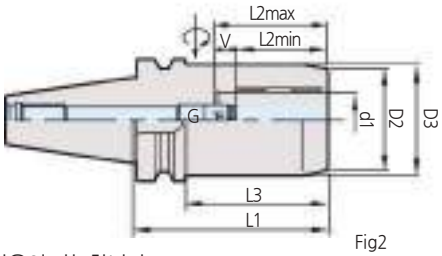


Fig2

GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- ■4D 선단에서 3㎛이내의 흔들림정도
- ■높은 정밀도와 고속가공에 최적화
- ■유압방식의 강력한 파지력
- ■렌치 하나로 쉽게 공구고정

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■The optimal chcuk for excellent accuracy and high speed operation.
- ■Powerful clamping force of hydraulic type.
- ■Easy clamping with just one wrench.

CODE NO.	d1	D2	D3	D4	L1	L2min	L2max	V	L3	G	Fig	Weight (kg)
GBT30 - SHC 6 - 70	6	25	28	45	70	27.5	37.5	10	28	M5X0.8	Fig1	0.65
SHC 8 - 70	8	27	30							M6X1.0		0.65
SHC 10 - 75	10	29	32		75	32.5	42.5		38			0.75
SHC 12 - 75	12	31	34			37.5	47.5		44			0.8
SHC 16 - 90	16	35	38		90	42.5	52.5		48	M8X1.0		0.9
SHC 20 - 90	20	40	43	-					-		Fig2	0.9

- ▶유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
- ▶유압척 SHC12, SHC20, SHC32는 D또는 OD콜렛을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
- ▶유압척 전용 콜렛은 P132~P133
- ▶척킹시 필요한 렌치는 부속되어 있습니다.
- ▶황삭작업에는 권장하지 않습니다.

- ▶ Tolerance of cutting tool shank should be configured within h6.
- ▶ HYDRAURIC CHCUK SHC12, SHC20, SHC32 are possible to use various shank cutting tool with D or OD COLLET .
- ▶ HYDRAURIC COLLET are refered. P132~P133
- ▶ Wrench is included.
- ▶ We do not recommed to use hydrauric chuck for roughing operation.

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.
GBT50 | SHC20 | 140
Shank | Chucking Dia | Length

SELUX Dual Contact System

MAX 25,000 min-1

Fig1

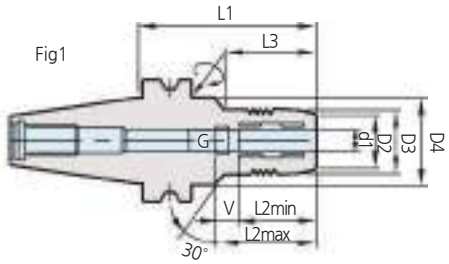
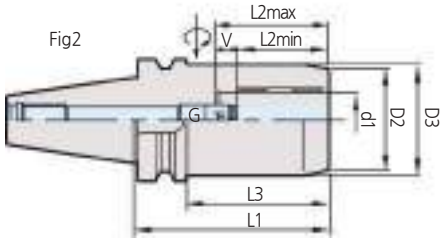


Fig2



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- 4D 선단에서 3㎛이내의 흔들림정도
- 높은 정밀도와 고속가공에 최적화
- 유압방식의 강력한 파지력
- 렌치 하나로 쉽게 공구고정

- 3㎛(T.I.R) Run-out at 4D away from shank nose.
- The optimal chcuk for excellent accuracy and high speed operation.
- Powerful clamping force of hydraulic type.
- Easy clamping with just one wrench.

CODE NO.	d1	D2	D3	D4	L1	L2min	L2max	V	L3	G	Fig	Weight (kg)
GBT40 - SHC 6 - 90	6	25	28	50	90	27.5	37.5	10	44	M5X0.8	Fig1	1.3
SHC 8 - 90	8	27	30						39	M6X1.0		1.3
SHC10 - 90	10	29	32			32.5	42.5		44			1.35
SHC12 - 90	12	31	34			37.5	47.5					1.35
SHC16 - 90	16	35	38			42.5	52.5		48	M8X1.0		1.4
SHC20 - 90	20	40	43									1.5
- 140					140							2.0
SHC25 - 100	25	53	57	-	100	51	61		73	M16X1.0	Fig2	1.7
SHC32 - 105	32	58	63		105	55	65		-			2.1
GBT50 - SHC 6 - 120	6	25	28	50	120	27.5	37.5	10	44	M5X0.8	Fig1	4.1
- 140					140							4.7
SHC 8 - 120	8	27	30		120				40	M6X1.0		4.1
- 140					140				44			4.7
SHC10 - 120	10	29	32		120	32.5	42.5		44			4.3
- 140					140							4.9
SHC12 - 120	12	31	34		120	37.5	47.5					4.3
- 140					140							4.9
SHC16 - 120	16	35	38		120	42.5	52.5		48	M8X1.0		4.4
- 140					140							5.0
SHC20 - 90	20	40	43		90				32			4.0
- 120					120				48			4.4
- 140					140							5.0
SHC25 - 105	25	53	57	-	105	51	61		67	M16X1.0	Fig2	4.4
- 150					150				112			5.6
SHC32 - 115	32	58	63		115	55	65		77			4.7
- 150					150				112			6.0

MILLING CHUCK

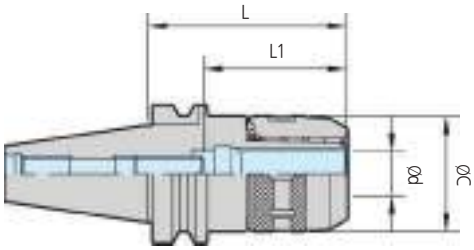
Coolant-through hole
Clamping Range : ø3.0 ~ ø42.0

CODE No.

GBT50 | MC32 | 105

Shank — Chucking Dia — Length

SELUX Dual Contact System



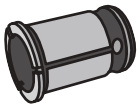
GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- 높은 정밀도
- 3.5D 선단에서 5㎛이내의 흔들림정도
- 간편한 척킹 시스템
- Taper 접촉 80%이상 Taper공차 AT3로 보증
- 완전한 단면 밀착으로 강력 절삭
- 4배열 Roller System 방식으로 강력한 파지력

- Excellent Run-out Accuracy.
- 5㎛(T.I.R) Run-out at 3.5D away from shank nose.
- Easy chucking system.
- More than 80% taper contact, we guarantee taper tolerance AT3.
- The strongest cutting power due to perfect face contact construction.
- Powerful clamping force by 4 needle roller system.

CODE NO.	ød	L	øC	L1	Collet	Weight (kg)
GBT30 - MC20 - 75	20	75	53	70	K20, NC20	1
MC32 - 100	32	100	72	78	K32, NC32	1.4
GBT40 - MC20 - 80	20	80	53	82	K20, NC20	1.5
- 90		90				1.6
MC32 - 85	32	85	72	90	K32, NC32	2
- 105		105				2.4
GBT50 - MC20 - 105	20	105	53	82	K20, NC20	4.4
- 135		135				4.8
MC32 - 105	32	105	72	125	K32, NC32	4.9
- 135		135				5.7
- 165		165				6.5
MC42 - 105	42	105	94	130	K42, NC42	5.5
- 135		135				6.9
- 165		165				8.3

Spare Parts		
	Option	
	Collet	Spanner
Type		
MC20	K20-NC20	MC20-SP(50-55)
MC25	K25-NC25	MC25-SP(56-61)
MC32	K32-NC32	MC32-SP(68-75)
MC42	K42-NC42	MC42-SP(88-96)

- ▶고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶밀링척 전용 콜렛은 P134~P136
- ▶밀링척 스페너는 별도 판매품 입니다. P149

- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are refered. P134~P136
- ▶ Spanner is ordered separately. P149

HIGH SPEED MILLING CHUCK

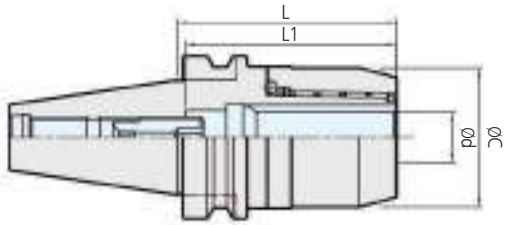
Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

GBT40	MC32	85	G
Shank	Chucking Dia	Length	High Speed

SELUX Dual Contact System

MAX 25,000 min-1



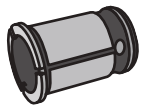
GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- ■고속 가공에서 높은 정도
- ■강력한 파지력
- ■3.5D 선단에서 5㎛이내의 흔들림 정도
- ■스패너는 GH 스패너 사용(별매)
- ■G6.3 max 25.000RPM
- ■원형너트로 고속 절삭시 소음 감소

- ■Excellent Run-out Accuracy.
- ■Powerful clamping force.
- ■5㎛(T.I.R)Run-out at 3.5D away from shank nose.
- ■GH spanner is orderd seperately.
- ■G6.3 max 25.000 RPM.
- ■The operation noise is reduced by assembled circle style nut.

CODE NO.	ød	L	øC	L1	Collet	MAX rpm	Weight (kg)
GBT30 - MC20 - 75G	20	75	48	70	K20, NC20	25,000	0.6
MC25 - 80G	25	80	55		K25, NC25		0.9
GBT40 - MC20 - 80G	20	80	48	82	K20, NC20	25,000	1.3
- 90G		90					1.4
MC25 - 80G	25	80	55	85	K25, NC25	20,000	1.5
- 90G		90					1.6
MC32 - 85G	32	85	68	80	K32, NC32		1.6
- 105G		105		90			2.0
GBT50 - MC20 - 105G	20	105	48	105	K20, NC20	20,000	4.1
- 135G		135					4.4
MC25 - 105G	25	105	55	90	K25, NC25	15,000	4.4
- 135G		135					4.8
MC32 - 105G	32	105	68	110	K32, NC32		4.7
- 135G		135		135			5.2

Spare Parts		
	Option	
	Collet	Spanner
Type		
MC20-G	K20-NC20	MC20-GH
MC25-G	K25-NC25	MC25-GH
MC32-G	K32-NC32	MC32-GH

▶고속형밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
▶밀링척 전용 콜렛은 P134 ~ P136
▶고속형밀링척 GH스페너는 별도 판매품 입니다. P149

▶ High speed MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
▶ K-CHUCK COLLET is refered. P132~P133
▶ GH SPANNER for high speed milling chuck is ordered separately. P149

SHRINK FIT HOLDER

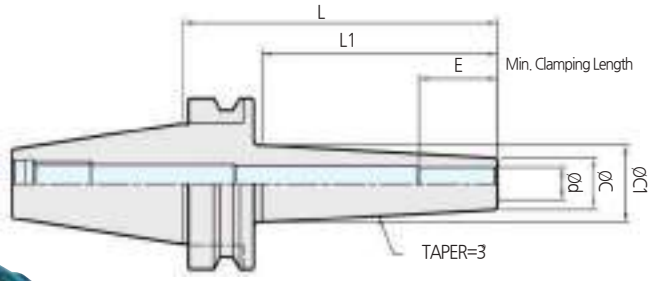
Coolant-through hole
Clamping Range : ø3.0 ~ ø12.0

CODE No.

GBT40	SSF10	S	120
Shank	Chucking Dia	Shim	Length

SELUX Dual Contact System

MAX 25,000 min-1



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 (Coolant Through Hole)

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant type.

Code No.	ød	øC	øC1	L	L1	E	Weight (kg)
GBT30 - SSF 4S - 80	4	7	20	80	42	12	0.4
SSF 6S - 80	6	11	17		55	18	0.4
- 120			21	120	95		0.45
SSF 8S - 80	8	13	19	80	55	24	0.4
- 120			23	120	95		0.45
SSF10S - 80	10	16	22	80	55	30	0.4
- 120			26	120	95		0.45
SSF12S - 80	12	19	25	80	55		0.5
- 120			29	120	95		0.55
GBT40 - SSF 3S - 90	3	6	26	90	37	9	1.0
SSF 4S - 90	4	7				12	1.0
SSF 6S - 120	6	11	20	120	90	18	1.1
- 160			25	160	130		1.2
SSF 8S - 120	8	13	22	120	90	24	1.1
- 160			27	160	130		1.3
SSF10S - 120	10	16	25	120	90	30	1.1
- 160			30	160	130		1.4
SSF12S - 120	12	19	28	120	90		1.2
- 160			33	160	130		1.4
GBT50 - SSF 6S - 120	6	11	19	120	79	18	3.8
- 160			23	160	119		4.1
SSF 8S - 120	8	13	21	120	79	24	3.8
- 160			25	160	119		4.1
SSF10S - 120	10	16	24	120	79	30	3.9
- 160			28	160	119		4.2
SSF12S - 120	12	19	27	120	79		3.9
-160			31	160	119		4.3

- ▶ 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- ▶ 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)
- ▶ 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- ▶ SELUX 고주파 히팅기는 P145
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P145
- ▶ 열박음홀더 사용시 오일홀 풀스터드 볼트를 권장합니다.

- ▶ Please use only carbide cutting tools of a shank tolerlance within H6.
- ▶ Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shink fit holder.
- ▶ SELUX shrink fit equipment is refered. P145
- ▶ Please follow minimum insertion lengh of the cutting tools.
- ▶ Stopper for adjusting cutting tool lengh order separately. P145
- ▶ We recommend oil hole Pull stud bolt for shrink fit holder.

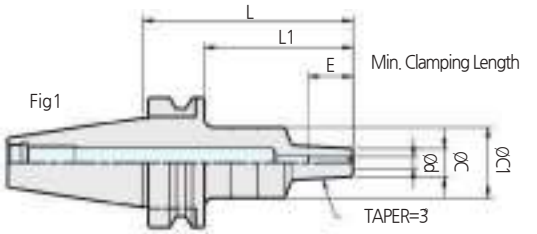
SHRINK FIT HOLDER

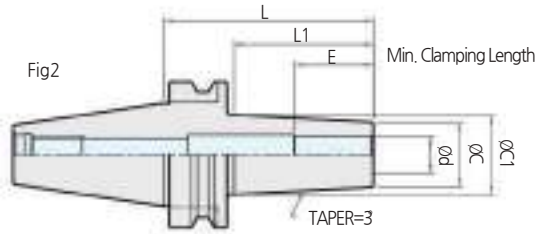
Coolant-through hole
Clamping Range : ø3.0 ~ ø20.0

CODE No.
GBT40 SSF10 160
Shank Chucking Dia Length

SELUX
Dual Contact System

MAX 25,000 min-1





GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 (Coolant Through Hole)

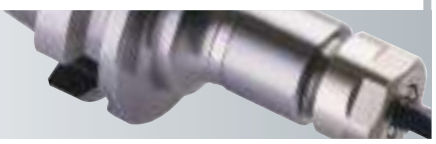
- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant type.

Code No.	ød	øC	øC1	L	L1	E	Fig	Weight (kg)
GBT30 - SSF 3 - 75	3	7.5	25	75	53	12	1	0.5
SSF 4 - 75	4	10				16		0.5
SSF 6 - 75	6	12	26			24		0.5
SSF 8 - 75	8	14	26					0.5
SSF10 - 75	10	16	26			36		0.5
SSF12 - 75	12	20	30					0.5
SSF16 - 75	16	26	34			48		0.5
GBT40 - SSF 3 - 90	3	7.5	26	90	37	9	1	1.0
SSF 4 - 90	4	10				12		1.0
SSF 6 - 90	6	14	20		60	18	2	1.2
- 160			21	160	130			1.4
SSF 8 - 90	8	18	24	90	60	24	2	1.2
- 160			32	160	130			1.4
SSF10 - 90	10	22	28	90	60	30	2	1.3
-160			36	160	130			1.5
SSF12 - 90	12	24	30	90	60			1.3
- 160			38	160	130			1.6
SSF16 - 90	16	28	34	90	60	34	2	1.3
- 160			42	160	130			1.8
SSF20 - 90	20	34	40	90	60	40	2	1.3
- 160			48	160	130			2.1
GBT50 - SSF 6 - 100	6	14	20	100	130	18	2	3.7
- 160			26	160	70			3.9
SSF 8 - 100	8	18	24	100	59	24	2	3.7
- 160			30	160	119			3.9
SSF10 - 100	10	22	28	100	59	30	2	3.8
- 160			34	160	119			4.1
SSF12 - 100	12	24	30	100	59			3.8
- 160			36	160	119			4.1
SSF16 - 100	16	28	34	100	59	34	2	3.8
- 160			40	160	119			4.1
SSF20 - 100	20	34	46	100	59	40	2	3.9
-160			53	160	119			4.4

▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다.
내구성 저하 원인이 됩니다.

▶ Please clean the shank outside and inside of shrink fit before use.
If you don't clean the shrink fit, it has problem about Run-out and toollife.

SSK COLLET CHUCK



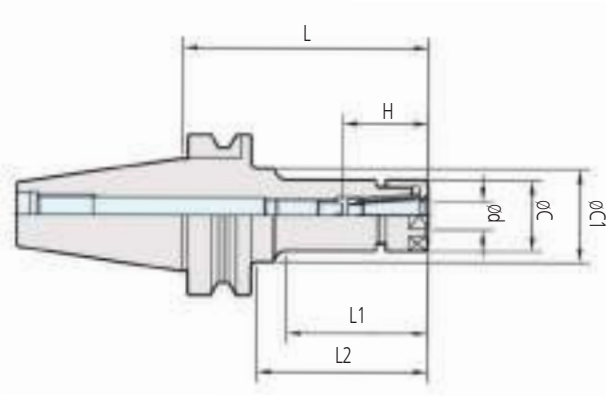
Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

GBT50 | SSK10 | 135

Shank — Chucking Dia — Length

SELUX
Dual Contact System



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

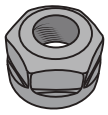
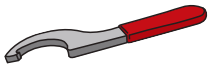
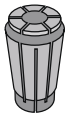
- ■8°Taper 의 강력한 파지력
- ■높은 정밀도와 빠른 가공에 적합
- ■드릴, 센터드릴, 엔드밀, 탭, 리머용으로 사용

- ■Powerful clamping force of 8°Taper.
- ■Excellent Run-out Accuracy.
- ■SSK COLLET CHUCK is suitable for a various operation using drill, endmill, tap and reamer.

Code No.	ød	øC	øC1	H Min	H Max	L	L1	L2	Collet	Weight (kg)
GBT30 - SSK 6 - 60	0.9~6.0	19.5	19.5	21	35	60	33	33	SC6	0.7
- 90			32			90	56	65		0.7
SSK10 - 60	1.75~10.0	27.5	27.5	30	50	60	35	35	SC10	0.9
- 90						90	65	65		1.0
-120						120	95	95		1.1
SSK13 - 60	2.75~13.0	33	33	31	50	60	35	35	SC13	1.0
- 90				31	65	90	65	65		1.1
SSK16 - 60	2.75~16.0	40	40	45	60	60	37	37	SC16	1.1
- 90				45	65	90	67	67		1.2
GBT40 - SSK 6 - 60	0.9~6.0	19.5	19.5	21	35	60	30	30	SC6	1.0
- 90			32			90	51	60		1.1
-120						120	60	90		1.4
SSK10 - 60	1.75~10.0	27.5	27.5	30	50	60	32	32	SC10	1.1
- 90			40			90	48	60		1.2
-120						120	73	90		1.4
-150			34.5			150	118	118		1.6
SSK13 - 60	2.75~13.0	33	33	31	65	60	28	28	SC13	1.2
- 90						90	58	58		1.4
-120						120	88	88		1.6
SSK16 - 60	2.75~16.0	40	40	50	65	60	32	32	SC16	1.3
- 90				40	67	90	58	58		1.5
-120				40	70	120	88	88		1.7
-150						150	118	118		1.9
SSK20 - 60	3.6~20.0	48.5	48.5	47	60	60	32	32	SC20	1.3
- 90				47	80	90	60	60		1.6
-120						120	90	90		2.0
SSK25 - 75	15.6~25.4	55	55	40	60	75	46	46	SC25	1.5
- 90				55	75	90	61	61		1.8
-120				55	85	120	91	91		2.0

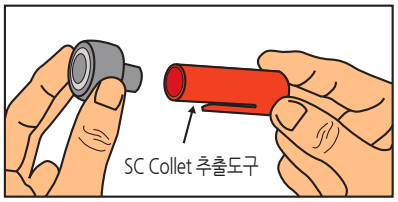
SSK COLLET CHUCK

Code No.	ød	øC	øC1	H Min	H Max	L	L1	L2	Collet	Weight (kg)
GBT50 - SSK 6 - 105	0.9~6.0	19.5	32	21	35	105	55	64	SC 6	3.8
- 135						135	60	92		4.0
- 165						165		114		4.2
SSK10 - 105	1.75~10.0	27.5	27.5	30	50	105	57	57	SC10	4.2
- 135			32			135	70	92		4.4
- 165			36			165	75	114		4.6
SSK13 - 105	2.75~13.0	33	33	31	65	105	62	62	SC13	4.5
- 135						135		92		4.7
- 165			45			165	92	122		4.9
SSK16 - 105	2.75~16.0	40	40	40	70	105	62	62	SC16	4.7
- 135						135	92	92		4.9
- 165			50			165	90	122		5.1
SSK20 - 105	3.6~20.0	48.5	48.5	47	80	105	62	62	SC20	4.3
- 135						135		92		4.6
- 165						165	122	122		5.0
SSK25 - 105	15.6~25.4	55	55	50	85	105	62	62	SC25	5.2
- 135						135	92	92		5.4
- 165						165	122	122		5.6

Spare Parts				
	Basic		Option	
	Nut	Adjust Screw	Spanner	Collet
Type				
SSK 6	SCN- 6 (HEXA)	BTD0825-C	SC 6-SP	SC 6-ø
SSK10	SCN-10 (HEXA)	BTD1225-C	SC10-SP	SC10-ø
SSK13	SCN-13	BTD1525-C	SC13-SP	SC13-ø
SSK16	SCN-16	BTD1830-C	SC16-SP	SC16-ø
SSK20	SCN-20	BTD2230-C	SC20-SP	SC20-ø
SSK25	SCN-25	BTD2838-C	SC25-SP	SC25-ø

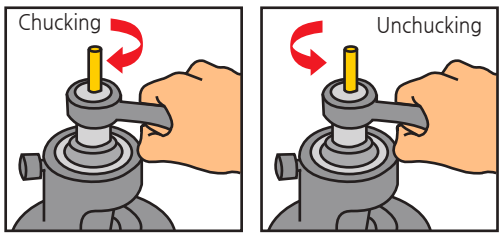
- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 고속회전용 GSK척은 P26
- ▶ 스페너는 별매입니다. P149
- ▶ Synchronized Tap 사용시 SSK10을 사용하십시오.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  위 사양 이상인경우는 Milling Chuck에 K-Collet을 사용하시길 바랍니다.
- ▶ SSK척 콜렛은 P138~P139
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.

- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ High speed GSK CHUCK is refered. P26
- ▶ Spanner is ordered separately. P149
- ▶ Please use SSK10 when you use Synchronized Tap.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  If it has problem, We recommend K COLLET with Milling Chuck.
- ▶ SC COLLET is refered. P138 ~ P139
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder.
- ▶ Extra charge for high speed balance.



SSK NUT에 SC COLLET 체결시에는 전용 콜렛 추출도구를 사용하시기 바랍니다.

Please use private remover when you insert the SSK COLLET in SSK NUT



SSK 척은 공구체결시 40 Torgue 이상의 힘이가해질시 너트 및 바디가 파손 될 수 있습니다. ※주의 (SSK6, SSK10)

SSK NUT and SSK CHCUK is possible to be broken if you clamp chuck and nut over 40 Torgue ※ WARNING (SSK6, SSK10)

HIGH SPEED GSK CHUCK(P CLASS)

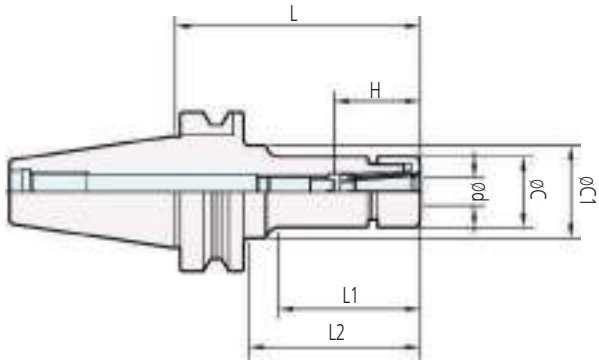
Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

GBT50	GSK10	105	P
Shank	SC Collet	Length	High Speed

SELUX Dual Contact System

MAX 40,000 min-1



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- 고속가공에서 높은 정도
- 8°Taper의 강력한 파지력
- 원형 너트로 컴팩트한 디자인
- 스패너는 PH스패너 사용(별매)
- G2.5X max 40.000 RPM
- 고속형GSK척에는 P CLASS 콜렛 사용을 권장

- Excellent Run-out Accuracy.
- Powerful clamping force of 8°taper.
- Circle style nut designed compactly
- PH spanner is orderd seperately.
- G2.5X max 40.000 RPM.
- We recommed to use P CLASS SC COLLET when you use GSK CHCUK.

Code No.	ød	øC	øC1	H Min	H Max	L	L1	L2	Collet	MAX rpm	Weight (kg)
GBT30 - GSK 6- 60P	0.9~6.0	19.5	19.5	21	35	60	33	33	SC6P	40,000	0.7
- 90P			32			90	56	65			0.7
GSK10- 60P	1.75~10.0	27.5	27.5	30	50	60	35	35	SC10P		0.9
- 90P						90	65	65			1.0
-120P						120	95	95			1.1
GSK13- 60P	2.75~13.0	33	33	31	50	60	35	35	SC13P		1.0
- 90P				31	65	90	65	65			1.1
GSK16- 60P	2.75~16.0	40	40	45	60	60	37	37	SC16P	30,000	1.1
- 90P				45	65	90	67	67			1.2
GBT40 - GSK 6- 60P	0.9~6.0	19.5	19.5	21	35	60	30	30	SC6P	25,000	1.0
- 90P			32			90	51	60			1.1
-120P						120	60	90			1.4
GSK10- 60P	1.75~10.0	27.5	27.5	30	50	60	32	32	SC10P		1.1
- 90P			40			90	48	60			1.2
-120P						120	73	90			1.4
-150P			34.5			150	118	118			1.6
GSK13- 60P	2.75~13.0	33	33	31	65	60	28	28	SC13P		1.2
- 90P						90	58	58			1.4
-120P						120	88	88			1.6
GSK16- 60P	2.75~16.0	40	40	50	65	60	32	32	SC16P		1.3
- 90P				40	67	90	58	58			1.5
-120P				40	70	120	88	88			1.7
-150P						150	118	118			1.9
GSK20- 60P	3.6~20.0	48.5	48.5	47	60	60	32	32	SC20P	20,000	1.3
- 90P				47	80	90	60	60			1.6
-120P						120	90	90			2.0
GSK25- 75P	15.6~25.4	55	55	40	60	75	46	46	SC25P		1.5
- 90P				55	75	90	61	61			1.8
-120P				55	85	120	91	91			2.0

HIGH SPEED GSK CHUCK(P CLASS)

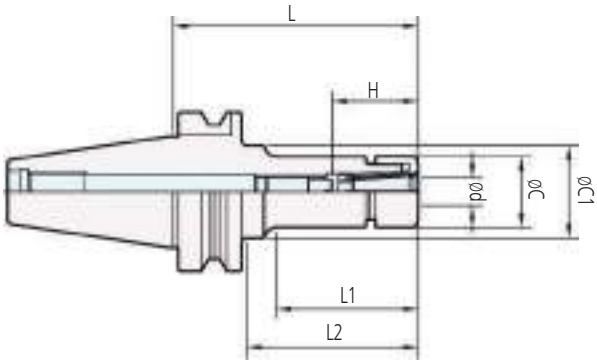
Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

GBT50	GSK10	105	P
Shank	SC Collet	Length	High Speed

SELUX Dual Contact System

MAX 40,000 min-1



Code No.	ød	øC	øC1	H Min	H Max	L	L1	L2	Collet	MAX rpm	Weight (kg)
GBT50 - GSK 6 - 105P	0.9~6.0	19.5	32	21	35	105	55	64	SC6P	20,000	3.8
- 135P						135	60	92			4.0
- 165P						165		114			4.2
GSK10 - 105P	1.75~10.0	27.5	27.5	30	50	105	57	57	SC10P		4.2
- 135P			32			135	70	92			4.4
- 165P			36			165	75	114			4.6
GSK13 - 105P	2.75~13.0	33	33	31	65	105	62	62	SC13P		4.5
- 135P						135		92			4.7
- 165P			45			165	92	122			4.9
GSK16 - 105P	2.75~16.0	40	40	40	70	105	62	62	SC16P		4.7
- 135P						135	92	92			4.9
- 165P			50			165	90	122			5.1
GSK20 - 105P	3.6~20.0	48.5	48.5	47	80	105	62	62	SC20P	15,000	4.3
- 135P						135		92			4.6
- 165P						165	122	122			5.0
GSK25 - 105P	15.6~25.4	55	55	50	85	105	62	62	SC25P		5.2
- 135P						135	92	92			5.4
- 165P						165	122	122			5.6

Spare Parts				
	Basic		Option	
	Nut	Adjust Screw	Spanner	Collet
Type				
GSK 6P	SCN- 6P	BTD0825-C	SC 6-PH	SC 6-øP
GSK10P	SCN-10P	BTD1225-C	SC10-PH	SC10-øP
GSK13P	SCN-13P	BTD1525-C	SC13-PH	SC13-øP
GSK16P	SCN-16P	BTD1830-C	SC16-PH	SC16-øP
GSK20P	SCN-20P	BTD2230-C	SC20-PH	SC20-øP
GSK25P	SCN-25P	BTD2838-C	SC25-PH	SC25-øP

- 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- 스페너는 별매입니다. P149
- GSK척 콜렛은 P138~P139
- 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.

- NUT, ADJUST SCREW, COLLET REMOVER are included.
- Spanner is ordered separately. P149
- P CLASS SC COLLET for GSK CHUCK is refered. P138 ~ P139
- It can be destoried nut or shank of chuck if you too strongly clamp nut and holder.

ER COLLET CHUCK

Coolant-through hole
Clamping Range : ø0.5 ~ ø20.0

CODE No.
GBT50 | ER16 | 105
Shank | ER Collet Size | Length

SELUX
Dual Contact System

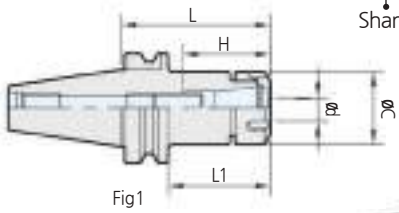


Fig1

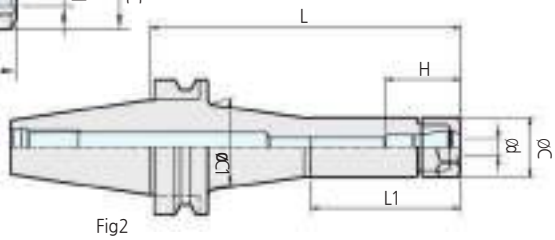


Fig2

GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- ■안정적인 정밀도와 파지력
- ■쉽고빠른 공구교환
- ■드릴, 엔드밀, 탭 다양한 사용범위

- ■Reliable accuracy and Powerful clamping force.
- ■Easy and quick tool exchange.
- ■ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	øC	C1	H Min	H Max	L	L1	Collet	Fig	Weight (kg)
GBT30 - ER11 - 60	0.5~7.0	19	-	19	34	60	35	ER11	1	0.5
- 90						90	65			0.6
ER16 - 60	0.5~10.0	28		23	43	60	35	ER16		0.5
- 90						90	65			0.6
ER20 - 60	1.0~13.0	35		25	48	60	35	ER20		0.5
- 90						90	65			0.7
ER25 - 60	1.0~16.0	42		34	54	60	35	ER25		0.6
- 90						90	65			0.8
ER32 - 60	2.0~20.0	50		40	60	60	35	ER32		0.5
- 90						90	65			0.9
GBT40 - ER11 - 60	0.5~7.0	19	-	19	34	60	28	ER11	1	1.0
- 90						90	58			1.1
- 120			26			120	65		2	1.2
ER16 - 60	0.5~10.0	28	-	23	43	60	28	ER16	1	1.1
- 90						90	58			1.2
- 120			36			120	73		2	1.3
ER20 - 60	1.0~13.0	35	-	25	48	60	30	ER20	1	1.1
- 90						90	60			1.3
- 120						120	90			1.5
ER25 - 60	1.0~16.0	42	-	34	54	60	30	ER25		1.2
- 90						90	60			1.4
- 120						120	90			1.6
ER32 - 60	2.0~20.0	50		40	60	60	30	ER32		1.3
- 90						90	60			1.4
- 120						120	90			1.7
GBT50 - ER11 - 105	0.5~7.0	19	-	19	34	105	62	ER11	1	3.7
- 135			32			135	61		2	3.8
- 165			35			165	61			4.0
ER16 - 105	0.5~10.0	28	-	23	43	105	62	ER16	1	4.0
- 135			32			135	70		2	4.1
- 165			36			165	77			4.2
ER20 - 105	1.0~13.0	35	-	25	48	105	62	ER20	1	3.9
- 135						135	92			4.1
- 165			40			165	87		2	4.5
ER25 - 105	1.0~16.0	42	-	34	54	105	62	ER25	1	4.1
- 135						135	92			4.3
- 165			50			165	90		2	4.4
ER32 - 105	2.0~20.0	50	-	40	60	105	62	ER32	1	4.3
- 135						135	92			4.9
- 165						165	122			5.0

- ▶ 내부급유 사용시에는 방수형콜렛이나 방수형 너트를 사용 해주십시오.
- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ ER척 스페어 파트는 P53

- ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER COLLET is refered. P140 ~ P141
- ▶ Spanner is ordered separately. P149
- ▶ Extra charge for high speed balance.
- ▶ The spare parts for ER CHCUK are refered. P53

NC DRILL CHUCK

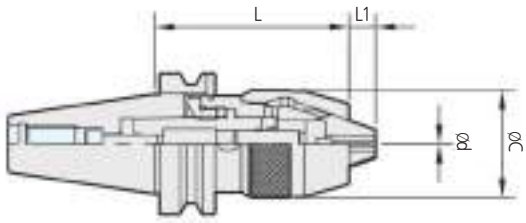
Clamping Range : ø0.3 ~ ø13.0

CODE No.

GBT40 NPU13 90

Shank — Chucking Dia — Length

SELUX Dual Contact System



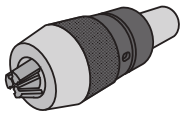
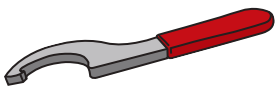
GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

머시닝 센터의 일반적인 드릴링 공구입니다.
- 척과 샹크가 일체형 구조로 길이가 짧음
- 가공정도 향상과 우수한 내구성
- 척의 탈락이 없고 주축 정지시 풀리지 않음

General Drillings for Machining Centers
- Unified body of chuck and shank reduces the length of tool.
- Improved operation accuracy and excellent rigidity
- The drillchuck is never detached from holder and is not released when the operation is stop.

Code No.	ød	øC	L	L1	Weight (kg)
GBT30 - NPU 8 - 80	0.3~8.0	38	80	8.5	0.8
NPU 13 - 105	1.0~13.0	50	105	11.5	1.5
GBT40 - NPU 8 - 75	0.3~8.0	38	75	8.5	1.3
- 105			105		1.6
- 150			150		2.0
NPU13 - 90	1.0~13.0	50	90	11.5	1.7
- 130			130		2.0
- 175			175		2.4
GBT50 - NPU 8 - 85	0.3~8.0	38	85	8.5	3.8
- 120			120		4.0
- 150			150		4.4
- 170			170		4.8
NPU 13 - 105	1.0~13.0	50	105	11.5	4.4
- 130			130		4.6
- 190			190		5.4

Spare Parts		
	Basic	
	Chuck	Spanner
Type		
NPU 8	NPU 8	NPU08-SP
NPU13	NPU13	NPU13-SP

- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
  NPU8-20mm이상
  NPU13-30mm이상
- ▶ 스페너는 별매입니다. P149

- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum lengh of cutting tools.
  NPU8 : more 20mm
  NPU13 : more 30mm
- ▶ Spanner is ordered separately. P149

TAPPING CHUCK HOLDER

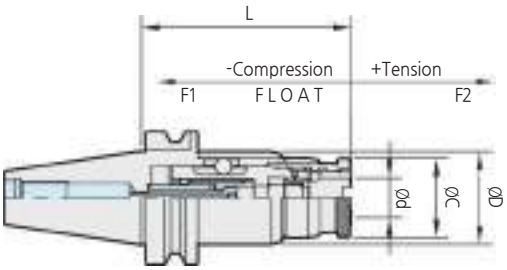
Tapping Range : M3 ~ M36

CODE No.

GBT50 TCH12 125

Shank / MAX Tapping / Length

SELUX Dual Contact System



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

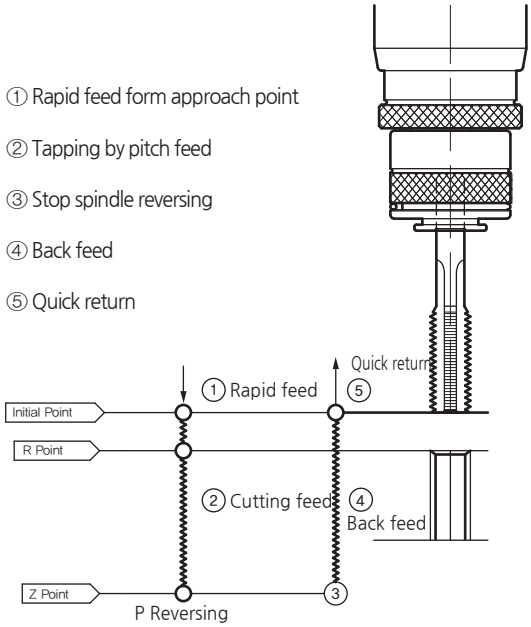
- ■플로팅 타입으로 인장수축 장치 내장
- ■공구교환이 빠르고 편리함
- ■관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능

- ■The tapping chuck is equipped with tension system by floating type.
- ■Easy and quick tool exchange.
- ■It is possible for tapping operation of blind hole and through hole.

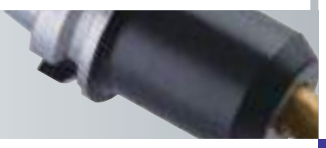
Code No.	ød	øD	L	øC	L1		Weight (kg)
					F1	F2	
GBT30 - TCH12 - 125	19	44	100	35	6	12	1.2
GBT40 - TCH12 - 120	19	44	95	35	6	12	1.6
- 150			125				1.9
TCH22 - 150	31	63	115	52	10	15	2.4
- 180			177				3.0
GBT50 - TCH12 - 135	19	44	110	35	6	12	4.2
- 165			140				4.8
- 195			170				5.0
TCH22 - 165	31	63	132	52	10	15	5.7
- 195			162				6.3
- 225			192				6.9
TCH36 - 210	48	67	165	83	15	20	8.0
- 240			195				8.5

▶ 적용 탭콜렛은 P137
▶ Private tap collets are refered. P137

① Rapid feed form approach point
② Tapping by pitch feed
③ Stop spindle reversing
④ Back feed
⑤ Quick return



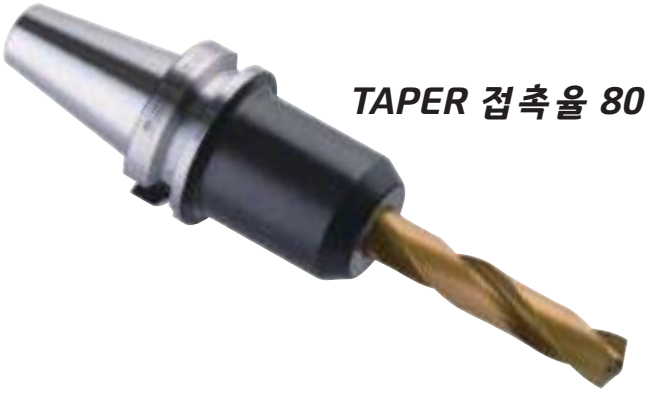
SIDE LOCK HOLDER



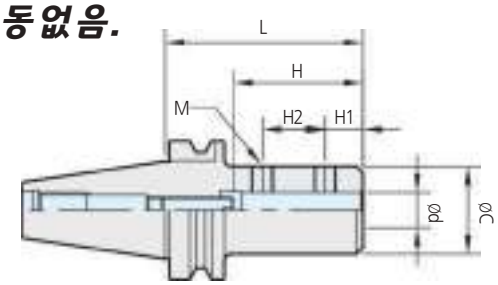
Coolant-through hole
Clamping Range : ø6.0 ~ ø42.0

CODE No.
GBT50 SLA32 105
Shank / Chucking Dia / Length

SELUX Dual Contact System



TAPER 접촉율 80% 이상 진동없음.



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

■ 드릴, 엔드밀 기타(Small chuck, Special tool)을 사용할 수 있습니다.
■ SIDE LOCK HOLDER can use tool holder for drill, endmill, etc.

Code No.	ød	L	øC	H Min	H Max	H1	H2	M	Weight (kg)
GBT30 - SLA 6 - 60	6	60	25	20	35	18	-	M 5	0.7
SLA 8 - 60	8		28	25	40			M 6	0.8
SLA10 - 75	10	75	35	35	45	14	15	M 8	0.9
SLA12 - 75	12		40	40	50	15	16	M10	1.0
SLA16 - 75	16		45	50	65	16	20	M12	1.1
SLA20 - 75	20		48	55	70	18		M14	1.2
SLA25 - 85	25	85					24		1.3
SLA32 - 105	32	105	58	65	80	20	22		1.5
GBT40 - SLA 6 - 75	6	75	25	20	35	20	-	M 5	1.2
SLA 8 - 75	8		30	25	40	18		M 6	1.2
SLA10 - 90	10	90	35	35	45	14	15	M 8	1.3
SLA12 - 90	12		40	40	50		16	M10	1.4
SLA16 - 90	16		45	50	65	20	20	M12	1.5
SLA20 - 90	20		50	55	70	25		M14	1.8
SLA25 - 90	25		52						2.0
SLA32 - 90	32		62	65	80		25	M16	2.2
SLA40 - 105	40	105	72						2.5
SLA42 - 105	42		76						2.6
GBT50 - SLA 6 - 90	6	90	25	20	35	18	-	M 5	3.7
SLA 8 - 90	8		28	25	40			M 6	3.9
SLA10 - 90	10		35	35	45	14	15	M 8	4.1
SLA12 - 90	12		40	40	50		16	M10	4.2
SLA16 - 90	16		45	50	65	20	20	M12	4.2
- 105		105							4.4
SLA20 - 105	20		50	60	75	25		M14	4.4
- 135		135							4.6
SLA25 - 105	25	105	52						4.4
- 135		135							4.7
- 165		165							5.1
SLA32 - 105	32	105	62	65	80		25	M16	4.8
- 135		135							5.4
- 165		165							6.2
SLA40 - 105	40	105	72						5.2
- 135		135							5.5
SLA42 - 105	42	105	76						5.8
- 135		135							6.0

▶ 사이드락홀더 스페어 파트는 P60
▶ The spare parts for SIDE LOCK HOLDER are refered. P60

MOLD SIDE LOCK HOLDER

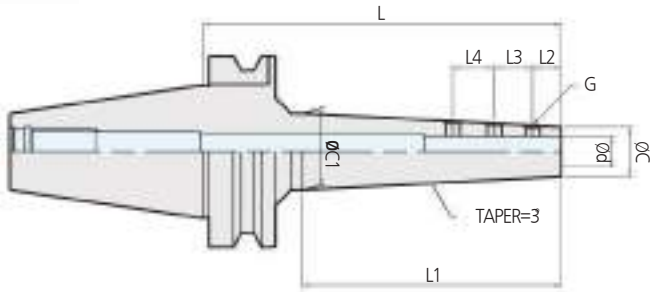
Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

GBT50	MSL12	150	S
Shank	Chucking Dia	Length	Gage line not included

SELUX Dual Contact System

MAX 20,000 min-1



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- 쉽고빠른 공구교환
- 높은 정밀도
- 슬림한 디자인으로 간섭부위 최소화

- Easy and quick tool exchange.
- Excellent accuracy.
- Minimize interference area by slim design.

Code No.	ød	øC	øC1	L	L1	L2	L3	L4	G	MAX rpm	Weight (kg)
GBT40 - MSL 3 - 135	3	10	20	135	94	6	6	-	M3	20,000	1.3
MSL 4 - 135	4	11	21				7		M4		1.3
MSL 6 - 135	6	13	23			12	13		M6		1.4
MSL 8 - 135	8	15	25			13.5	18			15,000	1.4
MSL10 - 150	10	17	29	150	109	15	20				1.6
MSL12 - 150	12	22	34				16	16	M8		1.7
GBT50 - MSL12 - 150S	12	22	37	188	136	15	16	16	M8	15,000	4.4
- 200S			42	238	186					12,000	5.0
MSL16 - 150S	16	26	41	188	136		20	22		15,000	4.6
- 200S			46	238	186					12,000	5.1
- 250S			51	288	236					10,000	5.9
MSL20 - 150S	20	30	45	188	136					15,000	4.7
- 200S			50	238	186					12,000	5.3
- 250S			55	288	236					10,000	6.0
MSL25 - 150S	25	35	50	188	136				M10	15,000	4.8
- 200S			55	238	186					12,000	5.4
- 250S			60	288	236					10,000	6.2
MSL32 - 150S	32	40	55	188	136					15,000	5.0
- 200S			60	238	186					12,000	5.6
- 250S			65	288	236					10,000	6.4

- ▶ MSL홀더 볼트는 SELUX 전용 볼트를 사용하시기 바랍니다.
- ▶ 육각렌치는 별도 판매 입니다.
- ▶ S Type는 표준길이(+38mm)

- ▶ Please only use SELUX pravate bolt for MSL HOLDER.
- ▶ Wrench is ordered separately.
- ▶ S type is extended by 38mm compare to standard type.

MSL BOLT

Item	Size	Length/pcs	chuck
MSL3 - BS	M3*0.5P	5mm / 2pcs.	MSL3
MSL4 - BS	M4*0.5P	5mm / 2pcs.	MSL4
MSL6 - BS	M6*0.75P	5 , 6mm / 1pcs. Each	MSL6
MSL8 - BS		5 , 6mm / 1pcs. Each	MSL8
MSL10 - BS			MSL10
MSL12 - BS	M8*0.75P	7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL12
MSL16 - BS		7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL16
MSL20 - BS		7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL20
MSL25 - BS	M10*10P	7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL25
MSL32 - BS		6mm / 1pcs. 7mm / 1pcs. 8mm / pcs.	MSL32

MORSE TAPER HOLDER

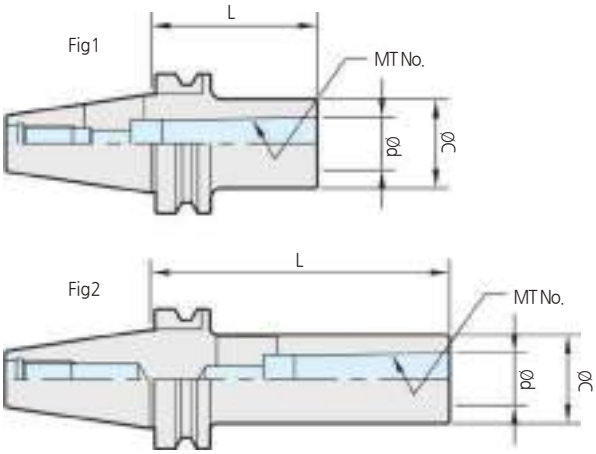
■for Morse taper shank with tang.

CODE No.

GBT50 | MTA1 | 45

- GBT50: Shank
- MTA1: Morse Taper No.
- 45: Length

SELUX Dual Contact System



TAPER 접촉율 80% 이상 진동없음.

GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

■Drill, reamer, 기타(MT Shank type tool)등을 사용할 수 있습니다.

■MORSE TAPER HOLDER can use tool holder for drill, reamer, etc.

Code No.	ød	MT No.	L	øC	Fig	Weight (kg)
GBT30 - MTA1 - 45	12.065	1	45	25	1	0.5
MTA2 - 60	17.780	2	60	32		0.5
MTA3 - 80	23.825	3	80	40		0.5
GBT40 - MTA1 - 45	12.065	1	45	25	1	1.0
- 120			120		2	1.3
MTA2 - 60	17.780	2	60	32	1	1.0
- 120			120		2	1.5
MTA3 - 75	23.825	3	75	40	1	1.0
- 135			135		2	1.7
MTA4 - 95	31.267	4	95	50	1	1.6
- 165			165		2	1.7
GBT50 - MTA1 - 45	12.065	1	45	25	1	3.9
- 120			120		2	4.2
- 180			180			4.3
MTA2 - 45	17.780	2	45	32	1	3.9
- 135			135		2	4.3
- 180			180			4.6
MTA3 - 45	23.825	3	45	40	1	3.8
- 150			150		2	4.6
- 180			180			4.9
MTA4 - 75	31.267	4	75	50	1	3.9
- 180			180		2	5.4
MTA5 - 105	44.399	5	105	65	1	4.5
- 210			210		2	7.2

Drill Dia and Shank

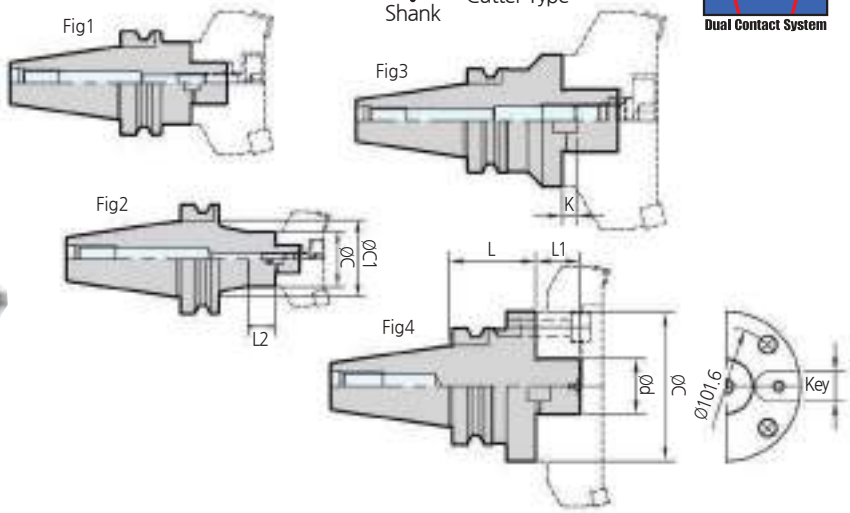
Shank		MT1	MT2	MT3	MT4	MT5
Drill dia	Min	3.0	14.5	23.5	32.0	51.0
	Max	14.0	23.0	31.5	50.0	76.0

FACE MILL ARBOR

CODE No.

GBT50 FMA25.4 45

Shank — Cutter Type — Length



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

■JIS B4113 face milling용 입니다. ■For face-milling cutter conforming to JIS B4113.

Code No.	ød	Cutter Dia	L	øC	øC1	L1	L2	Key	K	Fig	Weight (kg)
GBT30 - FMA25.4 - 45	25.4	80	45	50	-	22	-	K9.5 - S	5	3	0.8
- FMA31.75 - 45	31.75	100		60		30		K12.7 - S	7		1.0
GBT40 - FMA25.4 - 45	25.4	80	45	50	-	22	-	K9.5 - S	5	1	1.4
- 90			90					K9.5 - L			3.0
FMA31.75 - 45	31.75	100	45	60		30		K12.7 - S	7		2.0
- 75			75					K12.7 - S			3.2
FMA38.1 - 60	38.1	125	60	80		34		K15.85 - S	9	3	3.8
GBT50 -FMA25.4 - 45	25.4	80	45	50	-	22	-	K9.5 - S	5	1	3.8
- 90			90		60		25	K9.5 - L		2	4.5
-150			150		70		25				5.5
FMA31.75 - 45	31.75	100	45	60	-	30	-	K12.7 - S	7	1	4.6
- 75			75					K12.7 - L			5.2
-105			105		70		25			2	5.5
-150			150				25				7.0
FMA38.1 - 45	38.1	125	45	80	-	34	-	K15.85 - S	9	1	4.3
- 75			75					K15.85 - L			5.0
-105			105								5.5
-150			150								8.5
FMA50.8 - 45	50.8	160	45	100		36		K19 - S	10		4.8
- 75			75					K19 - S			6.8
-105			105								7.8
FMA47.625 - 75	47.625	200	75	128.5		38		K25.4	12.5	4	7.6

▶ 페이스밀아바 스페어 파트는 P71 ▶ The spare parts for FACE MILL ARBOR are refered. P71

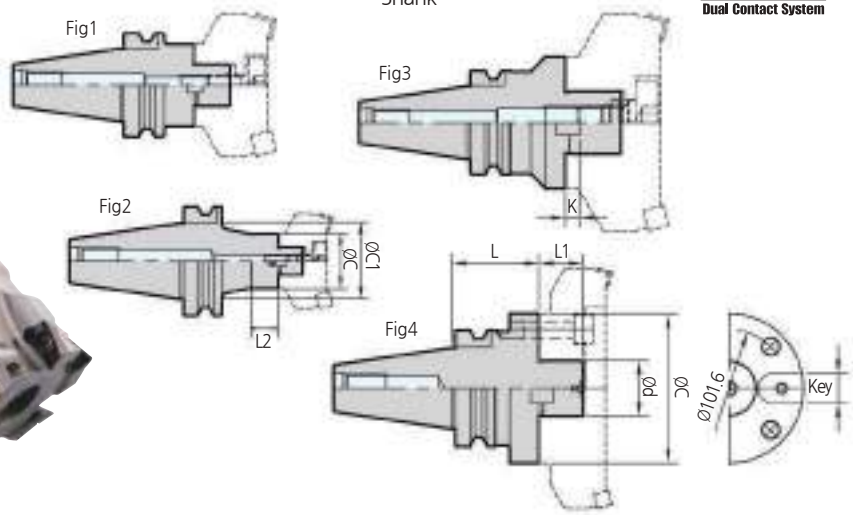
FACE MILL ARBOR

CODE No.

GBT50 | FMC22 | 105

Shank — Cutter Type — Length

SELUX Dual Contact System



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

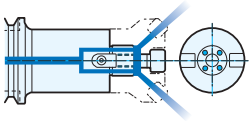
PRODUCT INFORMATION

- JIS B4113 face milling용 입니다.
- (S)Type은 표준길이(+38mm)
- For face-milling cutter conforming to JIS B4113.
- S type is extended by 38mm compare to standard type.

Code No.	ød	Cutter Dia	L	øC	øC1	L1	L2	Key	K	Fig	Weight (kg)
GBT30 - FMC16 - 45	16	40	45	38	-	16	-	K8-S	5	1	1.2
FMC22 - 45	22	50/63		45		18		K10-S	5.5		1.5
- 90			90								1.5
FMC27 - 45	27	63/80	45	60		20		K12-S	6	3	1.5
FMC32 - 45	32	100		80		22		K14-S	7		2.0
GBT40 - FMC16 - 45	16	40	45	38	-	16	-	K8-S	5	1	1.7
FMC22 - 45	22	50/63		45		18		K10-S	5.5		2.0
- 90			90					K10-L			2.2
FMC25,4 - 60	25.4	63/80	60	70		20		K9.5-S	6	3	2.5
- 90			90								2.7
FMC27 - 60	27		60	60				K12-S		1	2.5
- 90			90					K12-L			3.4
FMC32 - 60	32	100	60	80		22		K14-S	7	3	3.4
- 90			90					K14-L			3.8
FMC38,1 - 60	38.1		60	85				K15.85-S			4.7
- 90			90					K15.85-L			5.0
FMC40 - 60	40	125/160	60	90		26		K15.85-S	8	4	5.2
GBT50 - FMC16 - 60	16	40	60	38	-	16	-	K8-S	5.0	1	3.2
FMC22 - 60	22	50/63		45		18		K10-S	5.5		3.6
- 105			105					K10-L			5.5
- 150(50)			150		48		25			2	7.3
- 150(63)				58	63						7.3
FMC25,4 - 45	25.4	63/80	45	70	-	20	-	K9.5-S	6	1	4.1
- 90			90					K9.5-L			6.0
- 150			150								7.9
FMC27 - 45	27		45	60				K12-S			5.0
- 90			90					K12-L			6.0
- 150(63)			150								7.5
- 150(80)				68							7.5
FMC32 - 45	32	100	45	80		22		K14-S	7		5.0
- 75			75					K14-L			6.0
- 105			105								6.8
- 150			150								9.8
FMC38,1 - 45	38.1		45	85				K15.85-S			5.8
- 75			75					K15.85-L			6.0
- 105			105								7.0
FMC40 - 45	40	125/160	45	90		26		K15.85-S	8	4	6.2
- 75			75					K15.85-L			6.8

▶ 페이스밀아바 스페어 파트는 P71
▶ The spare parts for FACE MILL ARBOR are refered. P71

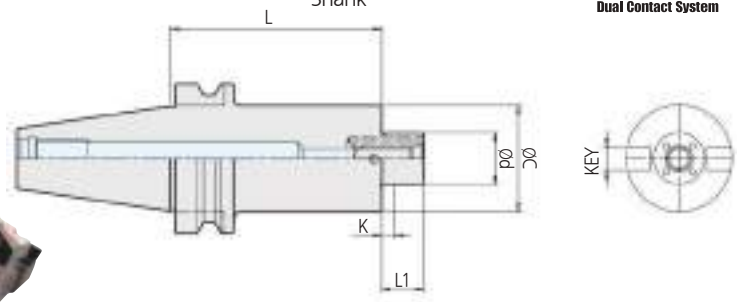
FACE MILL ARBOR



CODE No.

GBT50 | FMH22 | 105

Shank — Cutter Type — Length



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

■쿨런트 컷터 전용
■컷터 가공성 향상 및 공구사용시간 증가

■Only use coolant cutter.
■Improve tool life and cutting operation.

Code No.	ød	øC	L	L1	K	KEY	Weight (kg)
GBT30 - FMH16 - 45	16	38	45	16	5	K8-S	1.2
FMH22 - 45	22	45		18	5.5	K10-S	1.5
- 90			90				1.5
FMH27 - 45	27	60	45	20	6	K12-S	1.5
GBT40 - FMH16 - 45	16	38	45	16	5	K8-S	1.7
FMH22 - 45	22	45		18	5.5	K10-S	2.0
- 90			90			K10-L	2.0
FMH27 - 60	27	60	60	20	6	K12-S	2.5
- 90			90			K12-L	3.4
FMH32 - 60	32	80	60	22	7	K14-S	3.4
FMH25.4 - 60	25.4	70		20	6	K9.5-S	2.5
- 90			90				2.7
FMH31.75 - 60	31.75	76	60	30	7	K12.7-S	2.7
- 90			90				3.2
FMH38.1 - 60	38.1	85	60	34	9	K15.85-S	4.7
- 90			90			K15.85-L	5.0
GBT50 - FMH22 - 60	22	45	60	18	5.5	K10-S	3.6
- 105			105			K10-L	5.5
- 150			150				7.3
FMH27 - 90	27	60	90	20	6	K12-L	6.0
- 150			150				7.5
FMH32 - 90	32	80	90	22	7	K14-L	6.5
- 150			150				9.0
FMH25.4 - 90	25.4	70	90	20	6	K9.5-L	6.0
- 150			150				7.9
FMH31.75 - 90	31.75	76	90	30	7	K12.7-L	6.5
- 150			150				8.2
FMH38.1 - 90	38.1	85	90	34	9	K15.85-L	7.0
- 150			150				9.0

▶FMH 클램프볼트및 부품은 일반 FMA, FMC 아바와 호환합니다.
▶페이스밀아바 스페어 파트는 P71

▶ FMH clamp bolt and other parts is compatiblle with FACE MILL ARBOR FMA, FMC.
▶ The spare parts for FACE MILL ARBOR are refered. P71

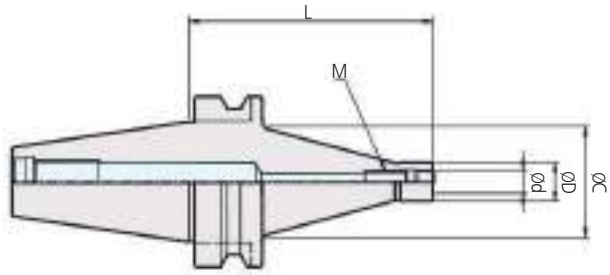
PRO MILL ARBOR

CODE No.

GBT50 | M06 | 135

Shank — Cutter Type — Length

SELUX Dual Contact System



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

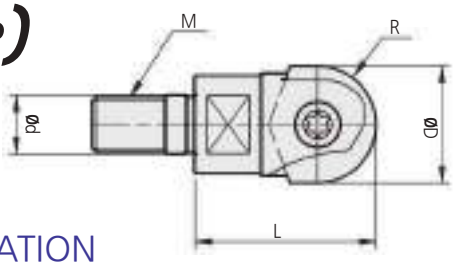
PRODUCT INFORMATION

- 모듈라 방식으로 원가 절감
- 높은 정밀도
- 이면구속 체결로 흔들림 감소
- 헤드 교체로 다양한 작업가능

- Cost reduction effect with modular system.
- Excellent accuracy.
- Vibration damping effect due to dual face contact.
- A various operation with exchanging head.

Code No.	ød	L	øD	øC	M	Weight (kg)
GBT40 - M06 - 90	6.5	90	10	40	M6	1.2
- 120		120				1.5
M08 - 90	8.5	90	14.4		M8	1.2
- 120		120				1.5
M10 - 90	10.5	90	18		M10	1.3
- 120		120				1.5
- 150		150				1.9
M12 - 120	12.5	120	22.5		M12	1.5
- 150		150				1.9
GBT50 - M06 - 135	6.5	135	10	65	M6	4.2
- 165		165				4.9
M08 - 135	8.5	135	14.4		M8	4.2
- 165		165				4.9
M10 - 135	10.5	135	18		M10	4.2
- 165		165				4.9
M12 - 135	12.5	135	22.5		M12	4.2
- 165		165				4.9

PRO MILL CUTTER(Ball Type)



PRODUCT INFORMATION

- HITACHI 인써트 호환
- 정삭 R작업 최적화

- Compatible with HITACHI insert.
- Optimal for R-finishing operation.

Code No.	R	øD	L	ød	M	Insert	Screw	Wrench
R05M0630	5	10	30	6.5	M6	ZPFG100, ZCFW100	TNS-5842	TXL-10
R06M0630	6	12				ZPFG120, ZCFW120	TNS-5843	TXT-20
R08M0830	8	16		8.5	M8	ZPFG160, ZCFW160	TNS-5844	
R10M1035	10	20	35	10.5	M10	ZPFG200, ZCFW200	TNS-5845	TXT-25
R12M1240	12.5	25	40	12.5	M12	ZPFG250, ZCFW250	TNS-5846	TXT-30

▶다양한 Type의 컷터 제작가능합니다.
▶전용 스페너는 별매입니다.

▶Cutters can be made of a variety of Type.
▶Spanner is orderd seperately.

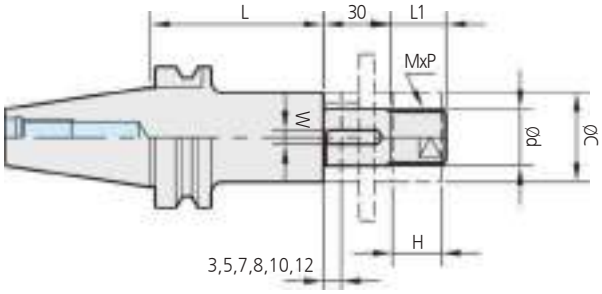
SIDE CUTTER ARBOR

CODE No.

GBT50 | SCA25.4 | 90

Shank — Cutter Type — Length

Dual Contact System

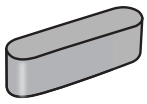
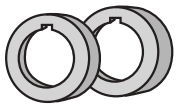
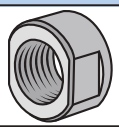


GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- JIS B4219,4109,4107 side cutter type 입니다.
- Key, collar 및 nut는 부착되어 있습니다.
- For side cutters conforming to JIS B4219, 4019, and 4107.
- Key, collar and nut attached.

Code No.	ød	L	øC	L1	W	H	M x P	Weight (kg)
GBT30 - SCA25.4 - 60	25.4	60	40	25	6.35	21	M24X1.5	0.9
GBT40 - SCA25.4 - 75	25.4	75	40	25	6.35	21	M24X1.5	2.1
-120		120						2.5
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	2.6
-120		120						2.9
GBT50 - SCA25.4 - 90	25.4	90	40	25	6.35	21	M24X1.5	4.7
-135		135						5.0
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	5.1
-135		135						5.7
SCA38.1 - 90	38.1	90	55	36	9.53	31	M36X1.5	5.8
-135		135						6.8

Spare Parts			
	Parallel Key	Coller	Lock Nut
Type			
SCA25.4	6.35 x 6.35 x 25	SCA25.4 -Set	SCA-M24
SCA31.75	7.92 x 7 x 25	SCA31.75 -Set	SCA-M30
SCA38.1	9.52 x 8 x 25	SCA38.1 -Set	SCA-M36

Excellent Precision
Excellent Quality

SELUX
NC TOOLING SYSTEM

BT

CHUCK & Item

HYDRAULIC CHUCK
MILLING CHUCK
HIGH SPEED MILLING CHUCK
MILLING CHUCK SET
SHRINK FIT HOLDER
SSK COLLET CHUCK
HIGH SPEED GSK CHUCK
ER COLLET CHUCK
ER SLIM COLLET CHUCK
NC DRILL CHUCK
TAPPING CHUCK HOLDER
SIDE LOCK HOLDER
LONG TYPE SIDE LOCK HOLDER
MOLD SIDE LOCK HOLDER
MSL BOLT
JACOBS TAPER ARBOR
MORSE TAPER HOLDER
FACE MILL ARBOR
LONG TYPE FACE MILL ARBOR
FACE MILL ARBOR
FACE MILL ARBOR SPARE PARTS
PRO MILL ARBOR
PRO MILL ARBOR CUTTER
SIDE CUTTER ARBOR
CUTTER HOLDER
SQUARE BORING BAR

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : ⌀3.0 ~ ⌀32.0

CODE No.

BT50 | SHC20 | 140

Shank — Chucking Dia — Length

MAX 25,000 min-1

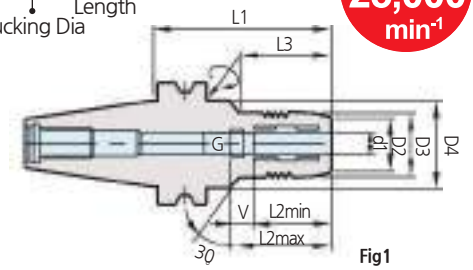


Fig1

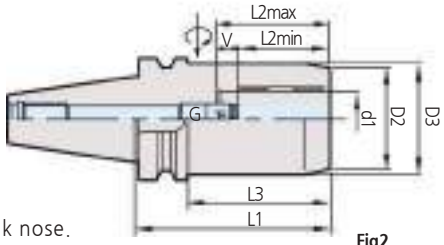


Fig2

PRODUCT INFORMATION

- ■4D 선단에서 3㎛이내의 흔들림정도
- ■높은 정밀도와 고속가공에 최적화
- ■유압방식의 강력한 파지력
- ■렌치 하나로 쉽게 공구고정

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■The optimal chcuk for excellent accuracy and high speed operation.
- ■Powerful clamping force of hydraulic type.
- ■Easy clamping with just one wrench.

CODE NO.	d1	D2	D3	D4	L1	L2min	L2max	V	L3	G	Type	Weight (kg)
BT30 - SHC 6 - 70	6	25	28	45	70	27.5	37.5	10	28	M5X0.8	Fig1	0.65
SHC 8 - 70	8	27	30							M6X1.0		0.65
SHC10 - 75	10	29	32		75	32.5	42.5		38			0.75
SHC12 - 75	12	31	34			37.5	47.5		36			0.80
SHC14 - 85	14	33	36		85				44			0.80
SHC16 - 90	16	35	38		90	42.5	52.5		48			0.90
SHC18 - 90	18	38	41							M8X1.0		0.90
SHC20 - 90	20	40	42	-							Fig2	0.90
BT40 - SHC 6 - 65	6	25	28	50	65	27.5	37.5	10	23	M5X0.8	Fig1	1.0
- 90					90				44			1.3
- 140					140							1.9
SHC 8 - 65	8	27	30		65				23	M6X1.0		1.0
- 90					90				39			1.3
- 140					140				44			1.9
SHC10 - 65	10	29	32		65	32.5	42.5		23			1.1
- 90					90				44			1.35
- 140					140							1.95
SHC12 - 65	12	31	34		65	37.5	47.5		23			1.1
- 90					90				44			1.35
- 140					140							1.96
SHC14 - 65	14	33	36		65				23			1.2
- 90					90				44			1.35
- 140					140							1.96
SHC16 - 65	16	35	38		65	42.5	52.5		23	M8X1.0		1.15
- 90					90				48			1.4
- 140					140							1.96
SHC18 - 75	18	38	41		75				30			1.15
- 90					90				48			1.45
- 140					140							1.98
SHC20 - 75	20	40	43		75				30			1.2
- 90					90				48			1.5
- 140					140							2.0
SHC25 - 100	25	53	57	-	100	51	61		73	M16X1.0	Fig2	1.7
- 135					135				108			2.3
SHC32 - 105	32	58	63		100	55	65		-			2.1
- 135					135				-			2.6

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

BT50 | SHC20 | 140

Shank — Chucking Dia — Length

MAX 25,000 min-1

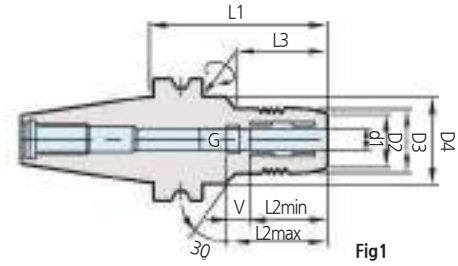


Fig1

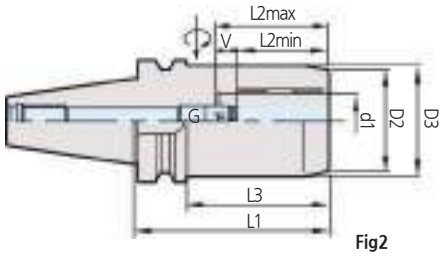


Fig2

CODE NO.	d1	D2	D3	D4	L1	L2min	L2max	V	L3	G	Type	Weight (kg)
BT50 - SHC 6 - 90	6	25	28	50	90	27.5	37.5	10	32	M5X0.8	Fig1	3.75
- 120					120				44			4.1
- 140					140							4.7
SHC 8 - 90	8	27	30		90				32	M6X1.0		3.75
- 120					120				40			4.1
- 140					140				44			4.7
SHC10 - 90	10	29	32		90	32.5	42.5		32			3.9
- 120					120				44			4.3
- 140					140							4.9
SHC12 - 90	12	31	34		90	37.5	47.5		32			3.9
- 120					120				44			4.3
- 140					140							4.9
SHC14 - 90	14	33	36		90				32			3.9
- 120					120				44			4.3
- 140					140							4.9
SHC16 - 90	16	35	38		90	42.5	52.5		32	M8X1.0		4.0
- 120					120				48			4.4
- 140					140							5.0
SHC18 - 90	18	38	41		90				32			4.0
- 120					120				48			4.4
- 140					140							5.0
SHC20 - 90	20	40	43		90				32			4.0
- 120					120				48			4.4
- 140					140							5.0
SHC25 - 105	25	53	57	-	105	51	61		67	M16X1.0	Fig2	4.4
- 150					150				112			5.6
SHC32 - 115	32	58	63		115	55	65		77			4.7
- 150					150				112			6.0

▶유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
▶유압척 SHC12, SHC20, SHC32는 D또는 OD콜렛을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
▶유압척 전용 콜렛은 P132~P133
▶척킹시 필요한 렌치는 부속되어 있습니다.
▶황삭작업에는 권장하지 않습니다.

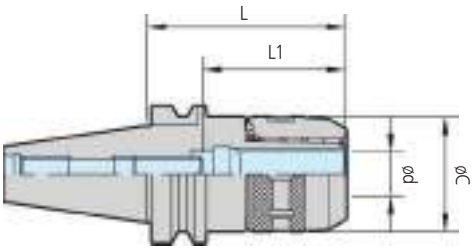
▶ Tolerance of cutting tool shank should be configured within h6.
▶ HYDRAURIC CHCUK SHC12, SHC20, SHC32 are possible to use various shank cutting tool with D or OD COLLET.
▶ HYDRAURIC COLLET are refered. P132~P133
▶ Wrench is included.
▶ We do not recommed to use hydrauric chuck for roughing operation.

MILLING CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø42.0

CODE No.

BT50	MC32	105
Shank	Chucking Dia	Length

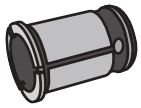


PRODUCT INFORMATION

- ■높은 정밀도
- ■3.5D 선단에서 5㎛이내의 흔들림정도
- ■간편한 척킹 시스템
- ■Taper 접촉 80%이상 Taper공차 AT3로 보증
- ■완전한 단면 밀착으로 강력 절삭
- ■4배열 Roller System 방식으로 강력한 파지력

- ■Excellent Run-out Accuracy.
- ■5㎛(T.I.R) Run-out at 3.5D away from shank nose.
- ■Easy chucking system.
- ■More than 80% taper contact, we guarantee taper tolerance AT3.
- ■The strongest cutting power due to perfect face contact construction.
- ■Powerful clamping force by 4 needle roller system.

CODE NO.	ød	L	øC	L1	Collet	Weight (kg)
BT30 - MC20 - 75	20	75	53	70	K20, NC20	1.0
MC25 - 80	25	80	62		K25, NC25	1.2
MC32 - 100	32	100	72	78	K32, NC32	1.4
BT40 - MC20 - 80	20	80	53	82	K20, NC20	1.5
90		90				1.6
105		105				1.7
120		120				1.9
MC25 - 80	25	80	62	90	K25, NC25	2.1
90		90				2.2
105		105				2.4
120		120				2.7
MC32 - 85	32	85	72	80	K32, NC32	2.0
105		105		90		2.4
120		120		105		2.7

Spare Parts		
	Option	
	Collet	Spanner
Type		
MC20	K20-NC20	MC20-SP(50-55)
MC25	K25-NC25	MC25-SP(56-61)
MC32	K32-NC32	MC32-SP(68-75)
MC42	K42-NC42	MC42-SP(88-96)

- ▶고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶밀링척 전용 콜렛은 P134~P136
- ▶밀링척 스페너는 별도 판매품 입니다. P149

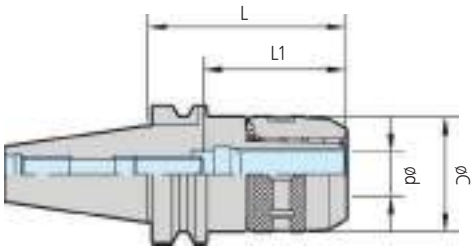
- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are refered. P134~P136
- ▶ Spanner is ordered separately. P149

MILLING CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø42.0

CODE No.

BT50	MC32	105
Shank	Chucking Dia	Length



PRODUCT INFORMATION

- ■높은 정밀도
- ■3.5D 선단에서 5㎛이내의 흔들림정도
- ■간편한 척킹 시스템
- ■Taper 접촉 80%이상 Taper공차 AT3로 보증
- ■완전한 단면 밀착으로 강력 절삭
- ■4배열 Roller System 방식으로 강력한 파지력

- ■Excellent Run-out Accuracy.
- ■5㎛(T.I.R) Run-out at 3.5D away from shank nose.
- ■Easy chucking system.
- ■More than 80% taper contact, we guarantee taper tolerance AT3.
- ■The strongest cutting power due to perfect face contact construction.
- ■Powerful clamping force by 4 needle roller system.

CODE NO.	ød	L	øC	L1	Collet	Weight (kg)
BT50 - MC 20 - 90	20	90	53	82	K20, NC20	4.1
105		105				4.4
120		120				4.6
135		135				4.8
165		165				5.3
200		200				6.0
250		250				7.5
300		300				9.5
MC 25 - 90	25	90	62	90	K25, NC25	4.5
105		105				4.8
120		120				5.0
135		135				5.2
165		165				5.6
200		200				6.5
250		250				8.0
300		300				10.0
MC 32 - 95	32	95	72	105	K32, NC32	4.7
105		105		110		4.9
120		120		125		5.3
135		135				5.7
165		165				6.5
200		200				7.5
250		250				9.2
300		300				10.6
350		350				12.5
400		400				15.0
MC 42 - 105	42	105	94	120	K42, NC42	5.5
120		120		125		6.2
135		135		130		6.9
165		165		135		8.3
200		200				9.5
250		250				11.8
300		300				14.0
350		350				17.5
400		400				19.2

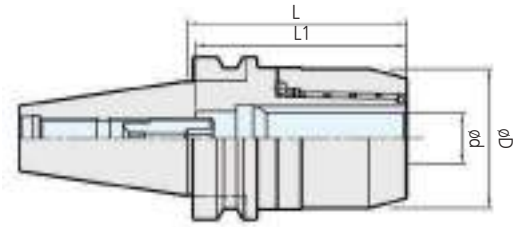
HIGH SPEED MILLING CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

BT40	MC32	85	G
Shank	Chucking Dia	Length	High Speed

MAX 25,000 min-1

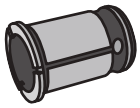


PRODUCT INFORMATION

- ■고속 가공에서 높은 정도
- ■강력한 파지력
- ■3.5D 선단에서 5㎛이내의 흔들림 정도
- ■스패너는 GH 스패너 사용(별매)
- ■G6.3 max 25.000RPM
- ■원형너트로 고속 절삭시 소음 감소

- ■Excellent Run-out Accuracy.
- ■Powerful clamping force.
- ■5㎛(T.I.R)Run-out at 3.5D away from shank nose.
- ■GH spanner is orderd seperately.
- ■G6.3 max 25.000 RPM.
- ■The operation noise is reduced by assembled circle style nut.

CODE NO.	ød	L	øC	L1	Collet	MAX rpm	Weight (kg)
BT30 - MC20 - 75G	20	75	48	70	K20, NC20	25,000	0.6
MC25 - 80G	25	80	55		K25, NC25		0.9
BT40 - MC20 - 80G	20	80	48	82	K20, NC20	25,000	1.3
- 90G		90					1.4
MC25 - 80G	25	80	55	85	K25, NC25	20,000	1.5
- 90G		90					1.6
MC32 - 85G	32	85	68	80	K32, NC32		1.6
- 105G		105		90			2.0
BT50 - MC20 - 105G	20	105	48	105	K20, NC20	20,000	4.1
- 135G		135					4.4
MC25 - 105G	25	105	55	90	K25, NC25	15,000	4.4
- 135G		135					4.8
MC32 - 105G	32	105	68	110	K32, NC32		4.7
- 135G		135		135			5.2

Spare Parts		
	Option	
	Collet	Spanner
Type		
MC20-G	K20-NC20	MC20-GH
MC25-G	K25-NC25	MC25-GH
MC32-G	K32-NC32	MC32-GH

▶고속형밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
▶밀링척 전용 콜렛은 P134 ~ P136
▶고속형밀링척 GH스페너는 별도 판매품 입니다. P149

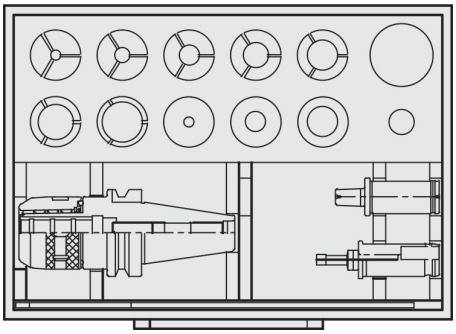
▶ High speed MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
▶ K-COLLET is refered. P132~P133
▶ GH SPANNER for high speed milling chuck is ordered separately. P149

MILLING CHUCK SET

Coolant-through hole
Clamping Range : ø3.0~ ø42.0

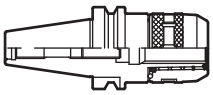
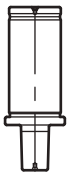
CODE No.

BT40	MC32	85	SET
Shank	Chucking Dia	Length	SET



PRODUCT INFORMATION

■HSK/SK SET는 주문제작 합니다. ■HSK/SK is available for request.

Code No.	Body	K- Collet	MT collet	JT Collet	Spanner
					
BT40-MC32- 85 SET	BT40-MC32-85	K 3 2 -	K32-MT1,2,3	K32-JT6	MC32-SP
BT50-MC32-105 SET	BT50-MC32-105	6,8,10,12,16,20,25	K32-MT1,2,3	K32-JT6	MC32-SP
BT50-MC42-105 SET	BT50-MC42-105	K 3 2 -	K 4 2 -	K42-JT6	MC42-SP

▶포장용 나무케이스는 별도로 판매하지 않습니다.
▶GBT, HSK, CAT, SK 타입은 별도로 주문하셔야됩니다.

▶ You can not order only wooden case for set.
▶ GBT, HSK, CAT, SK TYPE are ordered separately.

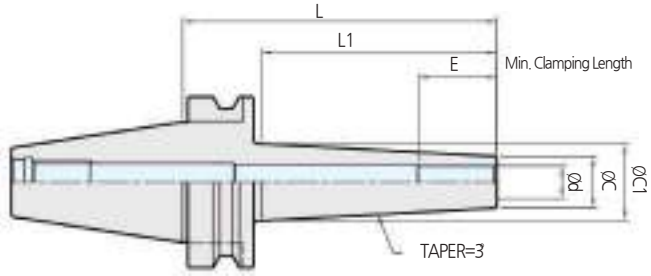
SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : ø3.0 ~ ø12.0

CODE No.

BT40	SSF10	S	120
Shank	Chucking Dia	Shlim	Length

MAX 25,000 min-1



PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 (Coolant Through Hole)

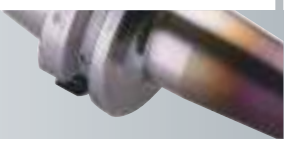
- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant type.

Code No.	ød	øC	øC1	L	L1	E	Weight (kg)
BT30 - SSF 4S - 80	4	7	20	80	42	12	0.4
SSF 6S - 80	6	11	17		55	18	0.4
- 120			21	120	95		0.45
SSF 8S - 80	8	13	19	80	55	24	0.4
- 120			23	120	95		0.45
SSF10S - 80	10	16	22	80	55	30	0.4
- 120			26	120	95		0.45
SSF12S - 80	12	19	25	80	55		0.5
- 120			29	120	95		0.55
BT40 - SSF 3S - 90	3	6	26	90	37	9	1.0
SSF 4S - 90	4	7				12	1.0
SSF 6S - 120	6	11	20	120	90	18	1.1
- 160			25	160	130		1.2
SSF 8S - 120	8	13	22	120	90	24	1.1
- 160			27	160	130		1.3
SSF10S - 120	10	16	25	120	90	30	1.1
- 160			30	160	130		1.4
SSF12S - 120	12	19	28	120	90		1.2
- 160			33	160	130		1.4
BT50 - SSF 6S - 120	6	11	19	120	79	18	3.8
- 160			23	160	119		4.1
SSF 8S - 120	8	13	21	120	79	24	3.8
- 160			25	160	119		4.1
SSF10S - 120	10	16	24	120	79	30	3.9
- 160			28	160	119		4.2
SSF12S - 120	12	19	27	120	79		3.9
-160			31	160	119		4.3

- ▶ 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- ▶ 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)
- ▶ 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- ▶ SELUX 고주파 히팅기는 P145
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P145
- ▶ 열박음홀더 사용시 오일홀 풀스터드 볼트를 권장합니다.
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- ▶ Please use only carbide cutting tools of a shank tolerlance within H6.
- ▶ Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shink fit holder.
- ▶ SELUX shrink fit equipment is refered. P145
- ▶ Please follow minimum insertion lengh of the cutting tools.
- ▶ Stopper for adjusting cutting tool lengh order separately. P145
- ▶ We recommend oil hole Pull stud bolt for shrink fit holder.
- ▶ Please clean the shank outside and inside of shrink fit before use. If you don't clean the shrink fit, it has problem about Run-out and toollife.

SHRINK FIT HOLDER



Coolant-through hole
Clamping Range : ø3.0 ~ ø20.0

CODE No.

BT40	SSF10	160
Shank	Chucking Dia	Length

MAX 25,000 min-1

Fig1

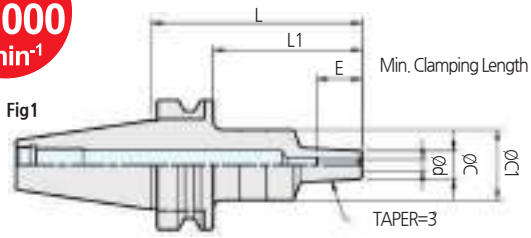
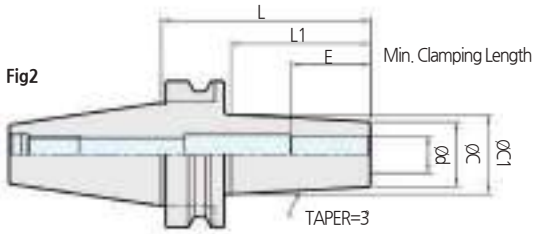


Fig2



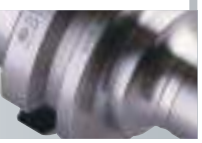
PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 (Coolant Through Hole)

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant type.

Code No.	ød	øC	øC1	L	L1	E	Fig	Weight (kg)
GBT30 - SSF 3 - 75	3	7.5	25	75	53	12	1	0.5
SSF 4 - 75	4	10				16		0.5
SSF 6 - 75	6	12	26			24		0.5
SSF 8 - 75	8	14	26					0.5
SSF10 - 75	10	16	26			36		0.5
SSF12 - 75	12	20	30					0.5
SSF16 - 75	16	26	34			48		0.5
GBT40 - SSF 3 - 90	3	7.5	26	90	37	9	1	1.0
SSF 4 - 90	4	10				12		1.0
SSF 6 - 90	6	14	20		60	18	2	1.2
- 160			21	160	130			1.4
SSF 8 - 90	8	18	24	90	60	24	2	1.2
- 160			32	160	130			1.4
SSF10 - 90	10	22	28	90	60	30	2	1.3
-160			36	160	130			1.5
SSF12 - 90	12	24	30	90	60			1.3
- 160			38	160	130			1.6
SSF16 - 90	16	28	34	90	60	34	2	1.3
- 160			42	160	130			1.8
SSF20 - 90	20	34	40	90	60	40	2	1.3
- 160			48	160	130			2.1
GBT50 - SSF 6 - 100	6	14	20	100	130	18	2	3.7
- 160			26	160	70			3.9
SSF 8 - 100	8	18	24	100	59	24	2	3.7
- 160			30	160	119			3.9
SSF10 - 100	10	22	28	100	59	30	2	3.8
- 160			34	160	119			4.1
SSF12 - 100	12	24	30	100	59			3.8
- 160			36	160	119			4.1
SSF16 - 100	16	28	34	100	59	34	2	3.8
- 160			40	160	119			4.1
SSF20 - 100	20	34	46	100	59	40	2	3.9
-160			53	160	119			4.4

SSK COLLET CHUCK

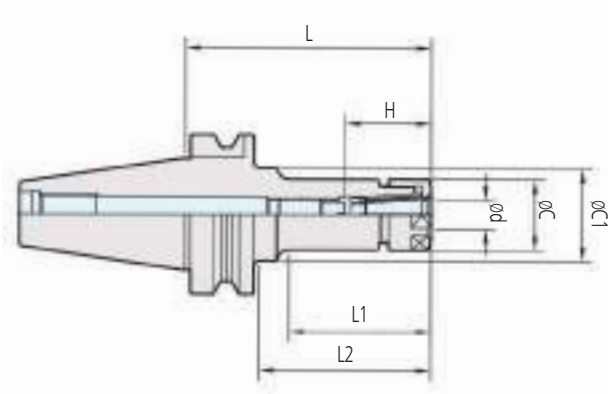


Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

BT50 | SSK10 | 135

Shank — Chucking Dia — Length



PRODUCT INFORMATION

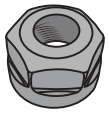
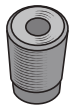
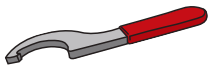
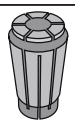
- 8°Taper 의 강력한 파지력
- 높은 정밀도와 빠른 가공에 적합
- 드릴, 센터드릴, 엔드밀, 탭, 리머용으로 사용

- Powerful clamping force of 8°Taper.
- Excellent Run-out Accuracy.
- SSK COLLET CHUCK is suitable for a various operation using drill, endmill, tap and reamer.

Code No.	ød	L	øC	øC1	H Min	H Max	L1	L2	Collet	Weight (kg)
BT30 - SSK 6 - 60	0.9~6.0	60	19.5	19.5	21	35	33	33	SC6	0.7
- 90		90		32			56	65		0.7
SSK10 - 45	1.75~10.0	45	27.5	27.5	30	50	22	22	SC10	0.8
- 60		60					35	35		0.9
- 90		90					65	65		1.0
- 120		120					95	95		1.1
SSK13 - 60	2.75~13.0	60	33	33	31	50	35	35	SC13	1.0
- 90		90			31	65	65	65		1.1
- 120		120					95	95		1.2
SSK16 - 60	2.75~16.0	60	40	40	45	60	37	37	SC16	1.1
- 90		90			45	65	67	67		1.2
- 120		120					97	97		1.3
SSK20 - 75	3.6~20.0	75	48.5	48.5	65	70	53	53	SC20	1.0
- 90		90			65	75	67	67		1.2
SSK25 - 90	16.0~25.4	90	55	55	55	75	67	67	SC25	1.5
BT40 - SSK 6 - 60	0.9~6.0	60	19.5	19.5	21	35	30	30	SC6	1.0
- 90		90		32			51	60		1.1
- 120		120					60	90		1.4
- 150		150		25			60	120		1.5
SSK10 - 60	1.75~10.0	60	27.5	27.5	30	50	32	32	SC10	1.1
- 90		90		40			48	60		1.2
- 120		120					73	90		1.4
- 150		150		34.5				118		1.6
- 180		180		39				148		1.6
SSK13 - 60	2.75~13.0	60	33	33	31	65	28	28	SC13	1.2
- 90		90					58	58		1.4
- 120		120					88	88		1.6
- 150		150		40				118		1.8
- 180		180						148		1.8
SSK16 - 60	2.75~16.0	60	40	40	50	65	32	32	SC16	1.3
- 90		90			40	67	58	58		1.5
- 120		120			40	70	88	88		1.7
- 150		150					118	118		1.9
- 180		180					148	148		2.0
SSK20 - 60	3.6~20.0	60	48.5	48.5	47	60	32	32	SC20	1.3
- 90		90			47	80	60	60		1.6
- 120		120					90	90		2.0
- 150		150			47	90	118	118		2.4
- 180		180					148	148		2.9

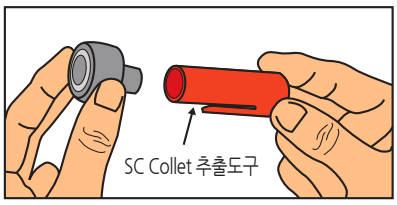
SSK COLLET CHUCK

Code No.	ød	L	øC	øC1	H Min	H Max	L1	L2	Collet	Weight (kg)
BT40 - SSK25 - 75	16.0~25.4	75	55	55	40	60	46	46	SC25	1.5
- 90		90			55	75	61	61		1.8
- 120		120			55	85	91	91		2.0
- 150		150			55	90	120	120		2.6
- 180		180					150	150		3.1
BT50 - SSK 6 - 105	0.9~6.0	105	19.5	32	21	35	55	64	SC6	3.8
- 135		135					60	92		4.0
- 165		165						114		4.2
SSK10 - 105	1.75~10.0	105	27.5	27.5	30	50	57	57	SC10	4.2
- 135		135		32			70	92		4.6
- 165		165		36				114		4.8
- 195		195						146		5.0
- 225		225						178		5.2
SSK13 - 105	2.75~13.0	105	33	33	31	65	62	62	SC13	4.5
- 135		135						92		4.7
- 165		165		45			92	122		4.9
- 195		195						152		5.2
SSK16 - 105	2.75~16.0	105	40	40	40	70	62	62	SC16	4.7
- 135		135					92	92		4.9
- 165		165		50			90	122		5.1
- 195		195		52				152		5.5
SSK20 - 105	3.6~20.0	105	48.5	48.5	47	80	62	62	SC20	4.3
- 135		135						92		4.7
- 165		165					122	122		5.0
- 195		195						152		5.7
SSK25 - 105	15.6~25.4	105	55	55	50	85	62	62	SC25	5.2
- 135		135					92	92		5.4
- 165		165					122	122		5.6
- 195		195					152	152		6.0

Spare Parts				
	Basic		Option	
	Nut	Adjust Screw	Spanner	Collet
Type				
SSK 6	SCN- 6	BTD0825-C	SC 6-SP	SC 6-ø
SSK10	(HEXA)	BTD1225-C	SC10-SP	SC10-ø
SSK13	SCN-10	BTD1525-C	SC13-SP	SC13-ø
SSK16	(HEXA)	BTD1830-C	SC16-SP	SC16-ø
SSK20	SCN-13	BTD2230-C	SC20-SP	SC20-ø
SSK25	SCN-16	BTD2838-C	SC25-SP	SC25-ø

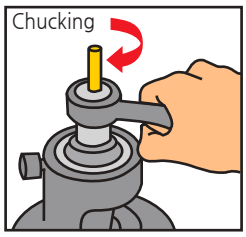
- 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- 고속회전용 GSK척은 P26
- 스페너는 별매입니다. P149
- Synchronized Tap 사용시 SSK10을 사용하십시오.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  위 사양 이상인경우는 Milling Chuck에 K-Collet을 사용하시길 바랍니다.
- SSK척 콜렛은 P138~P139
- 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- 고속 바란스 작업시 추가 비용이 청구됩니다.

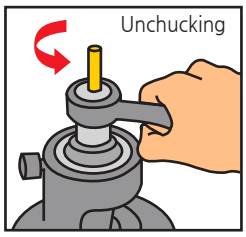
- NUT, ADJUST SCREW, COLLET REMOVER are included.
- High speed GSK CHUCK is refered. P26
- Spanner is ordered separately. P149
- Please use SSK10 when you use Synchronized Tap.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  If it has problem, We recommend K COLLET with Milling Chuck.
- SC COLLET is refered P138 ~ P139
- The nut or shank of chuck can be destoried if you too strongly clamp nut and holder.
- Extra charge for high speed balance.



SSK NUT에 SC COLLET 체결시에는 전용 콜렛 추출도구를 사용하시기 바랍니다.

Please use private remover when you insert the SSK COLLET in SSK NUT





SSK Collet chuck은 Nut와 Body 체결시 40 Torgue 이상의 힘이 가해질 시 너트 및 바디가 파손될 수 있습니다.
※주의 (SSK6, SSK10)

SSK NUT and SSK CHCUK is possible to be broken if you clamp chuck and nut over 40 Torgue
(※ WARNING SSK6, SSK10)

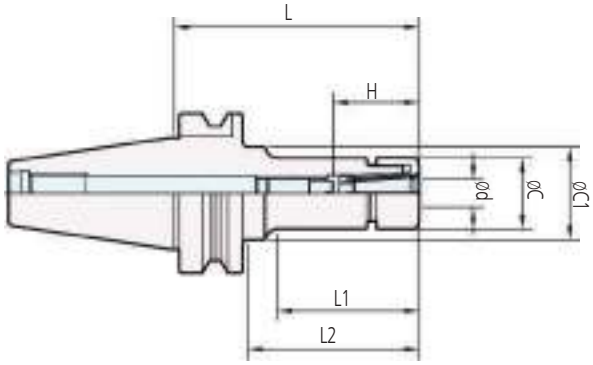
HIGH SPEED GSK CHUCK(P CLASS)

Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

BT50	GSK10	105	P
Shank	SC Collet	Length	High Speed

MAX 40,000 min-1



PRODUCT INFORMATION

- 고속가공에서 높은 정도
- 8°Taper의 강력한 파지력
- 원형 너트로 컴팩트한 디자인
- 스패너는 PH스패너 사용(별매)
- G2.5X max 40.000 RPM
- 고속형GSK척에는 P CLASS 콜렛 사용을 권장

- Excellent Run-out Accuracy.
- Powerful clamping force of 8°Taper
- Circle style nut designed compactly
- PH spanner is orderd seperately.
- G2.5X max 40.000 RPM.
- We recommed to use P CLASS SC COLLET when you use GSK CHCUK.

Code No.	ød	L	øC	øC1	H Min	H Max	L1	L2	Collet	MAX rpm	Weight (kg)
BT30 - GSK 6 -	0.9~6.0	60	19.5	19.5	21	35	33	33	SC6P	40,000	0.7
60P		90		32			56	65			0.7
- 90P	1.75~10.0	60	27.5	27.5	30	50	35	35	SC10P		0.9
GSK10 - 60P		90					65	65			1.0
- 90P		120					95	95			1.1
- 120P	2.75~13.0	60	33	33	31	50	35	35	SC13P		1.0
GSK13 - 60P		90			31	65	65	65			1.1
- 90P	2.75~16.0	60	40	40	45	60	37	37	SC16P	30,000	1.1
GSK16 - 60P		90			45	65	67	67			1.2
- 90P	0.9~6.0	60	19.5	19.5	21	35	30	30	SC6P	25,000	1.0
BT40 - GSK 6 -		90		32			51	60			1.1
60P		120					60	90			1.4
- 90P	1.75~10.0	60	27.5	27.5	30	50	32	32	SC10P		1.1
- 120P		90		40			48	60			1.2
GSK10 - 60P		120					73	90			1.4
- 90P		150		34.5			118	118			1.6
- 120P	2.75~13.0	60	33	33	31	65	28	28	SC13P		1.2
- 150P		90					58	58			1.4
GSK13 - 60P		120					88	88			1.6
- 90P	2.75~16.0	60	40	40	50	65	32	32	SC16P		1.3
- 120P		90			40	67	58	58			1.5
GSK16 - 60P		120			40	70	88	88			1.7
- 90P		150					118	118			1.9
- 120P	3.6~20.0	60	48.5	48.5	47	60	32	32	SC20P	20,000	1.3
- 150P		90			47	80	60	60			1.6
GSK20 - 60P		120					90	90			2.0
- 90P	15.6~25.4	75	55	55	40	60	46	46	SC25P		1.5
- 120P		90			55	75	61	61			1.8
GSK25 - 75P		120			55	85	91	91			2.0

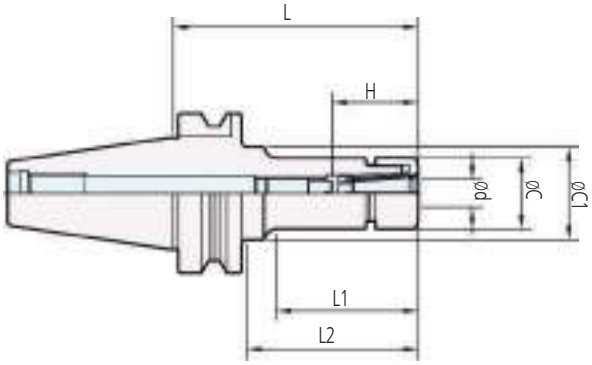
HIGH SPEED GSK CHUCK(P CLASS)

Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

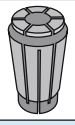
CODE No.

BT50	GSK10	105	P
Shank	SC Collet	Length	High Speed

MAX 40,000 min-1



Code No.	øD	L	øC	øC1	H Min	H Max	L1	L2	Collet	MAX rpm	Weight (kg)
BT50 - GSK 6 - 105P	0.9~6.0	105	19.5	32	21	35	55	64	SC6P	20,000	3.8
- 135P		135					60	92			4.0
- 165P		165						114			4.2
GSK10 - 105P	1.75~10.0	105	27.5	27.5	30	50	57	57	SC10P		4.2
- 135P		135		32			70	92			4.4
- 165P		165		36			75	114			4.6
GSK13 - 105P	2.75~13.0	105	33	33	31	65	62	62	SC13P		4.5
- 135P		135						92			4.7
- 165P		165		45			92	122			4.9
GSK16 - 105P	2.75~16.0	105	40	40	40	70	62	62	SC16P		4.7
- 135P		135					92	92			4.9
- 165P		165		50			90	122			5.1
GSK20 - 105P	3.6~20.0	105	48.5	48.5	47	80	62	62	SC20P	15,000	4.3
- 135P		135						92			4.6
- 165P		165					122	122			5.0
GSK25 - 105P	15.6~25.4	105	55	55	50	85	62	62	SC25P		5.2
- 135P		135					92	92			5.4
- 165P		165					122	122			5.6

Spare Parts	Basic		Option	
	Nut	Adjust Screw	Spanner	Collet
Type				
GSK 6P	SCN- 6P	BTD0825-C	SC 6-PH	SC 6-øP
GSK10P	SCN-10P	BTD1225-C	SC10-PH	SC10-øP
GSK13P	SCN-13P	BTD1525-C	SC13-PH	SC13-øP
GSK16P	SCN-16P	BTD1830-C	SC16-PH	SC16-øP
GSK20P	SCN-20P	BTD2230-C	SC20-PH	SC20-øP
GSK25P	SCN-25P	BTD2838-C	SC25-PH	SC25-øP

- 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- 스페너는 별매입니다. P149
- GSK척 콜렛은 P138~P139
- 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.

- NUT, ADJUST SCREW, COLLET REMOVER are included.
- Spanner is ordered separately. P149
- P CLASS SC COLLET for GSK CHUCK is refered. P138 ~ P139
- It can be destoried nut or shank of chuck if you too strongly clamp nut and holder.

ER COLLET CHUCK

Coolant-through hole
Clamping Range : ø0.5 ~ ø26.0

CODE No.

BT50 | ER16 | 105

Shank — ER Collet Size — Length

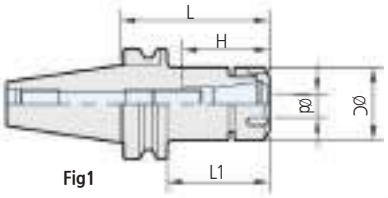


Fig1

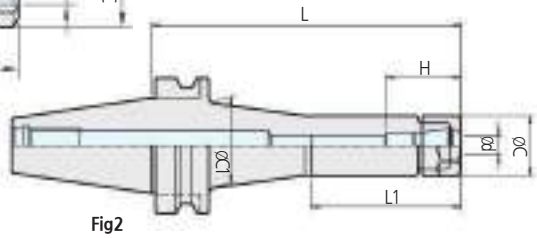


Fig2

PRODUCT INFORMATION

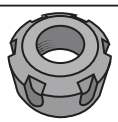
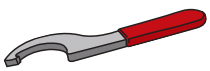
- ■안정적인 정밀도와 파지력
- ■쉽고빠른 공구교환
- ■드릴, 엔드밀, 탭 다양한 사용범위

- ■Reliable accuracy and Powerful clamping force.
- ■Easy and quick tool exchange.
- ■ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	L	L1	øC	C1	H Min	H Max	Collet	Fig	Weight (kg)
BT30 - ER11 - 60	0.5~7.0	60	35	19	-	19	34	ER11	1	0.5
- 75		75	50							0.5
- 90		90	65							0.6
ER16 - 60	0.5~10.0	60	35	28		23	43	ER16		0.5
- 75		75	50							0.5
- 90		90	65							0.6
ER20 - 60	1.0~13.0	60	35	35		25	48	ER20		0.5
- 75		75	50							0.6
- 90		90	65							0.7
ER25 - 60	1.0~16.0	60	35	42		34	54	ER25		0.6
- 75		75	50							0.7
- 90		90	65							0.8
ER32 - 60	2.0~20.0	60	35	50		40	60	ER32		0.5
- 75		75	50							0.7
- 90		90	65							0.9
BT40 - ER11 - 60	0.5~7.0	60	28	19	-	19	34	ER11	1	1.0
- 90		90	58							1.1
- 120		120	65		26				2	1.2
ER16 - 60	0.5~10.0	60	28	28	-	23	43	ER16	1	1.1
- 90		90	58							1.2
- 120		120	73		36				2	1.3
- 150		150	78		40					1.5
- 180		180	85		42					1.8
ER20 - 60	1.0~13.0	60	30	35	-	25	48	ER20	1	1.1
- 90		90	60							1.3
- 120		120	90							1.5
- 150		150	120							1.8
- 180		180	86		46				2	2.0
ER25 - 60	1.0~16.0	60	30	42	-	34	54	ER25	1	1.2
- 90		90	60							1.4
- 120		120	90							1.6
- 150		150	120							1.8
- 180		180	150							2.2
ER32 - 60	2.0~20.0	60	30	50		40	60	ER32		1.3
- 90		90	60							1.4
- 120		120	90							1.7
- 150		150	120							2.1
- 180		180	150							2.5
ER40 - 90	3.0~26.0	90	60	63		50	80	ER40		2.4
- 120		120	90							2.8
- 150		150	120							3.2

ER COLLET CHUCK

Code No.	ød	L	L1	øC	C1	H Min	H Max	Collet	Fig	Weight (kg)
BT50 - ER11 - 75	0.5~7.0	75	34	19	-	19	34	ER11	1	3.6
- 105		105	62							3.7
- 135		135	61		32				2	3.8
- 165		165			35					4.0
ER16 - 75	0.5~10.0	75	34	28	-	28	43	ER16	1	3.8
- 105		105	62							4.0
- 135		135	70		32				2	4.1
- 165		165	77		36					4.2
- 180		180			38					4.4
ER20 - 75	1.0~13.0	75	34	35	-	35	48	ER20	1	3.8
- 105		105	62							3.9
- 135		135	92							4.1
- 165		165	87		40				2	4.5
- 180		180			44					4.6
- 200		200	162		-				1	4.8
- 250		250	212							5.1
- 300		300	262							5.2
ER25 - 75	1.0~16.0	75	34	42		42	54	ER25	1	3.9
- 105		105	62							4.1
- 135		135	92							4.3
- 165		165	90		50				2	4.4
- 180		180								4.6
- 200		200	162						1	5.0
- 250		250	212							6.0
- 300		300	262							6.7
- 350		350	342							7.0
ER32 - 75	2.0~20.0	75	32	50	-	50	60	ER32	1	4.0
- 105		105	62							4.3
- 135		135	92							4.9
- 165		165	122							5.0
- 180		180	137							5.3
- 200		200	162							5.6
- 250		250	212							6.5
- 300		300	262							7.2
- 350		350	342							8.0
ER40 - 75	3.0~26.0	75	34	63		63	80	ER40	1	5.6
- 105		105	62							6.5
- 135		135	92							7.2
- 165		165	122							8.0

Spare Parts				
	Option			
	NUT	Adjust Screw	Spnner	ER Collet
Type				
ER11	UM/ER11(HEXA)	BTD0716-C	ER11-SP	ER11-ø
ER16	UM/ER16(HEXA)	BTD1025-C	ER16-SP	ER16-ø
ER20	UM/ER20(HEXA)	BTD1325-C	ER20-SP	ER20-ø
ER25	UX/ER25	BTD1830-C	ER25-SP	ER25-ø
ER32	UX/ER32	BTD2230-C	ER32-SP	ER32-ø
ER40	UX/ER40	BTD2838-C	ER40-SP	ER40-ø

- ▶ 내부급유 사용시에는 방수형콜렛이나 방수형 너트를 사용 해주십시오.
- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ ER척 스페어 파트는 P53

- ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER COLLET is refered. P140 ~ P141
- ▶ Spanner is ordered separately. P149
- ▶ Extra charge for high speed balance.
- ▶ The spare parts for ER CHCUK are refered. P53

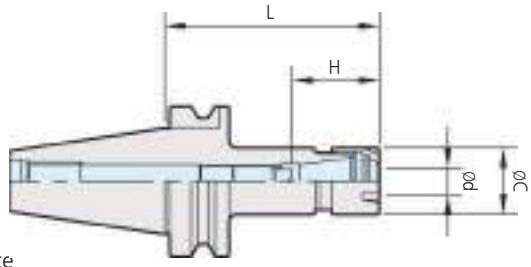
ER SLIM COLLET CHUCK

Coolant-through hole
Clamping Range : ø0.5 ~ ø16.0

CODE No.

BT50 | ER25 | M | 105

- BT50 → Shank
- ER25 → ER Collet Size
- M → Slim Length
- 105 → Slim Length

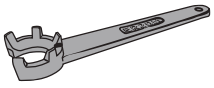


PRODUCT INFORMATION

- ■좁고 깊은 곳에 적합
- ■뛰어난 정밀도와 파지력
- ■척킹 범위ø0.5mm~ø16.0mm

- ■Narrow and depth place.
- ■High accuracy and Powerful clamping force.
- ■Chucking DiaØ0.5mm~Ø16.0mm

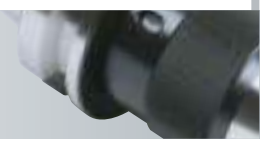
Code No.	ød	L	øC	H Min	H Max	Collet	Weight (kg)
BT30 - ER11M - 45	0.5~ 7.0	45	16	20	35	ER11	0.5
- 60		60					0.5
ER16M - 45	0.5~10.0	45	22	30	45	ER16	0.5
- 60		60					0.5
- 90		90					0.6
ER20M - 45	1.0~13.0	45	28	35	50	ER20	0.5
- 60		60					0.6
- 90		90					0.7
ER25M - 45	1.0~16.0	45	35	40	55	ER25	0.6
- 60		60					0.7
- 90		90					0.8
BT40 - ER11M - 60	0.5~ 7.0	60	16	20	35	ER11	1.0
- 90		90					1.1
- 120		120					1.2
ER16M - 60	0.5~10.0	60	22	30	45	ER16	1.2
- 90		90					1.1
- 120		120					1.4
ER20M - 60	1.0~13.0	60	28	35	50	ER20	1.1
- 90		90					1.2
- 120		120					1.6
ER25M - 75	1.0~16.0	75	35	40	55	ER25	1.2
- 90		90					1.3
- 120		120					1.8
BT50 - ER11M - 105	0.5~ 7.0	105	16	20	35	ER11	3.8
- 135		135					3.9
- 165		165					4.0
ER16M - 105	0.5~10.0	105	22	30	45	ER16	3.8
- 135		135					4.0
- 165		165					4.2
ER20M - 105	1.0~13.0	105	28	35	50	ER20	3.8
- 135		135					3.9
- 165		165					4.5
ER25M - 105	1.0~16.0	105	35	40	55	ER25	3.9
- 135		135					4.1
- 165		165					4.5

Spare Parts	Basic		Option	
	NUT	Adjust Screw	Spanner	Collet
Type				
ER11M	SM/ER11M	BTD0716-C	ER11M-SP	ER11-ø
ER16M	SM/ER16M	BTD1025-C	ER16M-SP	ER16-ø
ER20M	SM/ER20M	BTD1325-C	ER20M-SP	ER20-ø
ER25M	SM/ER25M	BTD1830-C	ER25M-SP	ER25-ø

▶ER콜렛은 P140~P141
▶스페너는 별매입니다. P149

▶ ER COLLET is refered. P140~P141
▶ Spanner is ordered separately. P149

NC DRILL CHUCK

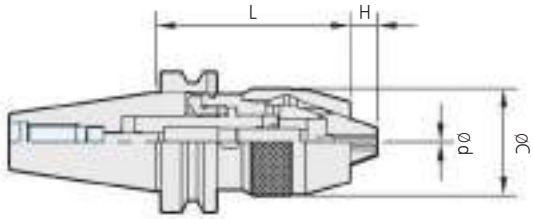


Clamping Range : ø0.5 ~ ø13.0

CODE No.

BT40 NPU13 90

Shank — Chucking Dia — Length



PRODUCT INFORMATION

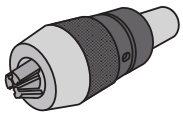
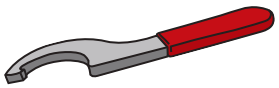
머시닝 센터의 일반적인 드릴링 공구입니다.

- 척과 샹크가 일체형 구조로 길이가 짧음
- 가공정도 향상과 우수한 내구성
- 척의 탈락이 없고 주축 정지시 풀리지 않음

General Drillings for Machining Centers

- Unified body of chuck and shank reduces the length of tool.
- Improved operation accuracy and excellent rigidity
- The drillchuck is never detached from holder and is not released when the operation is stop.

Code No.	ød	L	øC	H	Weight (kg)
BT30 - NPU 8 - 80	0.3~8.0	80	38	8.5	0.8
NPU 13 - 105	1.0~13.0	105	50	11.5	1.5
BT40 - NPU 8 - 75	0.3~8.0	75	38	8.5	1.3
- 105		105			1.6
- 150		150			2.0
NPU13 - 90	1.0~13.0	90	50	11.5	1.7
- 130		130			2.0
- 175		175			2.4
BT50 - NPU 8 - 85	0.3~8.0	85	38	8.5	3.8
- 120		120			4.0
- 150		150			4.4
- 170		170			4.8
NPU 13 - 105	1.0~13.0	105	50	11.5	4.4
- 130		130			4.6
- 190		190			5.4

Spare Parts		
	Basic	
	Chuck	Spanner
Type		
NPU 8	NPU 8	NPU08-SP
NPU13	NPU13	NPU13-SP

- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
  NPU8-20mm이상
  NPU13-30mm이상
- ▶ 스페너는 별매입니다. P149

- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum lengh of cutting tools.
  NPU8 : more 20mm
  NPU13 : more 30mm
- ▶ Spanner is ordered separately. P149

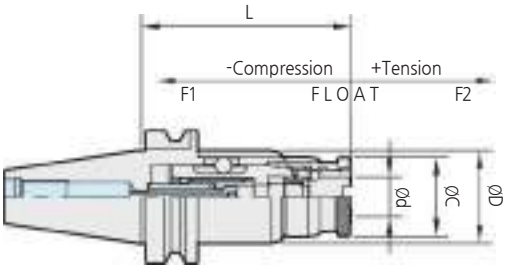
TAPPING CHUCK HOLDER

Tapping Range : M3 ~ M36

CODE No.

BT50 | TCH22 | 150

Shank — MAX Tapping — Length



PRODUCT INFORMATION

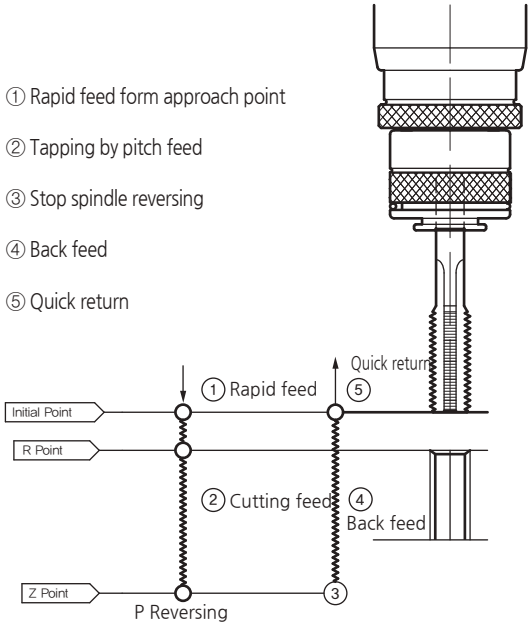
■플로팅 타입으로 인장수축 장치 내장
■공구교환이 빠르고 편리함
■관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능

■The tapping chuck is equipped with tension system by floating type.
■Easy and quick tool exchange.
■It is possible for tapping operation of blind hole and through hole.

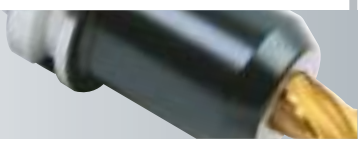
Code No.	ød	øD	L	øC	L1 F1	L1 F2	Weight (kg)
BT30 - TCH12 - 125	19	44	100	35	6	12	1.2
BT40 - TCH12 - 120	19	44	95	35	6	12	1.6
- 150			125		6	12	1.9
TCH22 - 150	31	63	115	52	10	15	2.4
- 180			177		10	15	3.0
BT50 - TCH12 - 135	19	44	110	35	6	12	4.2
- 165			140		6	12	4.8
- 195			170		6	12	5.0
TCH22 - 165	31	63	132	52	10	15	5.7
- 195			162		10	15	6.3
- 225			192		10	15	6.9
TCH36 - 210	48	67	165	83	15	20	8.0
- 240			195		15	20	8.5

▶ 적용 탭콜렛은 P137 ▶ Private tap collets are refered. P137

① Rapid feed form approach point
② Tapping by pitch feed
③ Stop spindle reversing
④ Back feed
⑤ Quick return

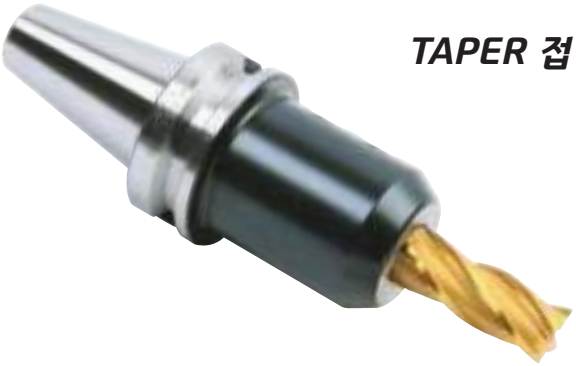


SIDE LOCK HOLDER

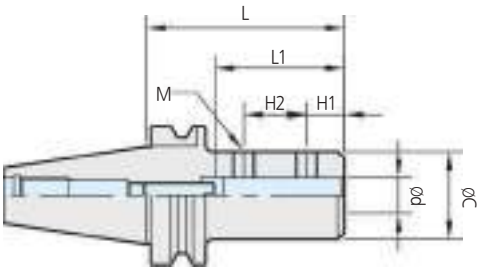


Coolant-through hole
Clamping Range : ø6.0 ~ ø42.0

CODE No.
BT50 SLA32 105
Shank / Chucking Dia / Length



TAPER 접촉율 80% 이상 진동없음.



PRODUCT INFORMATION

■드릴, 엔드밀 기타(Small chuck, Special tool)을 사용 할 수 있습니다.

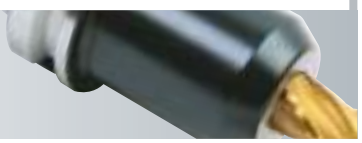
■SIDE LOCK HOLDER can use tool holder for drill, endmill, etc.

Code No.	ød	L	øC	H Min	H Max	H1	H2	M	Weight (kg)
BT30 - SLA 6 - 60	6	60	25	20	35	18	-	M 5	0.7
SLA 8 - 60	8		28	25	40			M 6	0.8
SLA10 - 75	10	75	35	35	45	14	15	M 8	0.9
SLA12 - 75	12		40	40	50	15	16	M10	1.0
SLA16 - 75	16		45	50	65	16	20	M12	1.1
SLA20 - 75	20		48	55	70	18		M14	1.2
SLA25 - 85	25	85					24		1.3
SLA32 - 105	32	105	58	65	80	20	22		1.5
BT40 - SLA 6 - 75	6	75	25	20	35	20	-	M 5	1.2
SLA 8 - 75	8		30	25	40	18		M 6	1.2
SLA10 - 90	10	90	35	35	45	14	15	M 8	1.3
SLA12 - 90	12		40	40	50		16	M10	1.4
SLA16 - 90	16		45	50	65	20	20	M12	1.5
SLA20 - 90	20		50	55	70	25		M14	1.8
SLA25 - 90	25		52						2.0
SLA32 - 90	32		62	65	80		25	M16	2.2
SLA40 - 105	40	105	72						2.5
SLA42 - 105	42		76						2.6
BT50 - SLA 6 - 90	6	90	25	20	35	18	-	M 5	3.7
SLA 8 - 90	8		28	25	40			M 6	3.9
SLA10 - 90	10		35	35	45	14	15	M 8	4.1
SLA12 - 90	12		40	40	50		16	M10	4.2
SLA16 - 90	16		45	50	65	20	20	M12	4.2
- 105		105							4.4
SLA20 - 105	20		50	60	75	25		M14	4.4
- 135		135							4.6
SLA25 - 105	25	105	52						4.4
- 135		135							4.7
- 165		165							5.1
SLA32 - 105	32	105	62	65	80		25	M16	4.8
- 135		135							5.4
- 165		165							6.2
SLA40 - 105	40	105	72						5.2
- 135		135							5.5
SLA42 - 105	42	105	76						5.8
- 135		135							6.0

▶ 사이드락홀더 스페어 파트는 P60

▶ The spare parts for SIDE LOCK HOLDER are refered. P60

LONG TYPE SIDE LOCK HOLDER

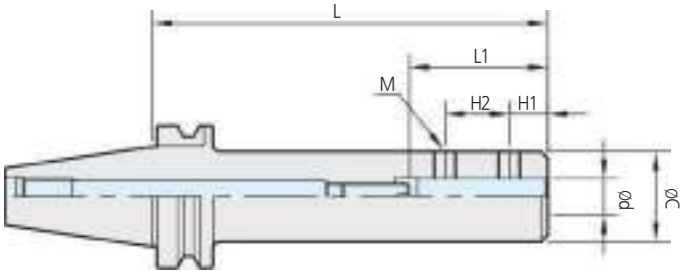


Coolant-through hole
Clamping Range : ø6.0 ~ ø63.0

CODE No.

BT50 | SLA32 | 200

Shank — Chucking Dia — Length



PRODUCT INFORMATION

■drill, endmill, 기타(small chuck, special tool) 등을 사용 할 수 있습니다.
➲Saddle pin type(DIN1835C) endmill용 입니다.

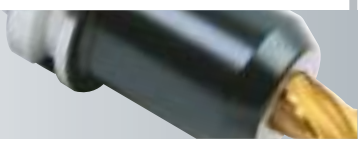
■SIDE LOCK HOLDER can use tool holder for drill, endmill, etc.
➲Saddle pin type(DIN1835C) endmill type.

Code No.	ød	L	øC	H Min	H Max	H1	H2	M	Weight (kg)
BT50 - SLA 6 - 105	6	105	25	20	35	18	-	M 5	4.4
- 150		150							5.3
- 200		200							5.8
- 250		250							6.5
※ - 300		300							1.3
※ - 350		350							6.2
SLA 8 - 105	8	105	28	25	40			M 6	4.4
- 150		150							5.3
- 200		200							5.8
- 250		250							6.5
- 300		300							7.3
※ - 350		350					20		8.3
SLA10 - 105	10	105	35	35	45	14	15	M 8	4.4
- 150		150							5.3
- 200		200							5.8
- 250		250							6.6
- 300		300							7.5
※ - 350		350			40				8.5
SLA12 - 105	12	105	40	40	50	15	16	M10	4.4
- 150		150							5.3
- 200		200							5.9
- 250		250							6.8
- 300		300							7.8
※ - 350		350							8.8
SLA16 - 150	16	150	45	50	65	16	20	M12	4.8
- 200		200							5.6
- 250		250							6.2
- 300		300							7.1
※ - 350		350							8.2
※ - 400		400							9.8
SLA20 - 150	20	150	50	60	75	18		M14	4.8
- 200		200							5.6
- 250		250							6.2
- 300		300							7.1
※ - 350		350							8.3
※ - 400		400							10.0

▶ 사이드락홀더 스페어 파트는 P60
▶ ※표시된 제품은 센터홀이 없습니다.

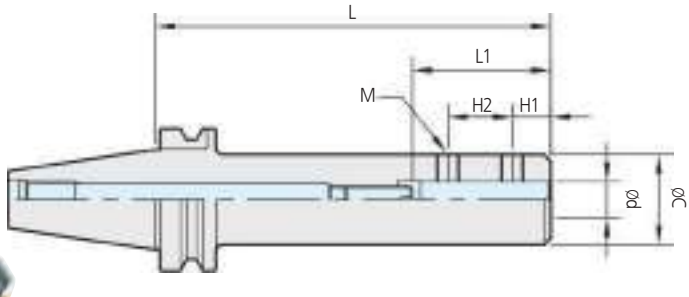
▶ The spare parts for SIDE LOCK HOLDER are refered. P60
▶ " ※ " indicate that it does not have centre through hole.

LONG TYPE SIDE LOCK HOLDER



Coolant-through hole
Clamping Range : ø6.0 ~ ø63.0

CODE No.
BT50 SLA32 200
Shank / Chucking Dia / Length



PRODUCT INFORMATION

■drill, endmill, 기타(small chuck, special tool) 등을 사용 할 수 있습니다.
➲Saddle pin type(DIN1835C) endmill용 입니다.

■Side lock holder is using as a tool hilder for drill, endmill, ETC.
➲Saddle pin type(DIN1835C) endmill type.

Code No.	ød	L	øC	H Min	H Max	H1	H2	M	Weight (kg)
BT50 - SLA25 - 150	25	150	52	60	75	25	20	M14	4.8
- 200		200							5.6
- 250		250							6.8
- 300		300							7.9
※ - 350		350							8.9
※ - 400		400							10.8
SLA32 - 150	32	150	62	65	82		25	M16	5.6
- 200		200							6.8
- 250		250							7.9
- 300		300							8.9
※ - 350		350							11.0
※ - 400		400							14.0
SLA40 - 150	40	150	72						5.8
- 200		200							7.0
- 250		250							8.1
- 300		300							9.0
※ - 350		350							12.1
※ - 400		400							15.0
SLA42 - 150	42	150	76		80				6.0
- 200		200							7.2
- 250		250							8.9
- 300		300							9.8
※ - 350		350							13.0
※ - 400		400		50					17.0
SLA50 - 105	50	105	88		82		28	M18	6.4
- 150		150							8.2
- 200		200							9.8
- 250		250							10.9
- 300		300							14.5
※ - 350		350							18.0
※ - 400		400							22.0
➲ SLA50.8 - 121	50.8	121	95	50	84	34	36	M20	5.0

▶ 사이드락홀더 스페어 파트는 P60
▶ ※표시된 제품은 센터홀이 없습니다.

▶ The spare parts for SIDE LOCK HOLDER are refered. P60
▶ " ※ " indicate that it does not have centre through hole.

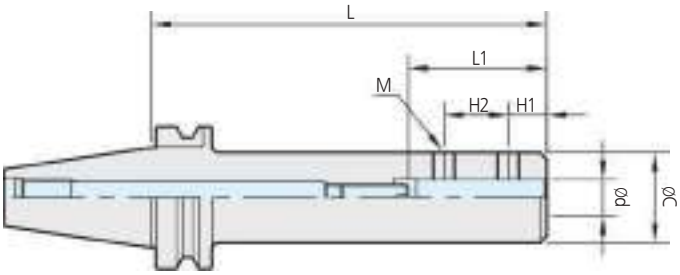
LONG TYPE SIDE LOCK HOLDER

Coolant-through hole
Clamping Range : ø6.0 ~ ø63.0

CODE No.

BT50 | SLA32 | 200

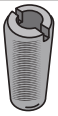
Shank — Chucking Dia — Length



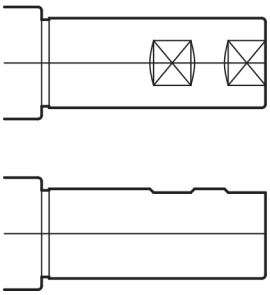
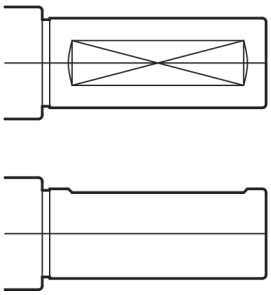
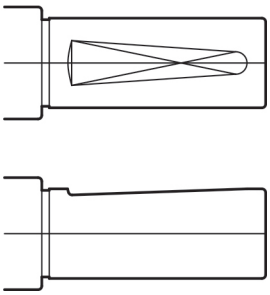
PRODUCT INFORMATION

■drill, endmill, 기타(small chuck, special tool) 등을 사용할 수 있습니다.
➲Saddle pin type(DIN1835C) endmill용 입니다.

■Side lock holder is using as a tool hilder for drill, endmill, ETC.
➲Saddle pin type(DIN1835C) endmill type.

Spare Parts		
	Basic	
	Set Screw	Adjust Screw
Type		
SLA 6	BT0510	BN0520-C
SLA 8	BT0610	BN0625-C
SLA10	BT0812	BN0825-C
SLA12	BT1014	BN1030-C
SLA14	BT1212	BN1030-C
SLA16	BT1414	BN1240-C
SLA20	BT1414	BN1240-C
SLA25	BT1414	BN1240-C
SLA32	BT1616	BN1240-C
SLA40	BT1616	BN1240-C
SLA42	BT1616	BN1240-C
SLA50	BT1818	BN1240-C
SLA50.8	BT2020	-

Purpose

Weldon Shank	Flst Shank	Whistel Notch Shank
		

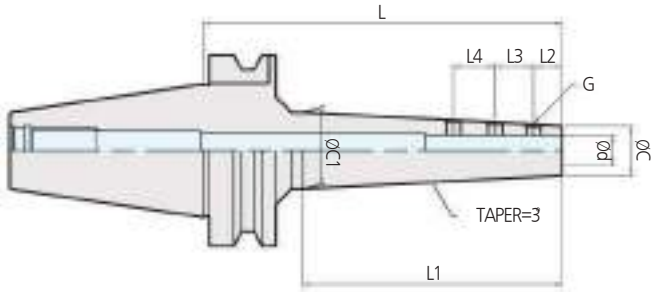
MOLD SIDE LOCK HOLDER

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

BT50	MSL12	150	S
Shank	Chucking Dia	Length	Gage line not included

MAX 20,000 min-1



PRODUCT INFORMATION

- ■쉽고빠른 공구교환
- ■높은 정밀도
- ■슬림한 디자인으로 간섭부위 최소화

- ■Easy and quick tool exchange.
- ■Excellent accuracy.
- ■Minimize interference area by slim design.

Code No.	ød	øC	øC1	L	L1	L2	L3	L4	G	MAX rpm	Weight (kg)
BT40 - MSL 3 - 135	3	10	20	135	94	6	6	-	M3	20,000	1.3
MSL 4 - 135	4	11	21				7		M4		1.3
MSL 6 - 135	6	13	23			12	13		M6		1.4
MSL 8 - 135	8	15	25			13.5	18			15,000	1.4
MSL10 - 150	10	17	29	150	109	15	20				1.6
MSL12 - 150	12	22	34				16	16	M8		1.7
BT50 - MSL12 - 150S	12	22	37	188	136	15	16	16	M8	15,000	4.4
- 200S			42	238	186					12,000	5.0
MSL16 - 150S	16	26	41	188	136		20	22		15,000	4.6
- 200S			46	238	186					12,000	5.1
- 250S			51	288	236					10,000	5.9
MSL20 - 150S	20	30	45	188	136					15,000	4.7
- 200S			50	238	186					12,000	5.3
- 250S			55	288	236					10,000	6.0
MSL25 - 150S	25	35	50	188	136				M10	15,000	4.8
- 200S			55	238	186					12,000	5.4
- 250S			60	288	236					10,000	6.2
MSL32 - 150S	32	40	55	188	136					15,000	5.0
- 200S			60	238	186					12,000	5.6
- 250S			65	288	236					10,000	6.4

- ▶ MSL홀더 볼트는 SELUX 전용 볼트를 사용하시기 바랍니다.
- ▶ 육각렌치는 별도 판매 입니다.
- ▶ S Type는 표준길이(+38mm)

- ▶ Please only use SELUX private bolt for MSL HOLDER.
- ▶ Wrench is ordered separately.
- ▶ S type is extended by 38mm compare to standard type.

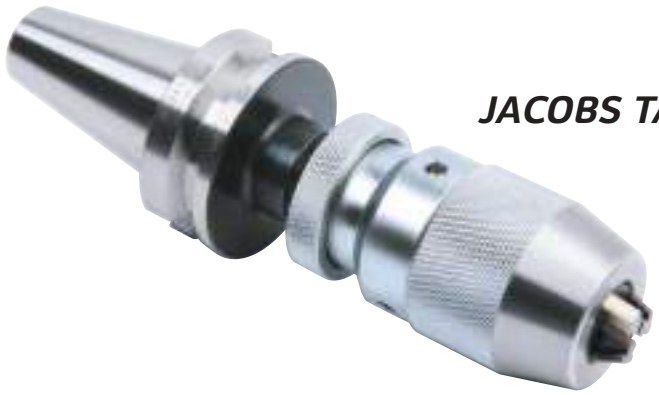
MSL BOLT

Item	Size	Length/pcs	chuck
MSL3 - BS	M3*0.5P	5mm / 2pcs.	MSL3
MSL4 - BS	M4*0.5P	5mm / 2pcs.	MSL4
MSL6 - BS	M6*0.75P	5 , 6mm / 1pcs. Each	MSL6
MSL8 - BS		5 , 6mm / 1pcs. Each	MSL8
MSL10 - BS			MSL10
MSL12 - BS	M8*0.75P	7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL12
MSL16 - BS		7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL16
MSL20 - BS		7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL20
MSL25 - BS	M10*10P	7mm / 1pcs. 8mm / 1pcs. 9mm / pcs.	MSL25
MSL32 - BS		6mm / 1pcs. 7mm / 1pcs. 8mm / pcs.	MSL32

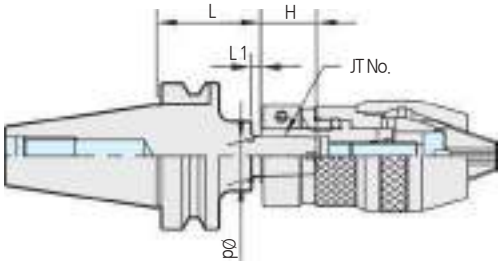
JACOBS TAPER ARBOR

CODE No.

BT50	JTA6	45
Shank	Jacobs No.	Length



JACOBS TAPER 접촉율 80% 이상 진동없음.



PRODUCT INFORMATION

■Drill chuck은 포함되어 있지 않습니다. ■Drill chuck is not included.

Code No.	ød	JT No.	L	L1	H	Weight (kg)
BT30 - JTA2 - 30	14.199	2	30	4	20	1.0
JTA6 - 30	17.170	6			24	1.0
BT40 - JTA2 - 45	14.199	2	45	4	20	1.1
- 90			90			1.4
JTA6 - 45	17.170	6	45		24	1.1
- 90			90			1.4
BT50 - JTA2 - 45	14.199	2	45	4	20	4.0
- 105			105			4.4
JTA6 - 45	17.170	6	45		24	4.0
- 105			105			4.4

MORSE TAPER HOLDER

■for Morse taper shank with tang.

CODE No.

BT50	MTA1	45

Shank — Morse Taper No. — Length

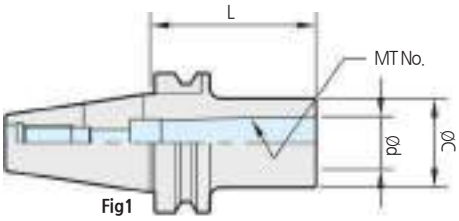


Fig1

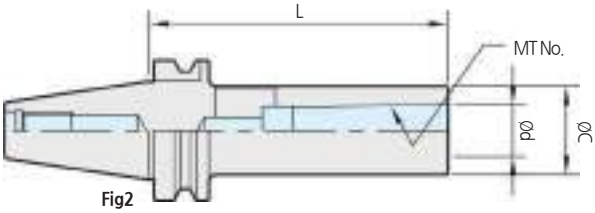


Fig2

TAPER 접촉율 80% 이상 진동없음.

PRODUCT INFORMATION

■Drill, reamer, 기타(MT Shank type tool)등을 사용 할 수 있습니다. ■MORSE TAPER HOLDER can use tool holder for drill, reamer, etc.

Code No.	ød	MT No.	L	øC	Fig	Weight (kg)
BT30 - MTA1 - 45	12.065	1	45	25	1	0.5
MTA2 - 60	17.780	2	60	32		0.5
MTA3 - 80	23.825	3	80	40		0.5
BT40 - MTA1 - 45	12.065	1	45	25	1	1.0
- 120			120		2	1.3
MTA2 - 60	17.780	2	60	32	1	1.0
- 120			120		2	1.5
MTA3 - 75	23.825	3	75	40	1	1.0
- 135			135		2	1.7
MTA4 - 95	31.267	4	95	50	1	1.6
- 165			165		2	1.7
BT50 - MTA1 - 45	12.065	1	45	25	1	3.9
- 120			120		2	4.2
- 180			180			4.3
MTA2 - 45	17.780	2	45	32	1	3.9
- 135			135		2	4.3
- 180			180			4.6
MTA3 - 45	23.825	3	45	40	1	3.8
- 150			150		2	4.6
- 180			180			4.9
MTA4 - 75	31.267	4	75	50	1	3.9
- 180			180		2	5.4
MTA5 - 105	44.399	5	105	65	1	4.5
- 210			210		2	7.2

Drill Dia and Shank

Shank		MT1	MT2	MT3	MT4	MT5
Drill dia	Min	3.0	14.5	23.5	32.0	51.0
	Max	14.0	23.0	31.5	50.0	76.0

MORSE TAPER HOLDER

■for Morse taper shank with tang.

CODE No.

BT50	MTB3	45

Shank — Morse Taper No. — Length

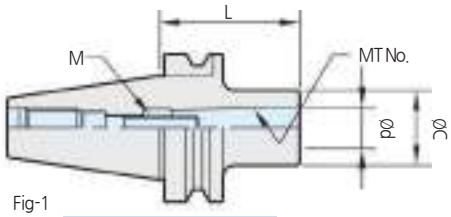


Fig-1

Draw BOLT Type

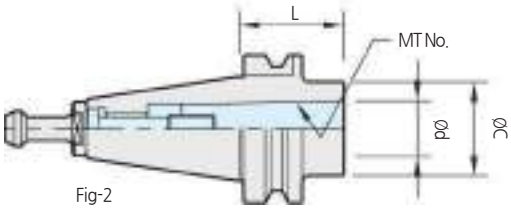


Fig-2

Pull - Stud Draw BOLT Type(별매)

PRODUCT INFORMATION

■Fig 1의경우 Draw Bolt가 포함되어 있습니다.
■Fig 2의 경우 전용 pull stud bolt가 필요합니다.

■Draw-in Bolt is supplied with Fig 1 type arbor.
■for Fig2. it is necessary for special pull stud bolt as exclusive use.

Code No.	ød	MT No.	L	øC	M	Fig	Weight (kg)
BT30 - MTB1 - 45	12.065	1	45	25	M 6	1	0.8
MTB2 - 60	17.780	2	60	32	M10	2	0.8
MTB3 - 80	23.825	3	80	40	M12		1.0
BT40 - MTB1 - 45	12.065	1	45	25	M 6	1	1.0
MTB2 - 45	17.780	2	45	32	M10		1.1
MTB3 - 45	23.825	3	45	40	M12	2	1.1
MTB4 - 85	31.267	4	85	50	M16		1.3
BT50 - MTB1 - 45	12.065	1	45	25	M 6	1	3.9
MTB2 - 45	17.780	2	45	32	M10		3.9
MTB3 - 60	23.825	3	60	40	M12		3.9
MTB4 - 70	31.267	4	70	50	M16		3.9
MTB5 - 105	44.399	5	105	65	M20	2	4.0

SPECIAL PULL STUD BOLT

PRODUCT INFORMATION

■전용 pull stud bolt 의 경우 주문제작 합니다. ■Special pull stud bolt can be ordered.

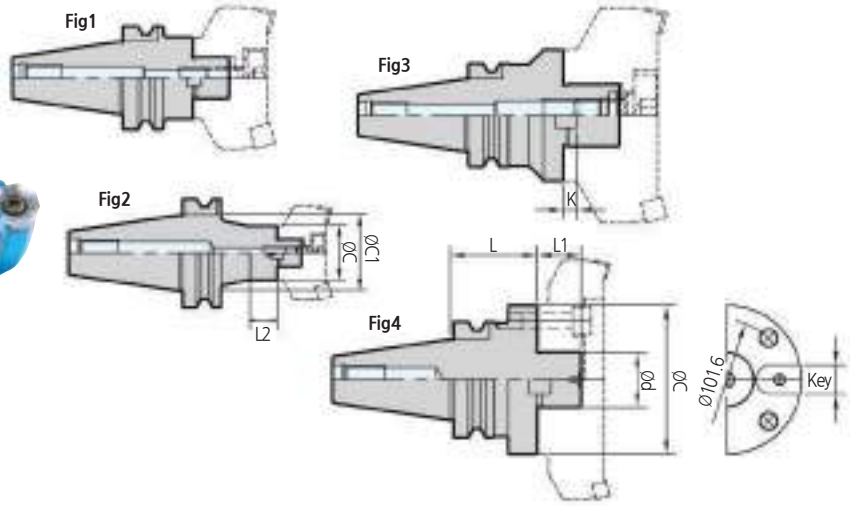
PSB Code No.	MTB2	MTB3	MTB4	MTB5
BT30 - MPS - 16	MPS - 16-2	MPS - 16 -3		
- 17	MPS - 17-2	MPS - 17 -3		
BT40 - MPS - 1		MPS - 1 -3	MPS - 1 - 4	
- 2		MPS - 2 -3	MPS - 2 - 4	
- 806		MPS - 806-3	MPS - 806 - 4	
- G51		MPS - G51-3	MPS - G51- 3	
BT50 - MPS - 5				MPS- 5-5
- 6				MPS- 6-5
- 0				MPS- 0-5

MT No.	MT No.
1	M 6 x 1.0
2	M10 x 1.5
3	M12 x 1.75
4	M16 x 2.0
5	M20 x 2.5

FACE MILL ARBOR

CODE No.

BT50	FMA25.4	45
Shank	Cutter Type	Length



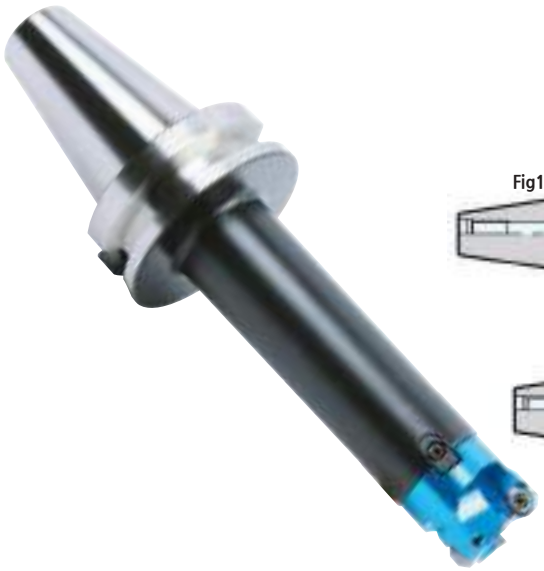
PRODUCT INFORMATION

■JIS B4113 face milling용 입니다. ■For face-milling cutter conforming to JIS B4113.

Code No.	ød	Cutter Dia	L	øC	C1	L1	L2	Key	K	Fig	Weight (kg)
BT30 - FMA25.4 - 45	25.4	80	45	50		22		K9.5 - S	5	3	0.8
FMA31.75 - 45	31.75	100		60		30		K12.7 - S	7		1.0
BT40 - FMA25.4 - 45	25.4	80	45	50	-	22	-	K9.5 - S	5	1	1.4
- 90			90					K9.5 - L			3.0
FMA31.75 - 45	31.75	100	45	60		30		K12.7 - S	7		2.0
- 75			75					K12.7 - S			3.2
FMA38.1 - 60	38.1	125	60	80		34		K15.85 - S	9	3	3.8
BT50 - FMA25.4 - 45	25.4	80	45	50		22		K9.5 - S	5	1	3.8
- 90			90		60		25	K9.5 - L		2	4.5
-150			150		70						5.5
FMA31.75 - 45	31.75	100	45	60	-	30	-	K12.7 - S	7	1	4.6
- 75			75					K12.7 - L			5.2
-105			105		70		25			2	5.5
-150			150								7.0
FMA38.1 - 45	38.1	125	45	80	-	34	-	K15.85 - S	9	1	4.3
- 75			75					K15.85 - L			5.0
-105			105								5.5
-150			150								8.5
FMA50.8 - 45	50.8	160	45	100		36		K19 - S	10		4.8
- 75			75					K19 - S			6.8
-105			105								7.8
FMA47.625 - 75	47.625	200	75	128.5		38		K25.4	12.5	4	7.6

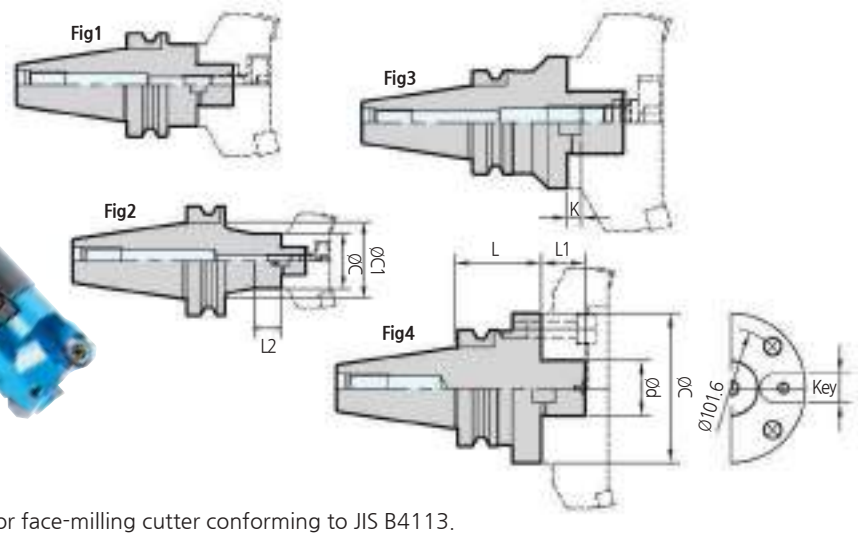
▶ 페이스밀아바 스페어 파트는 P71 ▶ The spare parts for FACE MILL ARBOR are refered. P71

LONG TYPE FACE MILL ARBOR



CODE No.

BT50	FMA31.75	200	S
Shank	Cutter Type	Length	Gage line not included



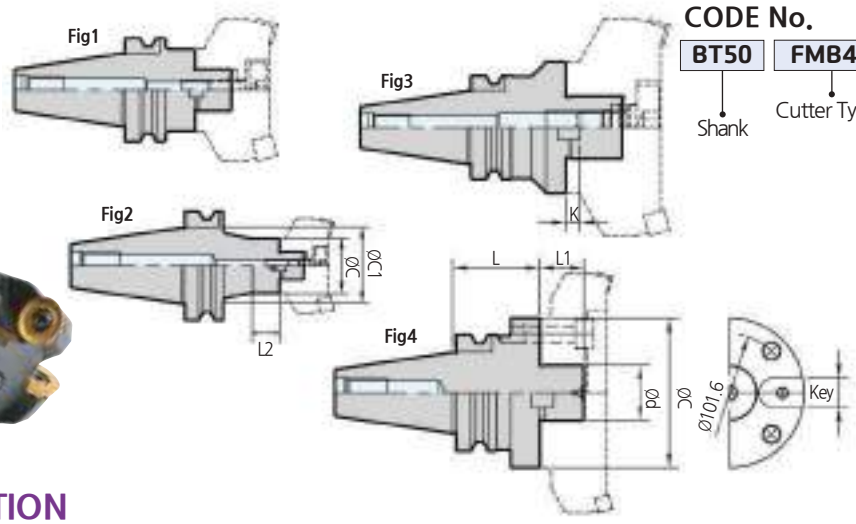
PRODUCT INFORMATION

- JIS B4113 face milling용 입니다.
- (S)Type은 표준길이(+38mm)
- For face-milling cutter conforming to JIS B4113.
- S type is extended by 38mm compare to standard type.

Code No.	ød	Cutter Dia	L	øC	C1	L1	L2	Key	K	Fig	Weight (kg)
BT50-FMA25.4 - 200	25.4	80	200	50	70	22	25	K9.5-L	5	2	8.7
- 250			250		74						10.3
- 300			300		75						11.8
- 350			250		79						13.5
- 400			400								15.8
BT50-FMA31.75 - 200	31.75	100	200	60	70	30	25	K12.7-L	7		9.7
- 250			250								11.6
- 300			300								13.4
- 350			350								15.7
- 400			400								18.4
- 150S			188	75	-	30	-	K12.7-L	7	1	9.4
- 200S			238								10.8
- 250S			288		79		25			2	13.0
- 300S			338								15.3
- 350S			388		80						18.5
- 400S			438								21.5
BT50-FMA38.1 - 200	38.1	125	200	80	-	34	-	K15.85-L	9	1	14.5
- 250			250								17.5
- 300			300								20.5
- 350			350								23.5
- 400			400								26.6
BT50-FMA50.8 - 150	50.8	160	150	100		36		K19-L	10		8.7
- 200			200								11.5
- 250			250								14.5
- 300			300								18.5
- 350			350								25.5
- 400			400								28.9
BT50-FMA47.625 - 105	47.625	200	105	128.5		38		K25.4	12.5	4	8.9
- 150			150								12.5
- 200			200								15.8
- 250			250								20.5
- 300			300								26.5

▶ 페이스밀아바 스페어 파트는 P71
▶ The spare parts for FACE MILL ARBOR are refered. P71

FACE MILL ARBOR



CODE No.

BT50	FMB40	200
Shank	Cutter Type	Length

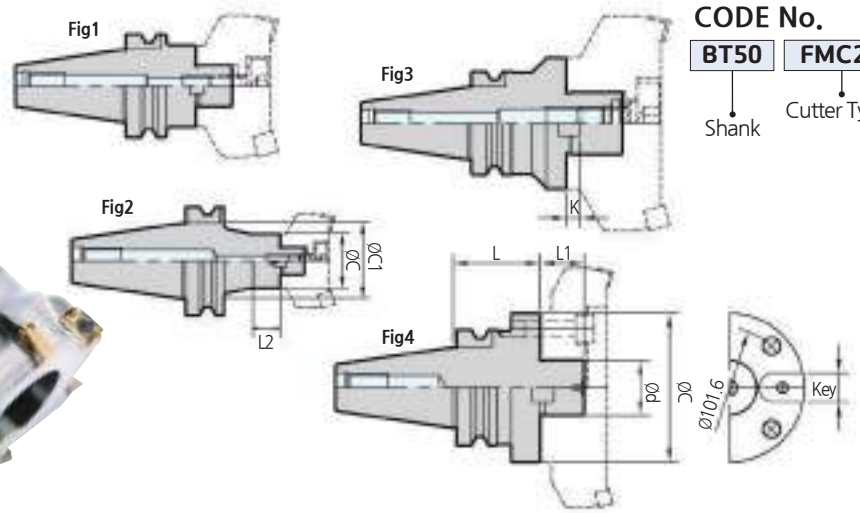
PRODUCT INFORMATION

- JIS B4113 face milling용 입니다.
- (S)Type은 표준길이(+38mm)
- For face-milling cutter conforming to JIS B4113.
- S type is extended by 38mm compare to standard type.

Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Fig	Weight (kg)
BT30-FMB25.4 - 45	25.4	80	45	80	26	K9.5-S	5	3	1.5
BT30-FMB27 - 45	27		45			K12-S	6		1.8
BT40-FMB25.4 - 60	25.4	80	60	80	26	K9.5-L	5	3	3.6
- 90			90						4.8
BT40-FMB38.1 - 60	38.1	100	60	85		K15.85-S	9		3.6
BT40-FMB27 - 60	27	80	60	80		K12-L	6		3.6
- 90			90						4.8
BT40-FMB40 - 60	40	100	60	85		K15.85-S	8.5	1	3.8
BT50-FMB25.4 - 45	25.4	80	45	80	26	K9.5-L	5	1	4.0
- 90			90						5.8
-150			150						8.0
BT50-FMB38.1 - 45	38.1	100	45	85		K15.87-S	9		4.6
- 75			75			K15.87-L			6.0
-105			105					4	8.8
BT50-FMB38.1F - 75	38.1	160	75	110				1	5.0
BT50-FMB27 - 45	27	80	45	80		K12-S	6		4.0
- 90			90			K12-L			5.8
-150			150						9.2
BT50-FMB40 - 45	40	100	45	85		K15.85-S	8.5		4.6
- 75			75			K15.85-L			6.0
-105			105						8.7
-150			150						11.5
-200			200						14.5
-250			250						17.5
-300			300						20.5
-350			350						23.6
-400			400						27.5
BT50-FMB40F - 75		160	75	110				4	6.6
-105			105						8.9
-150			150						11.8
-200			200						14.9
-250			250						18.2
-300			300						21.2
BT50-FMB60 - 75	60	200	75	140	25	K25.4	12.5		7.9
-105			105						9.8
-150			150						12.5
-200			200						15.8
-250			250						20.0

▶ 페이스밀아바 스페어 파트는 P71
▶ The spare parts for FACE MILL ARBOR are refered. P71

FACE MILL ARBOR



CODE No.

BT50	FMC22	105
Shank	Cutter Type	Length

PRODUCT INFORMATION

- JIS B4113 face milling용 입니다.
- (S)Type은 표준길이(+38mm)
- For face-milling cutter conforming to JIS B4113.
- S type is extended by 38mm compare to standard type.

Code No.	ød	Cutter Dia	L	øC	øC1	L1	L2	Key	K	Fig	Weight (kg)
BT30 - FMC16 - 45	16	40	45	38	-	16	-	K8-S	5	1	1.2
FMC22 - 45	22	50/63		45		18		K10-S	5.5		1.5
- 90			90								1.5
FMC27 - 45	27	63/80	45	60		20		K12-S	6	3	1.5
FMC32 - 45	32	100		80		22		K14-S	7		2.0
BT40 - FMC16 - 45	16	40	45	38	-	16	-	K8-S	5	1	1.7
FMC22 - 45	22	50/63		45		18		K10-S	5.5		2.0
- 90			90					K10-L			2.2
FMC25.4 - 60	25.4	63/80	60	70		20		K9.5-S	6	3	2.5
- 90			90								2.7
FMC27 - 60	27		60	60				K12-S		1	2.5
- 90			90					K12-L			3.4
FMC32 - 60	32	100	60	80		22		K14-S	7	3	3.4
- 90			90					K14-L			3.8
FMC38.1 - 60	38.1		60	85				K15.85-S			4.7
- 90			90					K15.85-L			5.0
FMC40 - 60	40	125/160	60	90		26		K15.85-S	8	4	5.2
BT50 - FMC16 - 60	16	40	60	38	-	16	-	K8-S	5.0	1	3.2
FMC22 - 60	22	50/63		45		18		K10-S	5.5		3.6
- 105			105					K10-L			5.5
- 150(50)			150		48		25			2	7.3
- 150(63)				58	63						7.3
FMC25.4 - 45	25.4	63/80	45	70	-	20	-	K9.5-S	6	1	4.1
- 90			90					K9.5-L			6.0
- 150			150								7.9
FMC27 - 45	27		45	60				K12-S			5.0
- 90			90					K12-L			6.0
- 150(63)			150								7.5
- 150(80)				68							7.5
FMC32 - 45	32	100	45	80		22		K14-S	7		5.0
- 75			75					K14-L			6.0
- 105			105								6.8
- 150			150								9.8
FMC38.1 - 45	38.1		45	85				K15.85-S			5.8
- 75			75					K15.85-L			6.0
- 105			105								7.0
FMC40 - 45	40	125/160	45	90		26		K15.85-S	8	4	6.2
- 75			75					K15.85-L			6.8

▶ 페이스밀아바 스페어 파트는 P71
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LONG TYPE FACE MILL ARBOR

CODE No.

BT50	FMC22	200	S
Shank	Cutter Type	Length	Gage line not included

Fig1

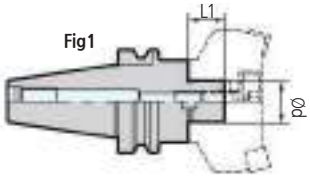
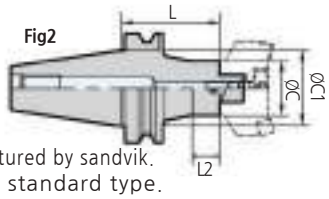


Fig2



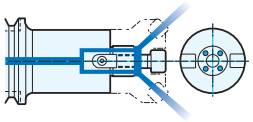
PRODUCT INFORMATION

- Sandvik T-MAX face mill cutter 전용 arbor 입니다.
- (S)Type표준길(+38mm)
- 주문시 체결될 Cutter의 Size를 확인
- Only For T-MAX face mill cutter arbor manufactured by sandvik.
- S type is extended by 38mm compare to standard type.
- Please check the cutter about the size when ordering.

Code No.	ød	Cutter Dia	L	øC	C1	L1	L2	Key	K	Fig	Weight (kg)
BT50-FMC22- 100S(ø50)	22	50	138	47	50	18	25	K10-L	5.5	2	8.0
- 150S(ø50)			188								8.7
- 200S(ø50)			238								10.3
- 250S(ø50)			288								11.8
- 300S(ø50)			338								13.5
- 350S(ø50)			388								15.8
- 400S(ø50)			438								18.2
- 100S(ø63)		63	138	58	62						8.2
- 150S(ø63)			188								8.7
- 200S(ø63)			238								10.3
- 250S(ø63)			288								11.8
- 300S(ø63)			338								13.5
- 350S(ø63)			388								15.8
- 400S(ø63)			438								185.2
BT50-FMC25.4 -	25.4	63	188	58	62	20	25	K9.5-L	6	2	8.7
150S(ø63)			238								10.3
- 200S(ø63)			288								11.8
- 250S(ø63)			338								13.5
- 300S(ø63)			388								15.8
- 350S(ø63)			438								18.2
- 400S(ø63)		80	188	75	-		-			1	8.7
- 150S(ø80)			238								10.3
- 200S(ø80)			288		79		25			2	11.8
- 250S(ø80)			338								13.5
- 300S(ø80)			388		80						15.8
- 350S(ø80)			438								18.2
- 400S(ø80)	27	63	188	58	62	20	25	K12-L	6	2	8.7
BT50-FMC27 - 150S(ø63)			238								10.3
- 200S(ø63)			288								11.8
- 250S(ø63)			338								13.5
- 300S(ø63)			388								15.8
- 350S(ø63)			438								18.2
- 400S(ø63)		80	188	75	-		-			1	9.0
- 150S(ø80)			238								11.5
- 200S(ø80)			288		79		25			2	13.5
- 250S(ø80)			338								16.0
- 300S(ø80)			388		80						19.0
- 350S(ø80)			438								20.0
- 400S(ø80)	32	80	188	75	-	22	25	K14-L	7	1	9.4
BT50-FMC32 -150S			238								10.8
-200S			288		79					2	13.0
-250S			338								15.3
-300S			388		80						18.5
			438								21.5

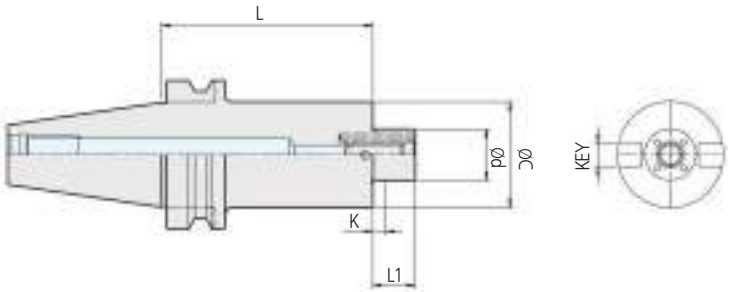
▶ 페이스밀아바 스페어 파트는 P71
▶ The spare parts for FACE MILL ARBOR are refered. P71

FACE MILL ARBOR



CODE No.

BT50	FMH22	105
Shank	Cutter Type	Length



PRODUCT INFORMATION

■쿨런트 컷터 전용 ■Only use coolant cutter.
■컷터 가공성 향상 공구사용시간 증가 ■Improve tool life and cutting operation

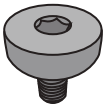
Code No.	ød	øC	L	L1	K	KEY	Weight (kg)
BT30 - FMH16 - 45	16	38	45	16	5	K8-S	1.2
FMH22 - 45	22	45		18	5.5	K10-S	1.5
- 90			90				1.5
FMH27 - 45	27	60	45	20	6	K12-S	1.5
BT40 - FMH16 - 45	16	38	45	16	5	K8-S	1.7
FMH22 - 45	22	45		18	5.5	K10-S	2.3
- 90			90			K10-L	2.2
FMH27 - 60	27	60	60	20	6	K12-S	2.5
- 90			90			K12-L	3.4
FMH32 - 60	32	80	60	22	7	K14-S	3.4
FMH25.4 - 60	25.4	70		20	6	K9.5-S	2.5
- 90			90				2.7
FMH31.75 - 60	31.75	76	60	30	7	K12.7-S	2.7
- 90			90				3.2
FMH38.1 - 60	38.1	85	60	34	9	K15.85-S	4.7
- 90			90			K15.85-L	5.0
BT50 - FMH22 - 60	22	45	60	18	5.5	K10-S	3.6
- 105			105			K10-L	5.5
- 150			150				7.3
FMH27 - 90	27	60	90	20	6	K12-L	6.0
- 150			150				7.5
FMH32 - 90	32	80	90	22	7	K14-L	6.5
- 150			150				8.0
FMH25.4 - 90	25.4	70	90	20	6	K9.5-L	6.0
- 150			150				7.9
FMH31.75 - 90	31.75	76	90	30	7	K12.7-L	6.2
- 150			150				8.5
FMH38.1 - 90	38.1	85	90	34	9	K15.85-L	7.0
- 150			150				9.0

▶FMH 클램프볼트및 부품은 일반 FMA, FMC 아바와 호환합니다.
▶페이스밀아바 스페어 파트는 P71

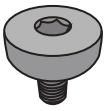
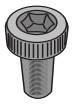
▶ FMH clamp bolt and other parts is compatiblle with FACE MILL ARBOR FMA, FMC.
▶ The spare parts for FACE MILL ARBOR are refered. P71

FACE MILL ARBOR SPARE PARTS

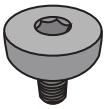
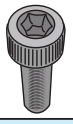
FMA Type

Spare Parts				
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
Type				
FMA25.4	K9.5	MBA-M12	BX0412	BX1230(Option)
FMA31.75	K12.7	MBA-M16	BX0515	-
FMA38.1	K15.85	MBA-M20	BX0615	-
FMA50.8	K19	MBA-M24	BX0820	-
FMA47.625	K25.4	-	BX1020	BX1645

FMB Type

Spare Parts				
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
Type				
FMB25.4	K9.5	MBA-M12	BX0412	BX1230(Option)
FMB38.1	K15.85	MBA-M20	BX0615	-
FMB38.1F				-
FMB27	K12.0	MBA-M12	BX0515	BX1230(Option)
FMB40	K15.85	MBA-M20	BX0615	-
FMB40F	K15.85			BX1230
FMB60	K25.4	-	BX1020	BX1645

FMC Type

SpareParts				
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
Type				
FMC16	K8	-	BX0310	BX0820
FMC22	K10	-	BX0412	BX1025
FMC25.4	K9.5	MBA-M12	BX0412	BX1230(Option)
FMC27	K12.0	MBA-M12	BX0515	BX1230(Option)
FMC32	K14.0	MBA-M16	BX0615	BX1645(Option)
FMC38.1	K15.85	MBA-M16	BX0615	BX1645(Option)
FMC40	K15.85	MBA-M20	BX0615	BX1230(Option)

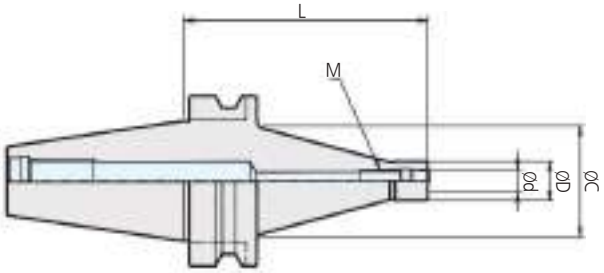
▶스페어 파트 주문시에는 반드시 품명의 정확한 확인이 필요합니다.
▶Key 주문시에는 제품상세표에서 LONG/SHORT Key를 확인해주십시오.

▶Please pay attention to check spare parts list when you order.
▶Please check long/short key when you order.

PRO MILL ARBOR

CODE No.

BT50	M06	135
Shank	Cutter Type	Length



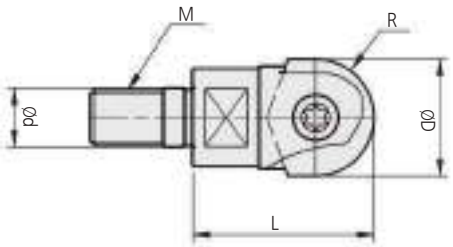
PRODUCT INFORMATION

- ■모듈라 방식으로 원가 절감
- ■높은 정밀도
- ■이면구속 체결로 흔들림 감소
- ■헤드 교체로 다양한 작업가능

- ■Cost reduction effect with modular system.
- ■Excellent accuracy.
- ■Vibration damping effect due to dual face contact.
- ■A various operation with exchanging head.

Code No.	ød	L	øD	øC	M	Weight (kg)
BT40 - M06 - 90	6.5	90	10	40	M6	1.2
- 120		120				1.5
M08 - 90	8.5	90	14.4		M8	1.2
- 120		120				1.5
M10 - 90	10.5	90	18		M10	1.3
- 120		120				1.5
- 150		150				1.9
M12 - 120	12.5	120	22.5		M12	1.5
- 150		150				1.9
BT50 - M06 - 135	6.5	135	10	65	M6	4.2
- 165		165				4.9
M08 - 135	8.5	135	14.4		M8	4.2
- 165		165				4.9
M10 - 135	10.5	135	18		M10	4.2
- 165		165				4.9
M12 - 135	12.5	135	22.5		M12	4.2
- 165		165				4.9

PRO MILL CUTTER(Ball Type)



PRODUCT INFORMATION

- ■HITACHI 인써트 호환
- ■정삭 R작업 최적화

- ■ Compatible with HITACHI insert.
- ■ Optimal for R-finishing operation.

Code No.	R	øD	L	ød	M	Insert	Screw	Wrench
R05M0630	5	10	30	6.5	M6	ZPFG100, ZCFW100	TNS-5842	TXL-10
R06M0630	6	12				ZPFG120, ZCFW120	TNS-5843	TXT-20
R08M0830	8	16		8.5	M8	ZPFG160, ZCFW160	TNS-5844	
R10M1035	10	20	35	10.5	M10	ZPFG200, ZCFW200	TNS-5845	TXT-25
R12M1240	12.5	25	40	12.5	M12	ZPFG250, ZCFW250	TNS-5846	TXT-30

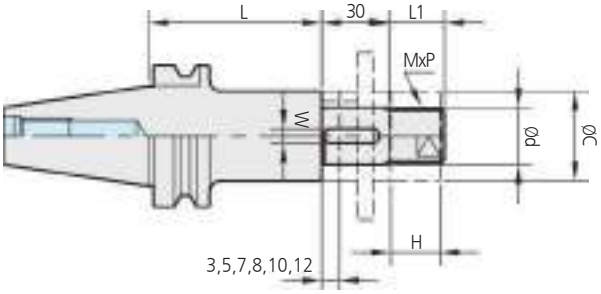
▶다양한 Type의 컷터 제작가능합니다.
▶전용 스페너는 별매입니다.

▶Cutters can be made of a variety of Type.
▶Spanner is orderd seperately.

SIDE CUTTER ARBOR

CODE No.

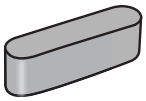
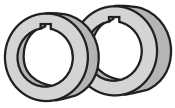
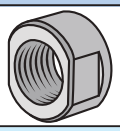
BT50	SCA25.4	90
Shank	Cutter Type	Length



PRODUCT INFORMATION

- JIS B4219,4109,4107 side cutter type 입니다.
- Key, collar 및 nut는 부착되어 있습니다.
- For side cutters conforming to JIS B4219, 4019, and 4107.
- Key, collar and nut attached.

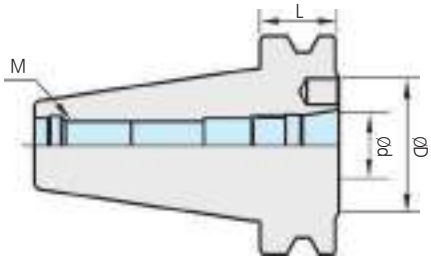
Code No.	ød	L	øC	L1	W	H	M x P	Weight (kg)
BT30 - SCA25.4 - 60	25.4	60	40	25	6.35	21	M24X1.5	0.9
BT40 - SCA25.4 - 75	25.4	75	40	25	6.35	21	M24X1.5	2.1
-120		120						2.5
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	2.6
-120		120						2.9
BT50 - SCA25.4 - 90	25.4	90	40	25	6.35	21	M24X1.5	4.7
-135		135						5.0
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	5.1
-135		135						5.7
SCA38.1 - 90	38.1	90	55	36	9.53	31	M36X1.5	5.8
-135		135						6.8

Spare Parts			
	Parallel Key	Coller	Lock Nut
Type			
SCA25.4	6.35 x 6.35 x 25	SCA25.4 -Set	SCA-M24
SCA31.75	7.92 x 7 x 25	SCA31.75 -Set	SCA-M30
SCA38.1	9.52 x 8 x 25	SCA38.1 -Set	SCA-M36

CUTTER HOLDER

CODE No.

BT50	WMA	630	40
Shank	Cutter Type	Cutter Size	Length



PRODUCT INFORMATION

■FPC 컷터, 볼컷터 전용 홀더 ■FPC, ball cutter holder.

Code No.	øD	ød	L	M	Weight (kg)
BT50 - WMA - 63040	63	31.75	40	M24	3.2
BT50 - WMA - 80040	80	44.45	40		3.2

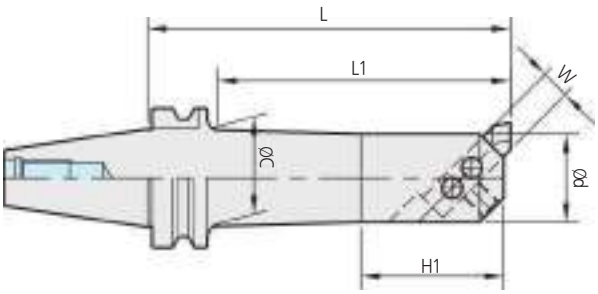
SQUARE BORING BAR

Boring Range : ø25.0 ~ ø190.0

CODE No.

BT50 | BSA50 | 180

Shank — 45° — Length



PRODUCT INFORMATION

■황삭용 Boring 및 중간정삭 Boring.
■막힌 구멍과 관통된 구멍 Boring.

■Rough boring and semi finish boring.
■Both blind and through hole boring.

Code No.	ød	Boring Range min	Boring Range max	L	øC	L1	H1	W	Weight (kg)
BT30 - BSA25 - 120	20	25	38	120	22	92	35	8	0.5
BSA30 - 150	24	30	42	150	26	121	40		0.9
BSA38 - 165	30	38	52	165	33	135	50	10	0.9
BSA42 - 165	34	42	56		37	138	60		0.9
BT40 - BSA25 - 135	20	25	38	135	22	105	35	8	1.2
BSA30 - 165	24	30	42	165	26		40		1.3
BSA38 - 165	30	38	52		33	133	50	10	1.8
BSA42 - 165	34	42	56		37		60		1.9
BSA50 - 165	40	50	65		44		65	13	2.2
- 210				210		178			2.6
BSA62 - 165	50	62	90	165	50	133	80	16	3.3
- 225				225	56	193			3.6
BSA72 - 165	60	72	110	165	60	-	95	19	3.6
- 225				225					4.5
BSA90 - 165	75	90	125	165	62		60		4.2
- 210				210					6.5
BT50 - BSA25 - 135	20	25	38	135	22	92	35	8	4.0
BSA30 - 165	24	30	42	165	26	122	40		4.2
BSA38 - 180	30	38	52	180	33	137	50	10	4.5
BSA42 - 210	34	42	56	210	37	167	60		4.6
BSA50 - 180	40	50	65	180	46	137	65	13	5.0
- 240				240		197			5.4
BSA62 - 195	50	62	90	195	56	152	80	16	6.5
- 270				270		227			7.0
BSA72 - 195	60	60	110	195	66	152	95	19	7.0
- 285				285		242			7.5
BSA90 - 210	75	72	125	210	80	167	110		8.5
- 300				300		257			9.4
BSA105 - 195	90	105	160	195	90	-	130	25	11.0
- 285				285	94				11.5
BSA130 - 255	110	130	190	255	99		85		15.0

▶보링바이트는 별도 구매입니다.
▶BORING BITE is ordered separately.

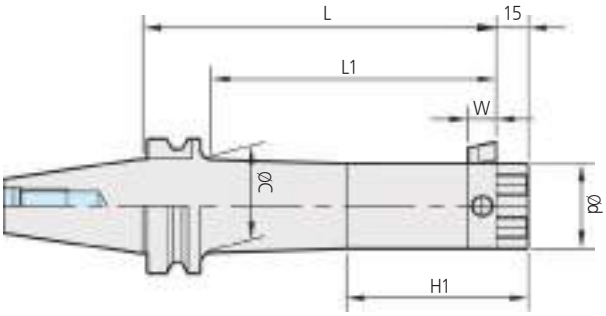
SQUARE BORING BAR

Boring Range : ø25.0 ~ ø260.0

CODE No.

BT50 | BSB90 | 210

Shank — 90° — Length



PRODUCT INFORMATION

■황삭용 Boring 및 중간정삭 Boring.
■막힌 구멍과 관통된 구멍 Boring.

■Rough boring and semi finish boring.
■Both blind and through hole boring.

Code No.	ød	Boring Range min	Boring Range max	L	øC	L1	H1	W	Weight (kg)
BT30 - BSB25 - 120	20	25	52	120	22	92	50	8	1.2
BSB38 - 165	30	38	70	165	33	121	70	10	1.2
BSB50 - 165	40	50	90		44	135	85	13	1.2
BT40 - BSB25 - 135	20	25	52	135	22	90	50	8	1.4
BSB38 - 165	30	38	70	165	33	135	70	10	1.5
BSB50 - 165	40	50	90		44		85	13	2.0
- 210				210		180			2.4
BSB62 - 165	50	62	115	165	-	135	95	16	3.2
- 225				225	56	180			3.4
BSB72 - 165	60	72	135	165	-	135	10	19	3.8
- 225				225		195			4.0
BSB90 - 165	75	90	150	165		-	130		4.0
- 210				210					4.4
BT50 - BSB25 - 135	20	25	52	135	22	92	50	8	4.0
BSB38 - 180	30	38	70	180	33	137	70	10	4.2
BSB50 - 180	40	50	90		44		85	13	5.0
- 240				240		197			5.2
BSB62 - 195	50	62	115	195	56	152	95	16	6.1
- 270				270		227			6.4
BSB72 - 195	60	72	135	195	66	152	110	19	6.9
- 285				285		242			6.9
BSB90 - 210	75	90	150	210	80	167	130		8.0
- 300				300		257			8.5
BSB105 - 195	90	105	190	195	-	-	-	25	9.9
- 285				285	94		150		10.5
BSB130 - 255	110	130	260	255	-		60		12.5

▶보링바이트는 별도 구매입니다.
▶BORING BITE is ordered separately.

Excellent Precision
Excellent Quality

SELUX
NC TOOLING SYSTEM

HSK

CHUCK & Item

HYDRAULIC CHUCK
MILLING CHUCK
HIGH SPEED MILLING CHUCK
SHRINK FIT HOLDER
SSK COLLET CHUCK
HIGH SPEED GSK COLLET CHUCK
ER COLLET CHUCK
NC DRILL CHUCK
TAPPING CHUCK HOLDER
SIDE LOCK HOLDER
MORSE TAPER HOLDER
FACE MILL ARBOR

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : ⌀3.0 ~ ⌀32.0

CODE No.

HSK63A | SHC20 | 90

Shank — Chucking Dia — Length

MAX 25,000 min⁻¹

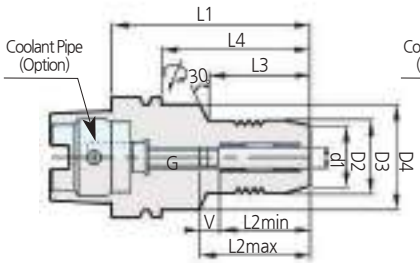


Fig1

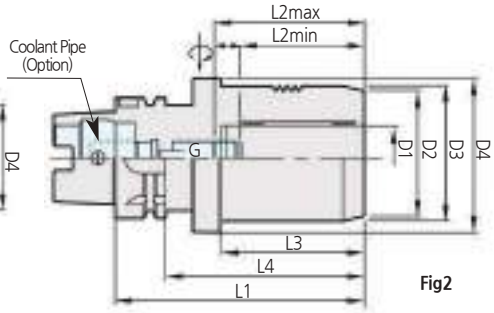


Fig2

PRODUCT INFORMATION

- ■4D 선단에서 3㎛이내의 흔들림정도
- ■높은 정밀도와 고속가공에 최적화
- ■유압방식의 강력한 파지력
- ■렌치 하나로 쉽게 공구고정

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■The optimal chcuk for excellent accuracy and high speed operation.
- ■Powerful clamping force of hydraulic type.
- ■Easy clamping with just one wrench.

CODE NO.	d1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	Type	Weight (kg)
HSK40A - SHC 6 - 70	6	25	28	34	70	27.5	37.5	10	28	50	M5X0.8	Fig1	0.5
SHC 8 - 70	8	27	30										0.5
SHC 10 - 75	10	29	32		75	32.5	42.5		34	55			0.6
SHC 12 - 85	12	31	34		85	37.5	47.5		-	65	M6X1.0		0.65
HSK50A - SHC 6 - 70	6	25	28	40	70	27.5	37.5	10	28	44	M5X0.8	Fig1	0.65
SHC 8 - 70	8	27	30								M6X1.0		0.65
SHC 10 - 80	10	29	32		80	32.5	42.5		34	54			0.7
SHC 12 - 85	12	31	34		85	37.5	47.5		44	59			0.75
SHC 14 - 85	14	33	36										0.75
SHC 16 - 90	16	35	38	60	90	42.5	52.5		30	64		Fig2	0.9
SHC 18 - 90	18	38	41	-					-			Fig1	0.9
SHC 20 - 90	20	40	42										1.0
HSK63A - SHC 6 - 70	6	25	28	50	70	27.5	37.5	10	24	44	M5X0.8	Fig1	0.53
SHC 8 - 70	8	27	30								M6X1.0		0.55
SHC 10 - 80	10	29	32		80	32.5	42.5		35	54			1.08
SHC 12 - 85	12	31	34		85	37.5	47.5		40	59			1.0
SHC 14 - 85	14	33	36										1.05
SHC 16 - 90	16	35	38		90	42.5	52.5		46	64	M8X1.0		1.15
SHC 18 - 90	18	38	41						47				1.15
SHC 20 - 90	20	40	43						48				1.2
SHC 25 - 120	25	53	57	63	120	51	61		59	94	M16X1.0	Fig2	2.2
SHC 32 - 125	32	58	63	75	125	55	65		63	99			2.4
HSK100A - SHC 6 - 75	6	25	28	54	75	27.5	37.5	10	26	46	M5X0.8	Fig1	3.2
SHC 8 - 75	8	27	30								M6X1.0		3.2
SHC 10 - 90	10	29	32	50	90	32.5	42.5		42	61			3.4
SHC 12 - 95	12	31	34		95	37.5	47.5		47	66			3.4
SHC 14 - 95	14	33	36										3.4
SHC 16 - 100	16	35	38		100	42.5	52.5		53	71	M8X1.0		3.5
SHC 18 - 100	18	38	41										3.6
SHC 20 - 105	20	40	43		105				59	76			4.0
SHC 25 - 110	25	53	57	63	110	51	61		62	81	M16X1.0		4.2
SHC 32 - 110	32	58	63	75		55	65						4.3

- ▶유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
- ▶유압척 SHC12, SHC20, SHC32는 D또는 OD콜렛을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
- ▶유압척 전용 콜렛은 P132~P133
- ▶척킹시 필요한 렌치는 부속되어 있습니다.
- ▶황삭작업에는 권장하지 않습니다.
- ▶내부급유 쿨런트파이프는 P94

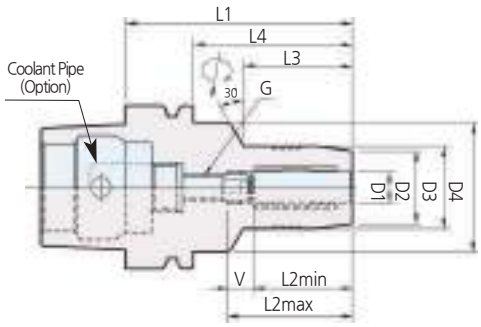
- ▶ Tolerance of cutting tool shank should be configured within h6.
- ▶ HYDRAURIC CHCUK SHC12, SHC20, SHC32 are possible. to use various shank cutting tool with D or OD COLLET.
- ▶ HYDRAURIC COLLET are refered. P132~P133
- ▶ Wrench is included.
- ▶ We do not recommed to use hydrauric chuck for roughing operation.
- ▶ The Coolant pipe are refered. P94

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø20.0

CODE No.
HSK40E | SHC10 | 75
Shank | Chucking Dia | Length

MAX 40,000 min-1



PRODUCT INFORMATION

- ■4D 선단에서 3㎛이내의 흔들림정도
- ■높은 정밀도와 고속가공에 최적화
- ■유압방식의 강력한 파지력
- ■렌치 하나로 쉽게 공구고정

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■The optimal chcuk for excellent accuracy and high speed operation.
- ■Powerful clamping force of hydraulic type.
- ■Easy clamping with just one wrench.

CODE NO.	D1	D2	D3	L1	L2min	L2max	V	L3	G	Weight (kg)
HSK40C - SHC 6 - 60	6	25	28	60	27.5	37.5	10	35	M5X0.8	0.6
SHC 8 - 60	8	27	30					36	M6X1.0	0.6
SHC 10 - 65	10	29	32	65	32.5	42.5		41		0.6
SHC 12 - 70	12	31	34	70	37.5	47.5		47	M6X1.0	0.65
HSK50C - SHC 6 - 60	6	25	28	60	27.5	37.5	10	30	M5X0.8	0.65
SHC 8 - 60	8	27	30						M6X1.0	0.65
SHC 10 - 65	10	29	32	65	32.5	42.5		35	M6X1.0	0.7
SHC 12 - 75	12	31	34	75	37.5	47.5		44		0.75
SHC 14 - 75	14	33	36					46		0.75
SHC 16 - 80	16	35	38	80	42.5	52.5		51	M8X1.0	0.9
SHC 18 - 80	18	38	41							0.9
SHC 20 - 80	20	40	43					52		1.0

CODE NO.	D1	D2	D3	D4	L1	L2min	L2max	V	L3	L4	G	Weight (kg)
HSK40E - SHC 6 - 75	6	25	28	34	75	27.5	37.5	10	28	55	M5X0.8	0.6
SHC 8 - 70	8	27	30		70					50		0.6
SHC 10 - 75	10	29	32		75	32.5	42.5		34	55		0.7
SHC 12 - 85	12	31	34		85	37.5	47.5		-	65	M6X1.0	0.7
HSK50E - SHC 6 - 70	6	25	28	40.0	70	27.5	37.5	10	28	44	M5X0.8	0.7
SHC 8 - 70	8	27	30								M6X1.0	0.7
SHC 10 - 80	10	29	32		80	32.5	42.5		34	54	M6X1.0	0.7
SHC 12 - 85	12	31	34		85	37.5	42.5		44	59		0.8
SHC 16 - 90	16	35	38	60	90	42.5	52.5		30	64		0.9
SHC 20 - 90	20	40	42	-					-			1.1

- ▶유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
- ▶유압척 SHC12, SHC20, SHC32는 D또는 OD콜렛을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
- ▶유압척 전용 콜렛은 P132~P133
- ▶척킹시 필요한 렌치는 부속되어 있습니다.
- ▶황삭작업에는 권장하지 않습니다.
- ▶내부급유 쿨런트파이프는 P94

- ▶ Tolerance of cutting tool shank should be configured within h6.
- ▶ HYDRAURIC CHCUK SHC12, SHC20, SHC32 are possible. to use various shank cutting tool with D or OD COLLET.
- ▶ HYDRAURIC COLLET are refered. P132~P133
- ▶ Wrench is included.
- ▶ We do not recommed to use hydrauric chuck for roughing operation.
- ▶ The Coolant pipe are refered. P94

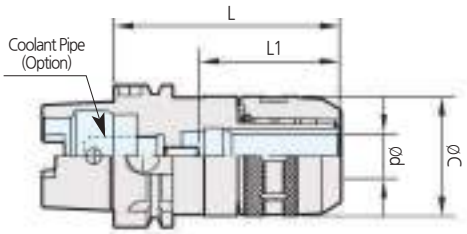
MILLING CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø42.0

CODE No.

HSK63A | MC32 | 110

Shank — Chucking Dia — Length

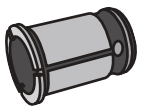


PRODUCT INFORMATION

- ■높은 정밀도
- ■3.5D 선단에서 5㎛이내의 흔들림정도
- ■간편한 척킹 시스템
- ■Taper 접촉 80%이상 Taper공차 AT3로 보증
- ■완전한 단면 밀착으로 강력 절삭
- ■4배열 Roller System 방식으로 강력한 파지력

- ■Excellent Run-out Accuracy.
- ■5㎛(T.I.R) Run-out at 3.5D away from shank nose.
- ■Easy chucking system.
- ■More than 80% taper contact, we guarantee taper tolerance AT3.
- ■The strongest cutting power due to perfect face contact construction.
- ■Powerful clamping force by 4 needle roller system.

Code No.	ød	L	øC	L1	Collet	Weight (kg)
HSK40A - MC20 - 100	20	100	53	57	K20	1.2
HSK50A - MC20 - 95	20	95	53	57	K20	1.2
HSK63A - MC20 - 105	20	105	53	76	K20	1.7
MC25 - 105	25	105	62	77	K25	2.0
MC32 - 120	32	120	72	80	K32	2.2
- 130		130		100		2.6
HSK100A - MC20 - 105	20	105	53	77	K20	2.9
MC20 - 135		135				3.6
MC25 - 105	25	105	62	80	K25	3.3
- 135		135				3.6
MC32 - 120	32	120	72	81.5	K32	3.2
- 135		135		102		4.0
- 165		165		105		4.8
- 200		200				5.7
- 250		250				7.0
MC42 - 115	42	115	94	87	K42	4.8
- 135		135		112		5.5
- 165		165		120		7.0
- 200		200				8.5
- 250		250				10.8

Spare Parts		
	Option	
	Collet	Spanner
Type		
MC20	K20-NC20	MC20-SP(50-55)
MC25	K25-NC25	MC25-SP(56-61)
MC32	K32-NC32	MC32-SP(68-75)
MC42	K42-NC42	MC42-SP(88-96)

- ▶고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶밀링척 전용 콜렛은 P134~P136
- ▶밀링척 스페너는 별도 판매품 입니다. P149
- ▶내부급유 쿨런트파이프는 P94

- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are refered. P134~P136
- ▶ Spanner is ordered separately. P149
- ▶ The Coolant pipe are refered. P94

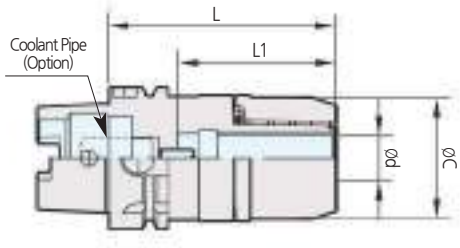
HIGH SPEED MILLING CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

HSK63A	MC32	110	G
Shank	Chucking Dia	Length	High Speed

MAX 30,000 min-1

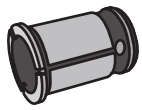


PRODUCT INFORMATION

- 고속 가공에서 높은 정도
- 강력한 파지력
- 3.5D 선단에서 5㎛이내의 흔들림 정도
- 스패너는 GH 스패너 사용(별매)
- G6.3 max 30.000RPM
- 원형너트로 고속 절삭시 소음 감소

- Excellent Run-out Accuracy.
- Powerful clamping force.
- 5㎛(T.I.R)Run-out at 3.5D away from shank nose.
- GH spanner is orderd seperately.
- G6.3 max 25.000 RPM.
- The operation noise is reduced by assembled circle style nut.

Code No.	ød	L	øC	MAX rpm	L1	Weight (kg)
HSK40A - MC20 - 100G	20	100	48	30,000	57	1.2
HSK50A - MC20 - 95G	20	95	48	30,000	57	1.2
HSK63A - MC20 - 105G	20	105	55	25,000	76	1.7
MC25 - 105G	25			20,000	77	2.0
MC32 - 110G	32	110	68		80	2.2
HSK100A - MC20 - 105G	20	105	48	15,000	100	2.9
MC25 - 105G	25		55		77	3.3
MC32 - 110G	32	110	68	12,000		3.2
- 135G		135			80	4.0

Spare Parts		
	Option	
	Collet	Spanner
Type		
MC20-G	K20 - NC20	MC20-GH
MC25-G	K25 - NC25	MC25-GH
MC32-G	K32 - NC32	MC32-GH

▶ 고속형밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
▶ 밀링척 전용 콜렛은 P134 ~ P136
▶ 고속형밀링척 GH스페너는 별도 판매품 입니다. P149
▶ 내부급유 쿨런트파이프는 P94

▶ High speed MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
▶ K-COLLET is refered. P132~P133
▶ GH SPANNER for high speed milling chuck is ordered separately. P149
▶ The Coolant pipe are refered. P94

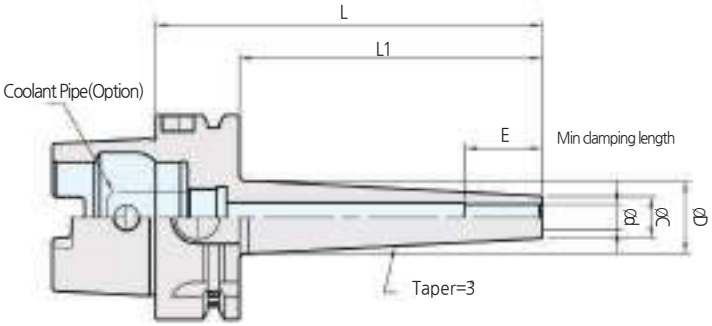
SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : ø4.0 ~ ø12.0

CODE No.

HSK63A	SSF10	S	120
Shank	Chucking Dia	Shim	Length

MAX 25,000 min-1



PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 (Coolant Through Hole)

- ■3㎛(T.I.R) Run-out at 4D away from shank nose
- ■Excellent Run-out accuracy and powerful clamping
- ■Optimal operation with slim and symmetrical design
- ■All products can be used for center through coolant type

Code No.	ød	øC	øD	L	L1	E	Weight (kg)
HSK40A - SSF 4S - 105	4	7	12.6	105	82	12	0.32
SSF 6S - 105	6	11	14.6			18	0.32
SSF 8S - 105	8	13	16.6			24	0.35
SSF10S - 105	10	16	18.0			30	0.39
SSF12S - 105	12	19	20.6				0.46
HSK50A - SSF 6S - 105	6	11	18.0	105	76	18	0.62
SSF 8S - 105	8	13	21.0			24	0.65
SSF10S - 105	10	16	24.0			30	0.68
SSF12S - 105	12	19	27.0				0.71
HSK63A - SSF 6S - 120	6	11	19.5	120	91	18	0.9
- 165			24.3	165	136		1.0
SSF 8S - 120	8	13	22.5	120	91	24	0.9
- 165			27.2	165	136		1.1
SSF10S - 120	10	16	25.5	120	91	30	1.0
- 165			30.2	165	136		1.1
SSF12S - 120	12	19	28.5	120	91	30	1.0
- 165			33.2	165	136		1.2

- ▶ 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- ▶ 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)

- ▶ 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- ▶ SELUX 고주파 히팅기는 P145
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P145
- ▶ 내부급유 쿨런트파이프는 P94
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

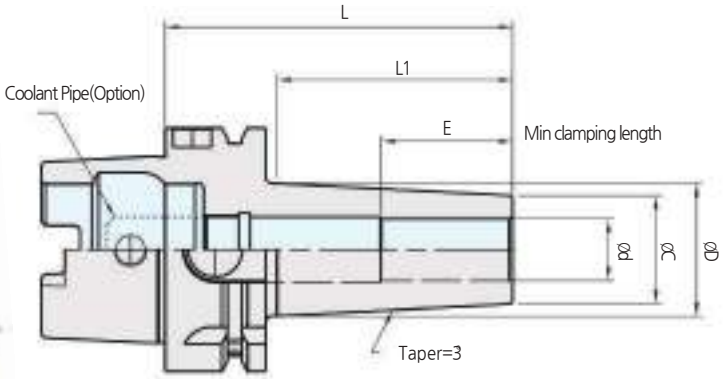
- ▶ Please use only carbide cutting tools of a shank tolerlance within H6.
- ▶ Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shink fit holder.
- ▶ SELUX shrink fit equipment is refered. P145
- ▶ Please follow minimum insertion lengh of the cutting tools.
- ▶ Stopper for adjusting cutting tool lengh order separately. P145
- ▶ The Coolant pipe are refered. P94
- ▶ Please clean the shank outside and inside of shrink fit before use. If you don't clean the shrink fit, it has problem about Run-out and toollife.

SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : ø4.0 ~ ø20.0

CODE No.
HSK63A SSF10 120
Shank Chucking Dia Length

MAX 25,000 min-1

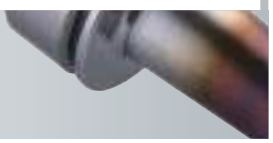


Code No.	ød	øC	øD	L	L1	E	Weight (kg)
HSK40A - SSF 4 - 60	4	10	14.0	60	38	12	0.27
SSF 6 - 75	6	14	19.5	75	52	18	0.31
SSF 8 - 75	8	18	23.5			24	0.34
SSF10 - 75	10	22	27.5			30	0.42
SSF12 - 75	12	24	29.5				0.43
HSK50A - SSF 4 - 75	4	10	15.0	75	46	12	0.51
SSF 6 - 75	6	14	19.0			18	0.61
SSF 8 - 75	8	18	23.0			24	0.64
SSF10 - 75	10	22	27.0			30	0.67
SSF12 - 75	12	24	29.0				0.69
SSF16 - 75	16	28	33.0			34	0.71
HSK63A - SSF 4 - 90	4	10	16.4	90	61	12	0.85
SSF 6 - 90	6	14	20.4		61	18	0.9
- 150			26.7	150	121		1.04
SSF 8 - 90	8	18	24.4	90	61	24	0.9
- 150			30.7	150	121		1.15
SSF10 - 90	10	22	38.4	90	61	30	1.0
- 150			34.7	150	121		1.29
SSF12 - 90	12	24	30.4	90	61		1.0
- 150			36.7	150	121		1.33
SSF16 - 90	16	28	34.4	90	61	34	1.0
- 165			42.3	165	136		1.7
SSF20 - 90	20	34	40.4	90	61	40	1.1
- 165			48.3	165	136		1.9
HSK100A - SSF 6 - 105	6	14	21.7	105	73	18	2.5
- 165			27.9	165	133		2.7
SSF 8 - 105	8	18	25.7	105	73	24	2.5
- 165			31.9	165	133		2.8
SSF10 - 105	10	22	29.7	105	73	30	2.6
- 165			35.9	165	133		2.9
SSF12 - 105	12	24	31.7	105	73		2.6
- 165			37.9	165	133		3.0
SSF16 - 105	16	28	35.7	105	73	34	2.7
- 165			41.9	165	133		3.1
SSF20 - 105	20	34	41.7	105	73	40	2.8
- 165			47.9	165	133		3.4

- 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)
- 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- SELUX 고주파 히팅기는 P145
- 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- 공구길이조정 Stopper는 별도 판매 입니다. P145
- 내부급유 쿨런트파이프는 P94
- 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- Please use only carbide cutting tools of a shank tolerlance within H6.
- Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- We recommend shrink fit equipment when you use shink fit holder.
- SELUX shrink fit equipment is refered. P145
- Please follow minimum insertion lengh of the cutting tools.
- Stopper for adjusting cutting tool lengh order separately. P145
- The Coolant pipe are refered. P94
- Please clean the shank outside and inside of shrink fit before use. If you don't clean the shrink fit, it has problem about Run-out and toollife.

SHRINK FIT HOLDER

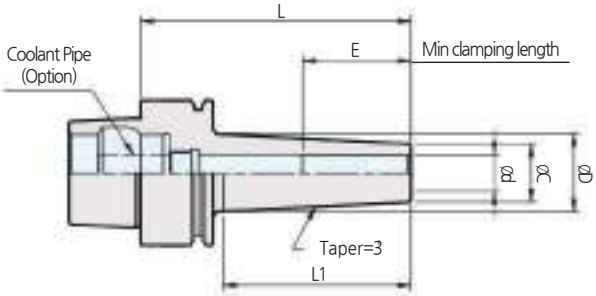


Coolant-through hole
Clamping Range : ø4.0 ~ ø12.0

CODE No.

HSK40E	SSF10	S	75
Shank	Chucking Dia	Shim	Length

MAX 40,000 min-1



PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 (Coolant Through Hole)

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant type.

Code No.	ød	øC	øD	L	L1	E	Weight (kg)
HSK25E - SSF 4S - 45	4	7	10.0	45	32	12	0.06
SSF 6S - 60	6	11	15.0	60	47	18	0.08
SSF 8S - 60	8	13	18.0			24	0.10
HSK32E - SSF 4S - 60	4	7	10.0	60	37	12	0.14
SSF 6S - 60	6	11	13.5			18	0.15
SSF 8S - 60	8	13	16.5			24	0.16
SSF10S - 60	10	16	20.0			30	0.18
SSF12S - 60	12	19	23.0				0.19
HSK40E - SSF 4S - 60	4	7	10.0	60	37	12	0.22
SSF 6S - 75	6	11	15.0	75	52	18	0.24
SSF 8S - 75	8	13	18.0			24	0.26
SSF10S - 75	10	16	21.0			30	0.29
SSF12S - 75	12	19	24.0				0.31
HSK50E - SSF 6S - 75	6	11	14.5	75	52	18	0.45
SSF 8S - 75	8	13	17.5				0.46
SSF10S - 75	10	16	20.5			24	0.48
SSF12S - 75	12	19	23.5			30	0.51

- ▶ 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- ▶ 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)
- ▶ 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- ▶ SELUX 고주파 히팅기는 P145
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P145
- ▶ 내부급유 쿨런트파이프는 P94
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

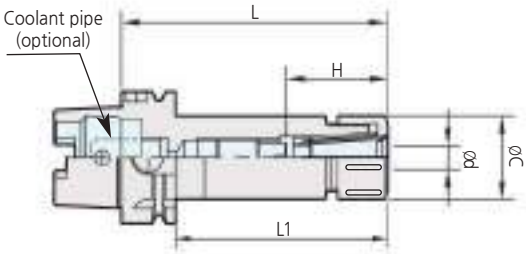
- ▶ Please use only carbide cutting tools of a shank tolerlance within H6.
- ▶ Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shink fit holder.
- ▶ SELUX shrink fit equipment is refered. P145
- ▶ Please follow minimum insertion lengh of the cutting tools.
- ▶ Stopper for adjusting cutting tool lengh order separately. P145
- ▶ The Coolant pipe are refered. P94
- ▶ Please clean the shank outside and inside of shrink fit before use. If you don't clean the shrink fit, it has problem about Run-out and toollife.

SSK COLLET CHUCK

Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

HSK50A	SSK10	90
Shank	SC Collet Size	Length



PRODUCT INFORMATION

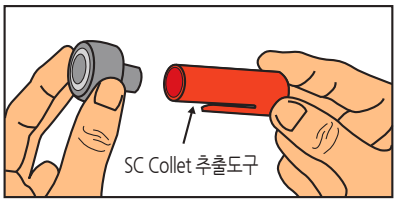
- ■8° Taper 의 강력한 파지력
- ■높은 정밀도와 빠른 가공에 적합
- ■드릴, 센터드릴, 엔드밀, 탭, 리머용으로 사용

- ■Powerful clamping force of 8° taper.
- ■Excellent Run-out Accuracy.
- ■SSK COLLET CHUCK is suitable for a various operation using drill, endmill, tap and reamer.

Code No.	ød	L	C	H Min	H Max	L1	Weight (kg)
HSK40A - SSK 6 - 60	0.9~6.0	60	19.5	40		40	0.3
SSK10 - 60	1.75~10.0		27.5				0.35
- 75		75		29	36	55	0.4
SSK13 - 75	2.75~13.0		33	55			0.5
SSK16 - 90	2.75~16.0	90	40	60		70	0.7
HSK50A - SSK 6 - 60	0.9~6.0	60	19.5	37		34	0.4
SSK10 - 60	1.75~10.0		27.5	35			0.5
- 90		90		36	41	64	0.6
SSK13 - 90	2.75~13.0		33	31	47		1.0
SSK16 - 90	2.75~16.0		40	50	58		1.2
HSK63A - SSK 6 - 90	0.9~6.0	90	19.5	26	31	64	0.9
SSK10 - 105	1.75~10.0	105	27.5	33	41	79	1.1
SSK13 - 105	2.75~13.0		33	31	47		1.2
SSK16 - 105	2.75~16.0		40	50	58		1.3
SSK20 - 120	3.5~20.0	120	48.5	50	55	94	1.8
SSK25 - 125	15.5~25.4	125	55	60	65	99	1.9
HSK100A - SSK 6 - 120	0.9~6.0	120	19.5	26	31	91	1.3
SSK10 - 125	1.75~10.0	125	27.5	33	41	96	2.9
SSK13 - 135	2.75~13.0	135	33	39	40	106	3.2
SSK16 - 140	2.75~16.0	140	40	46	51	111	3.4
SSK20 - 150	3.5~20.0	150	48.5	48	63	121	3.5
SSK25 - 155	15.5~25.4	155	55	60	65	126	5.0

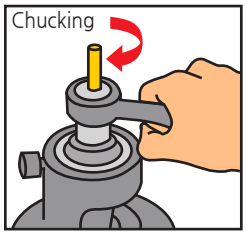
- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. P149
- ▶ Synchronized Tap 사용시 SSK10을 사용하십시오.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  위 사양 이상인경우는 Milling Chuck에 K-Collet을 사용하시길 바랍니다.
- ▶ SSK척 콜렛은 P138~P139
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ 내부급유 쿨런트파이프는 P94

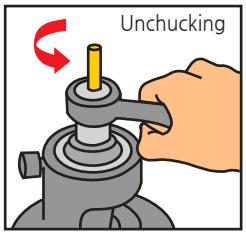
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. P149
- ▶ Please use SSK10 when you use Synchronized Tap.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  If it has problem, We recommend K COLLET with Milling Chuck.
- ▶ SC COLLET is refered. P138 ~ P139
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder.
- ▶ Extra charge for high speed balance.
- ▶ The Coolant pipe are refered. P94



SSK Chuck NUT에 SC Collet 체결시에는 전용 콜렛 추출도구를 사용하시기 바랍니다.

Please use private remover when you insert the SSK COLLET in SSK NUT





SSK Collet chuck은 Nut와 Body 체결시 40 Torgue 이상의 힘이 가해질 시 너트 및 바디가 파손될 수 있습니다.
※주의 (SSK6, SSK10)

SSK NUT and SSK CHCUK is possible to be broken if you clamp chuck and nut over 40 Torgue
(※ WARNING SSK6, SSK10)

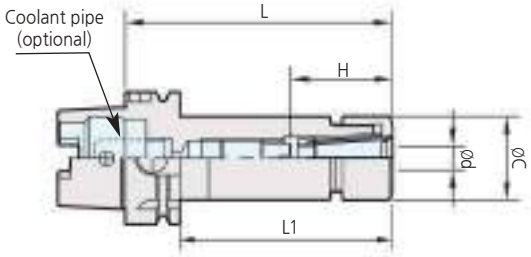
GSK COLLET CHUCK

Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

HSK63A	GSK25	125	P
Shank	SC Collet Size	Length	P Class

MAX 40,000 min-1



PRODUCT INFORMATION

- ■고속가공에서 높은 정도
- ■ 8。Taper의 강력한 파지력
- ■원형 너트로 컴팩트한 디자인
- ■스패너는 PH스패너 사용(별매)
- ■G2.5X max 40.000 RPM
- ■고속형GSK척에는 P CLASS 콜렛 사용을 권장

- ■Excellent Run-out Accuracy.
- ■Powerful clamping force of 8。Taper.
- ■Circle style nut designed compactly
- ■PH spanner is orderd seperately.
- ■G2.5X max 40.000 RPM.
- ■We recommed to use P CLASS SC COLLET when you use GSK CHCUK.

Code No.	ød	L	C	H Min	H Max	L1	Weight (kg)
HSK40A - GSK 6 - 60P	0.9 ~ 6.0	60	19.5	40		40	0.3
GSK10 - 60P	1.75 ~ 10.0		27.5				0.35
- 75P		75		29	36	55	0.4
GSK13 - 75P	2.75 ~ 13.0		33	55			0.5
GSK16 - 90P	2.75 ~ 16.0	90	40	60		70	0.7
HSK50A - GSK 6 - 60P	0.9 ~ 6.0	60	19.5	37		34	0.4
GSK10 - 60P	1.75 ~ 10.0		27.5	35			0.5
- 90P		90		36	41	64	0.6
GSK13 - 90P	2.75 ~ 13.0		33	31	47		1.0
GSK16 - 90P	2.75 ~ 16.0		40	50	58		1.2
HSK63A - GSK 6 - 90P	0.9 ~ 6.0	90	19.5	26	31	64	0.9
GSK10 - 105P	1.75 ~ 10.0	105	27.5	33	41	79	1.1
GSK13 - 105P	2.75 ~ 13.0		33	31	47		1.2
GSK16 - 105P	2.75 ~ 16.0		40	50	58		1.3
GSK20 - 120P	3.5 ~ 20.0	120	48.5	50	55	94	1.8
GSK25 - 125P	15.5 ~ 25.4	125	55	60	65	99	1.9
HSK100A - GSK 6 - 120P	0.9 ~ 6.0	120	19.5	26	31	91	1.3
GSK10 - 125P	1.75 ~ 10.0	125	27.5	33	41	96	2.9
GSK13 - 135P	2.75 ~ 13.0	135	33	39	40	106	3.2
GSK16 - 140P	2.75 ~ 16.0	140	40	46	51	111	3.4
GSK20 - 150P	3.5 ~ 20.0	150	48.5	48	63	121	3.5
GSK25 - 155P	15.5 ~ 25.4	155	55	60	65	126	5.0

- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. P149
- ▶ GSK척 콜렛은 P138~P139
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ 내부급유 쿨런트파이프는 P94

- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. P149
- ▶ P CLASS SC COLLET for GSK CHUCK is refered. P138 ~ P139
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder
- ▶ The Coolant pipe are refered. P94

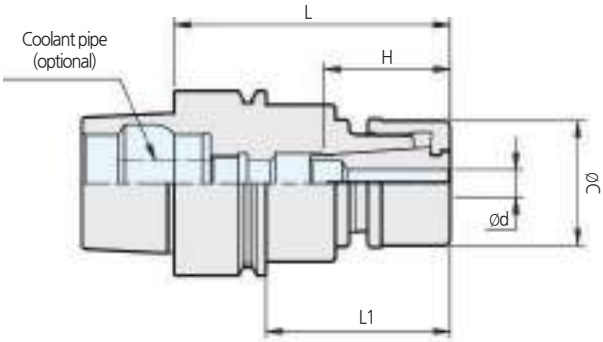
GSK COLLET CHUCK

Coolant-through hole
Clamping Range : ø1.0 ~ ø16.0

CODE No.

HSK40E	GSK10	60	P
Shank	SC Collet Size	Length	P Class

MAX 40,000 min-1



PRODUCT INFORMATION

- ■고속가공에서 높은 정도
- ■ 8。 Taper의 강력한 파지력
- ■원형 너트로 컴팩트한 디자인
- ■스패너는 PH스패너 사용(별매)
- ■G2.5X max 40.000 RPM
- ■고속형GSK척에는 P CLASS 콜렛 사용을 권장

- ■Excellent Run-out Accuracy.
- ■Powerful clamping force of 8。taper.
- ■Circle style nut designed compactly
- ■PH spanner is orderd seperately.
- ■G2.5X max 40.000 RPM.
- ■We recommed to use P CLASS SC COLLET when you use GSK CHCUK.

Code No.	ød	L	C	H	L1	MAX rpm	Weight (kg)
HSK25E - GSK 6 - 45P	0.9 ~ 6.0	45	19.5	30.5	35	40,000	0.1
GSK10 - 55P	1.75~10.0	55	27.5	41	45		0.2
HSK30E - GSK 6 - 50P	0.9 ~ 6.0	50	19.5	32	29	40,000	0.2
GSK10 - 60P	1.75~10.0	60	27.5	44	41		0.3
HSK40E - GSK 6 - 60P	0.9 ~ 6.0	60	19.5	40	37	30,000	3.0
GSK10 - 60P	1.75~10.0		27.5		39		0.4
GSK13 - 75P	2.75~13.0	75	33	55	54		0.6
GSK16 - 80P	2.75~16.0	80	40	59	59		0.6
HSK50E - GSK 6 - 60P	0.9 ~ 6.0	60	19.5	40	33	25,000	0.5
GSK10 - 60P	1.75~10.0		27.5	35			0.5
GSK13 - 70P	2.75~13.0	70	33	47	43	25,000	1.0
GSK16 - 80P	2.75~16.0	80	40	52	53		1.2

- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. P149
- ▶ GSK척 콜렛은 P138~P139
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ 내부급유 쿨런트파이프는 P94

- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. P149
- ▶ P CLASS SC COLLET for GSK CHUCK is refered. P138 ~ P139
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder
- ▶ The Coolant pipe are refered. P94

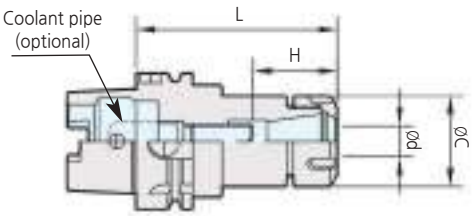
ER COLLET CHUCK

Coolant-through hole
Clamping Range : ø0.5 ~ ø26.0

CODE No.

HSK63A | ER16 | 95

- HSK63A: Shank
- ER16: ER Collet Size
- 95: Length

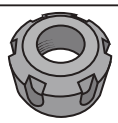
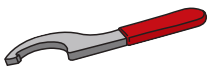


PRODUCT INFORMATION

- ■안정적인 정밀도와 파지력
- ■쉽고빠른 공구교환
- ■드릴, 엔드밀, 탭 다양한 사용범위

- ■Reliable accuracy and Powerful clamping force.
- ■Easy and quick tool exchange.
- ■ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	L	øC	H		Collet	Weight (kg)
				Min	Max		
HSK50A - ER11 - 75	0.5 ~ 7.0	75	19	19	34	ER11	0.5
ER16 - 90	0.5 ~ 10.0	90	28	23	43	ER16	0.6
ER20 - 95	1.0 ~ 13.0	95	35	25	48	ER20	0.7
ER25 - 100	1.0 ~ 16.0	100	42	34	54	ER25	0.8
ER32 - 105	2.0 ~ 20.0	105	50	40	60	ER32	0.9
HSK63A - ER11 - 80	0.5 ~ 7.0	80	19	19	34	ER11	0.8
ER16 - 95	0.5 ~ 10.0	95	28	23	43	ER16	1.0
ER20 - 100	1.0 ~ 13.0	100	35	25	48	ER20	1.1
ER25 - 105	1.0 ~ 16.0	105	42	34	54	ER25	1.2
ER32 - 110	2.0 ~ 20.0	110	50	40	60	ER32	1.4
ER40 - 120	3.0 ~ 26.0	120	63	50	80	ER40	1.8
HSK100A - ER11 - 85	0.5 ~ 7.0	85	19	19	34	ER11	2.4
ER16 - 95	0.5 ~ 10.0	95	28	23	43	ER16	2.7
ER20 - 105	1.0 ~ 13.0	105	35	25	48	ER20	3.0
ER25 - 110	1.0 ~ 16.0	110	42	34	54	ER25	3.2
ER32 - 120	2.0 ~ 20.0	120	50	40	60	ER32	3.4
ER40 - 130	3.0 ~ 26.0	130	63	50	80	ER40	3.6

Spare Parts				
	Option			
	NUT	Adjust Screw	Spnner	ER Collet
Type				
ER11	UM/ER11(HEXA)	BTD0716-C	ER11-SP	ER11-ø
ER16	UM/ER16(HEXA)	BTD1025-C	ER16-SP	ER16-ø
ER20	UM/ER20(HEXA)	BTD1325-C	ER20-SP	ER20-ø
ER25	UX/ER25	BTD1830-C	ER25-SP	ER25-ø
ER32	UX/ER32	BTD2230-C	ER32-SP	ER32-ø
ER40	UX/ER40	BTD2838-C	ER40-SP	ER40-ø

- ▶ 내부급유 사용시에는 방수형콜렛이나 방수형 너트를 사용 해주십시오.
- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ ER척 스페어 파트는 P53
- ▶ 내부급유 쿨런트 파이프는 P94

- ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER COLLET is refered. P140 ~ P141
- ▶ Spanner is ordered separately. P149
- ▶ Extra charge for high speed balance.
- ▶ The spare parts for ER CHCUK are refered. P71
- ▶ The Coolant pipe are refered. P94

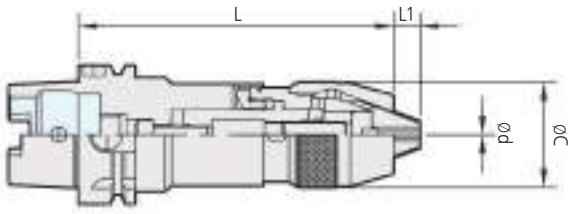
NC DRILL CHUCK

Clamping Range : ø0.5 ~ ø13.0

CODE No.

HSK63A | NPU13 | 150

Shank — Chucking Dia — Length



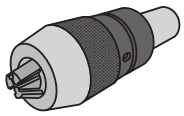
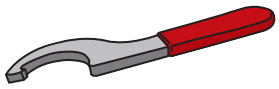
PRODUCT INFORMATION

머시닝 센터의 일반적인 드릴링 공구입니다. General Drillings for Machining Centers

- ■척과 샹크가 일체형 구조로 길이가 짧음
- ■가공정도 향상과 우수한 내구성
- ■척의 탈락이 없고 주축 정지시 풀리지 않음

- ■Unified body of chuck and shank reduces the length of tool.
- ■Improved operation accuracy and excellent rigidity
- ■The drillchuck is never detached from holder and is not released when the operation is stop.

Code No.	ød	L	øC	L1	Weight (kg)
HSK50A - NPU 8 - 135	0.3 ~ 8.0	135	38	8.5	1.4
HSK63A - NPU 8 - 135	0.3 ~ 8.0	135	38	8.5	1.8
NPU13 - 150	1.0 ~ 13.0	150	50	11.5	2.2
HSK100A - NPU 8 - 135	0.3 ~ 8.0	135	38	8.5	3.5
NPU13 - 165	1.0 ~ 13.0	165	50	11.5	4.4

Spare Parts		
	Basic	
	Chuck	Spanner
Type		
NPU 8	NPU 8	NPU08-SP
NPU13	NPU13	NPU13-SP

- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
  NPU8-20mm이상
  NPU13-30mm이상
- ▶ 스페너는 별매입니다. P149

- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum lengh of cutting tools.
  NPU8 : more 20mm
  NPU13 : more 30mm
- ▶ Spanner is ordered separately. P149

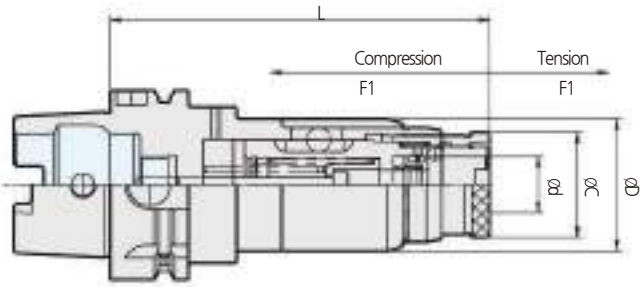
TAPPING CHUCK HOLDER

Tapping Range : M3 ~ M36

CODE No.

HSK63A | TCH22 | 190

Shank — MAX Tapping — Length



PRODUCT INFORMATION

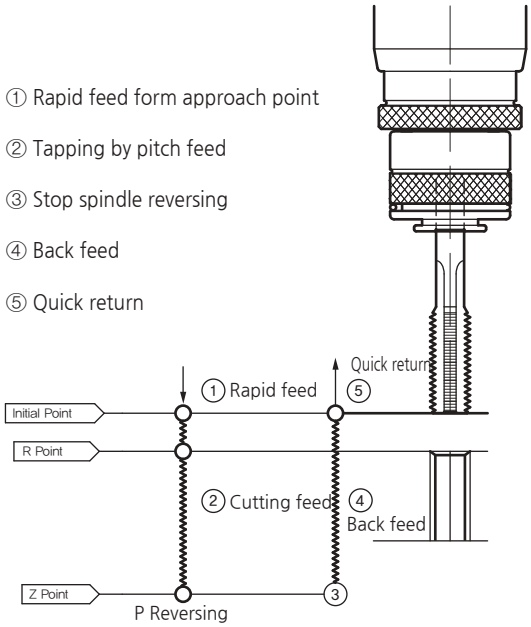
- ■플로팅 타입으로 인장수축 장치 내장
- ■공구교환이 빠르고 편리함
- ■관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능

- ■The tapping chuck is equipped with tension system by floating type.
- ■Easy and quick tool exchange.
- ■It is possible for tapping operation of blind hole and through hole.

Code No.	ød	øD	L	øC	H		Weight (kg)
					Min	Max	
HSK 63A - TCH12 - 150	19	44	125	35	6	12	3.3
TCH22 - 190	31	63	155	52	10	15	5.1
HSK100A - TCH12 - 160	19	44	135	35	6	12	4.5
TCH22 - 200	31	63	165	52	10	15	6.1
TCH36 - 300	48	67	255	83	15	20	11.3

▶ 적용 탭콜렛은 P137
▶ Private tap collets are refered. P137

① Rapid feed form approach point
② Tapping by pitch feed
③ Stop spindle reversing
④ Back feed
⑤ Quick return

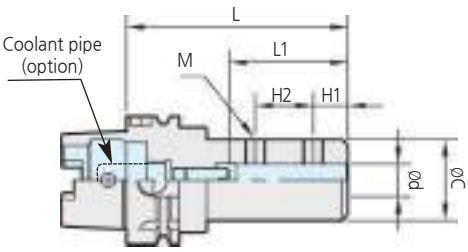


SIDE LOCK HOLDER

Coolant-through hole
Clamping Range : ø6.0 ~ ø42.0

CODE No.
HSK63A SLA32 125
Shank / Chucking Dia / Length

TAPER 접촉율 80% 이상 진동없음.



PRODUCT INFORMATION

■Drill, endmill, 기타(small chuck, special tool)등을 사용할 수 있습니다. ■SIDE LOCK HOLDER can use tool holder for drill, endmill, etc.

Code No.	Ød	L	øC	H Min	H Max	H1	H2	M	Weight (kg)
HSK63A - SLA 6 - 75	6	75	25	20	35	18	-	M 5	1.0
SLA 8 - 80	8	80	28	25	40			M 6	1.2
SLA10 - 90	10	90	35	35	50	14	13	M 8	1.2
SLA12 - 90	12		40				16	M10	1.2
SLA14 - 105	14	105	42	50	65	20	20	M12	1.4
SLA16 - 105	16		44						1.4
SLA20 - 115	20	115	50	55	68	25		M14	1.7
SLA25 - 115	25		52						1.7
SLA32 - 120	32	120	63	65	72		25	M16	2.2
SLA40 - 125	40	125	73		80				2.4
SLA42 - 125	42								2.6
HSK100A - SLA 6 - 80	6	80	25	20	35	18	-	M 5	3.1
SLA 8 - 85	8	85	28	25	40			M 6	3.1
SLA10 - 95	10	95	35	35	50	14	13	M 8	3.3
SLA12 - 95	12		40				16	M10	3.5
SLA14 - 110	14	110	42	50	65	20	20	M12	3.5
SLA16 - 110	16		44						3.6
SLA20 - 120	20	120	50	60	75	25		M14	3.8
SLA25 - 120	25		52						3.9
SLA32 - 125	32	125	63	65	80		25	M16	4.0
SLA40 - 135	40	135	75						4.3
SLA42 - 135	42								4.5

▶ 사이드락홀더 스페어 파트는 P60
▶ 내부급유 쿨런트 파이프는 P94
▶ The spare parts for SIDE LOCK HOLDER are refered. P60
▶ The Coolant pipe are refered. P94

MORSE TAPER HOLDER

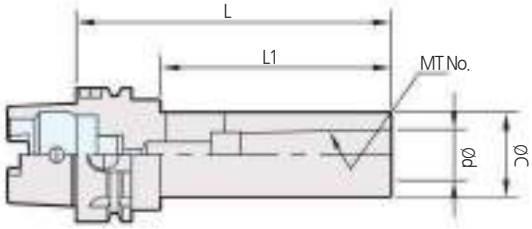
■for Morse taper shank with tang.

CODE No.

HSK63A | MTA1 | 120

- Shank
- Morse Taper No.
- Length

TAPER 접촉율 80% 이상 진동없음.



PRODUCT INFORMATION

■Drill reamer, 기타(MT Shank type tool)등을 사용할 수 있습니다.

■MORSE TAPER HOLDER can use tool holder for drill, reamer, etc.

Code No.	ød	MT No.	øC	L	L1	Weight (kg)
HSK 63A - MTA1 - 120	12.065	1	25	120	78	1.5
MTA2 - 135	17.780	2	32	135	93	1.5
MTA3 - 150	23.825	3	40	150	108	1.6
MTA4 - 165	31.267	4	50	165	123	1.8
HSK100A - MTA1 - 120	12.065	1	25	120	75	2.0
MTA2 - 135	17.780	2	32	135	90	2.0
MTA3 - 155	23.825	3	40	155	110	2.1
MTA4 - 180	31.267	4	50	180	135	2.4
MTA5 - 220	44.399	5	65	220	175	2.9

Drill Dia and Shank

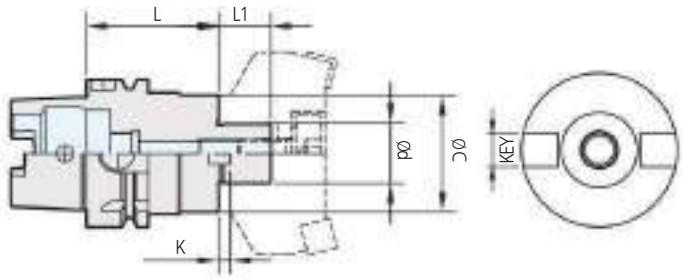
Shank		MT1	MT2	MT3	MT4	MT5
Drill dia	Min	3.0	14.5	23.5	32.0	51.0
	Max	14.0	23.0	31.5	50.0	76.0

FACE MILL ARBOR

CODE No.

HSK63A | FMA25.4 | 60

Shank — Cutter Type — Length



PRODUCT INFORMATION

■JIS B4113 face milling용 입니다.

■For face-milling cutter conforming to JIS B4113.

FMA Type

Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Weight (kg)
HSK 63A - FMA25.4 - 60	25.4	80	60	50	22	K 9.5-L	5	1.0
FMA31.75 - 65	31.75	100	65	60	30	K12.7-L	7	1.3
FMA38.1 - 70	38.1	125	70	80	34	K15.87-L	9	1.7
HSK100A - FMA25.4 - 60	25.4	80	60	50	22	K 9.5-L	5	2.4
FMA31.75 - 65	31.75	100	65	60	30	K12.7-L	7	3.0
FMA38.1 - 75	38.1	125	75	80	34	K15.87-L	9	3.9
FMA50.8 - 80	50.8	160	80	100	36	K19-L	10	4.3
FMA47.625 - 95	47.625	200	95	128	38	K25.4	12.5	4.8

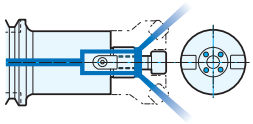
FMC Type

Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Weight (kg)
HSK 63A - FMC16 - 55	16	40	55	38	17	K8-L	5	1.2
FMC22 - 60	22	50.63	60	45	18	K10-L	5.5	1.2
FMC27 - 65	27	63.80	65	60	20	K12-L	6	1.4
FMC32 - 75	32	100	75	85	22	K14-L	7	2.0
HSK100A - FMC22 - 60	22	50.63	60	45	18	K10-L	5.5	2.5
FMC27 - 65	27	63.80	65	60	20	K12-L	6	2.8
FMC32 - 75	32	100	75	85	22	K14-L	7	3.0

▶ 페이스밀아바 스페어 파트는 P71

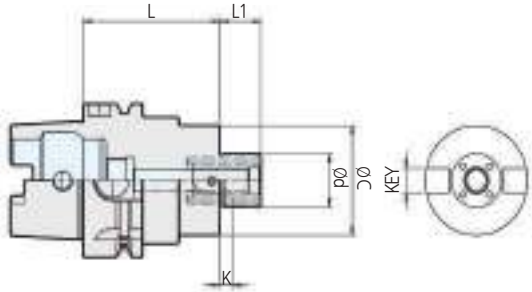
▶ The spare parts for FACE MILL ARBOR are refered. P71

FACE MILL ARBOR



CODE No.

HSK63A	FMH22	60
Shank	Cutter Type	Length



PRODUCT INFORMATION

■쿨런트 컷터 전용
■컷터 가공성 향상 공구사용시간 증가

■Only use coolant cutter.
■Improve tool life and cutting operation

Code No.	ød	øC	L	L1	K	KEY	Weight (kg)
HSK40A - FMH22 - 50	22	45	50	18	5.5	K10-L	0.6
FMH25.4 - 50	25.4	50	50	22	5	K9.5-L	0.6
HSK50A - FMH22 - 60	22	45	60	18	5.5	K10-L	1.0
FMH25.4 - 60	25.4	50	60	22	5	K9.5-L	1.1
HSK63A - FMH22 - 60	22	45	60	18	5.5	K10-L	1.3
FMH25.4 - 60	25.4	50	60	22	5	K9.5-L	1.3
FMH27 - 65	27	60	65	20	6	K12-L	1.4
FMH31.75 - 65	31.75	60	65	30	7	K12.7-L	1.5
HSK100A - FMH22 - 60	22	45	60	18	5.5	K10-L	2.9
FMH27 - 65	27	60	65	20	6	K12-L	3.2
FMH32 - 75	32	85	75	22	7	K14-L	3.8
FMH25.4 - 60	25.4	50	60	22	5	K9.5-L	3.2
FMH31.75 - 65	31.75	60	65	30	7	K12.7-L	3.6
FMH38.1 - 75	38.1	80	75	34	9	K15.87-L	4.5

▶ FMH 클램프볼트및 부품은 일반 FMA, FMC 아바와 호환합니다.
▶ 페이스밀아바 스페어 파트는 P71
▶ 내부급유 쿨런트 파이프는 P94

▶ FMH clamp bolt and other parts is compatiblle with FACE MILL ARBOR FMA, FMC.
▶ The spare parts for FACE MILL ARBOR are refered. P71
▶ The Coolant pipe are refered. P94

CENTER THROUGH COOLANT PIPE

Taper	Code No.	Wrench
HSK 40	HSK 40-CP	HSK 40-CPW
HSK 50	HSK 50-CP	HSK 50-CPW
HSK 63	HSK 63-CP	HSK 63-CPW
HSK100	HSK100-CP	HSK100-CPW

Excellent Precision
Excellent Quality

SELUX
NC TOOLING SYSTEM

SK

CHUCK & Item

HYDRAULIC CHUCK
MILLING CHUCK
SHRINK FIT HOLDER
SSK COLLET CHUCK
ER COLLET CHUCK
NC DRILL CHUCK
TAPPING CHUCK HOLDER
JACOBS TAPER ARBOR
SIDE LOCK HOLDER
PRO MILL ARBOR
PRO MILL CUTTER (BALL TYPE)
MORSE TAPER HOLDER
FACE MILL ARBOR

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : ⌀3.0 ~ ⌀32.0

CODE No.

SK40	SHC20	110
Shank	Chucking Dia	Length

Fig1

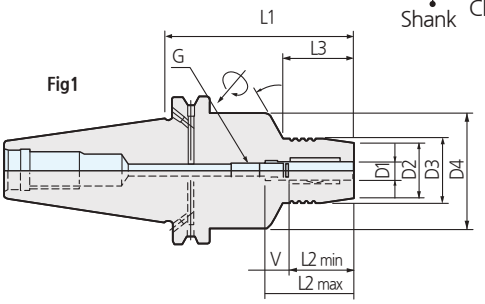
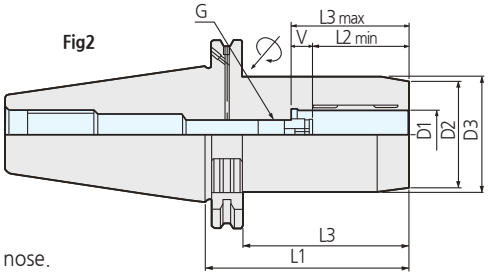


Fig2



PRODUCT INFORMATION

- ■4D 선단에서 3㎛이내의 흔들림정도
- ■높은 정밀도와 고속가공에 최적화
- ■유압방식의 강력한 파지력
- ■렌치 하나로 쉽게 공구고정

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■The optimal chcuk for excellent accuracy and high speed operation.
- ■Powerful clamping force of hydraulic type.
- ■Easy clamping with just one wrench.

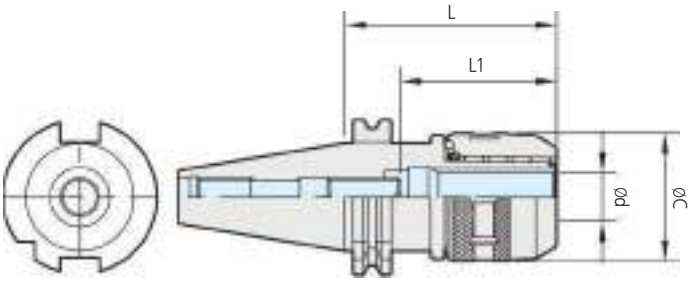
CODE NO.	D1	D2	D3	D4	L1	L2min	L2max	V	L3	G	Type	Weight (kg)
SK40 - SHC 6 - 80.5	6	25	28	50	80.5	27.5	37.5	10	44	M5X0.8	Fig1	1.4
- 110					110							2.0
SHC 8 - 80.5	8	27	30		80.5					M6X1.0		1.4
- 110					110							2.0
SHC 10 - 80.5	10	29	32		80.5	32.5	42.5					1.5
- 110					110							2.1
SHC 12 - 80.5	12	31	34		80.5	37.5	47.5					1.5
- 110					110							2.1
SHC 14 - 80.5	14	33	36		80.5							1.5
- 110					110							2.1
SHC 16 - 80.5	16	35	38		80.5	42.5	52.5		48	M8X1.0		1.5
- 110					110							2.1
SHC 18 - 80.5	18	38	41		80.5				30			1.5
- 110					110				48			2.1
SHC 20 - 80.5	20	40	43		80.5							1.5
- 110					110							2.1
SHC 25 - 80.5	25	53	57	66	80.5	51.0	61.0		26	M16X1.0	Fig2	1.9
SHC 32 - 80.5	32	63	63	80		55.0	65.0					2.0
SK50 - SHC 6 - 90	6	25	28	50	90	27.5	37.5	10	44	M5X0.8	Fig1	3.9
- 140					140							4.5
SHC 8 - 90	8	27	30		90					M6X1.0		3.9
- 140					140							4.5
SHC 10 - 90	10	29	32		90	32.5	42.5					3.9
- 140					140							4.5
SHC 12 - 90	12	31	34		90	37.5	47.5					4.0
- 140					140							4.6
SHC 14 - 90	14	33	36		90							4.0
- 140					140							4.6
SHC 16 - 90	16	35	38		90	42.5	52.5		48	M8X1.0		4.1
- 140					140							4.7
SHC 18 - 90	18	38	41		90							4.1
- 140					140							4.7
SHC 20 - 80.5	20	40	43		80.5				44			4.1
- 90					90				48			4.2
- 110					110							4.7
- 140					140							5.5
SHC 25 - 105	25	53	57	-	105	51.0	61.0		85.9	M16X1.0	Fig2	5.0
- 140					140				120.9			6.2
SHC 32 - 115	32	58	63		115	55.0	65.0		95.9			5.2
- 140					140				120.9			6.4

MILLING CHUCK

Coolant-through hole
Clamping Range : ø3.0 ~ ø42.0

CODE No.

SK40	MC32	95
Shank	Chucking Dia	Length



PRODUCT INFORMATION

- ■높은 정밀도
- ■3.5D 선단에서 5㎛이내의 흔들림정도
- ■간편한 척킹 시스템
- ■Taper 접촉 80%이상 Taper공차 AT3로 보증
- ■완전한 단면 밀착으로 강력 절삭
- ■4배열 Roller System 방식으로 강력한 파지력

- ■Excellent Run-out Accuracy.
- ■5㎛(T.I.R) Run-out at 3.5D away from shank nose.
- ■Easy chucking system.
- ■More than 80% taper contact, we guarantee taper tolerance AT3.
- ■The strongest cutting power due to perfect face contact construction.
- ■Powerful clamping force by 4 needle roller system.

Code No.	ød	L	øC	L1	Collet	Weight (kg)
SK40 - MC20 - 90	20	90	53	82	K20	2.0
- 105		105		95		2.0
- 120		120		105		2.2
MC32 - 95	32	95	72	85	K32	2.9
- 105		105		95		3.0
- 120		120		105		3.2
SK50 - MC20 - 105	20	105	53	105	K20	4.6
- 135		135		105		4.8
- 165		165		105		5.0
MC32 - 105	32	105	72	110	K32	5.5
- 135		135		125		5.8
- 165		165		125		6.5
MC42 - 105	42	105	94	120	K42	5.9
- 135		135		130		6.5
- 165		165		135		7.8

- ▶고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶밀링척 전용 콜렛은 P134~P136
- ▶밀링척 스페너는 별도 판매품 입니다. P149

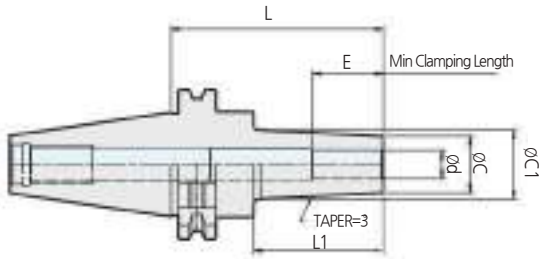
- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are refered. P134~P136
- ▶ Spanner is ordered separately. P149

SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : ø3.0 ~ ø20.0

CODE No.
SK40 | SSF10 | 120
Shank | Chucking Dia | Length

MAX 25,000 min-1



PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 (Coolant Through Hole)

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant type.

Code No.	ød	øC	øC1	L	L1	E	Weight (kg)
SK40 - SSF 4 - 90	4	10	26	90	37	12	1.0
SSF 6 - 90	6	14	20		60	18	1.1
- 160			21	160	130		1.2
SSF 8 - 90	8	18	24	90	60	24	1.2
- 160			32	160	130		1.4
SSF10 - 90	10	22	28	90	60	30	1.2
-160			36	160	130		1.4
SSF12 - 90	12	24	30	90	60		1.3
- 160			38	160	130		1.5
SSF16 - 90	16	28	34	90	60	34	1.4
- 160			42	160	130		1.6
SSF20 - 90	20	34	40	90	60	40	1.5
- 160			48	160	130		1.8
SK50 - SSF 6 - 100	6	14	20	100	130	18	3.8
- 160			26	160	70		4.2
SSF 8 - 100	8	18	24	100	59	24	3.8
- 160			30	160	119		4.3
SSF10 - 100	10	22	28	100	59	30	3.9
- 160			34	160	119		4.5
SSF12 - 100	12	24	30	100	59		4.0
- 160			36	160	119		4.6
SSF16 - 100	16	28	34	100	59	34	4.0
- 160			40	160	119		4.8
SSF20 - 100	20	34	46	100	59	40	4.2
-160			53	160	119		5.0

- ▶ 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- ▶ 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)
- ▶ 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- ▶ SELUX 고주파 히팅기는 P145
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P145
- ▶ 열박음홀더 사용시 오일홀 풀스터드 볼트를 권장합니다.
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- ▶ Please use only carbide cutting tools of a shank tolerlance within H6.
- ▶ Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shink fit holder.
- ▶ SELUX shrink fit equipment is refered. P145
- ▶ Please follow minimum insertion lengh of the cutting tools.
- ▶ Stopper for adjusting cutting tool lengh order separately. P145
- ▶ We recommend oil hole Pull stud bolt for shrink fit holder.
- ▶ Please clean the shank outside and inside of shrink fit before use. If you don't clean the shrink fit, it has problem about Run-out and toollife.

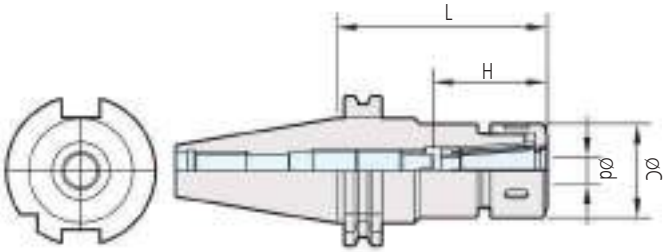
SSK COLLET CHUCK

Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

SK40 | SSK10 | 90

Shank — SC Collet Size — Length



PRODUCT INFORMATION

- 8° Taper 의 강력한 파지력
- 높은 정밀도와 빠른 가공에 적합
- 드릴, 센터드릴, 엔드밀, 탭, 리머용으로 사용

- Powerful clamping force of 8° taper.
- Excellent Run-out Accuracy.
- SSK COLLET CHUCK is suitable for a various operation using drill, endmill, tap and reamer.

Code No.	ød	L	øC	H Min	H Max	Collet	Weight (kg)
SK40 - SSK 6 - 60	0.9~6.0	60	19.5	19	34	SC6	1.0
- 90		90					1.1
- 120		120					1.2
SSK10 - 60	1.75~10.0	60	27.5	30	50	SC10	1.2
- 90		90					1.5
- 120		120					1.8
- 150		150					2.0
SSK13 - 75	2.75~13.0	75	33	36	60	SC13	1.9
- 90		90					1.4
- 120		120					1.8
- 150		150					2.1
SSK16 - 75	2.75~16.0	75	40	45	70	SC16	1.3
- 90		90					1.4
- 120		120					1.8
- 150		150					2.1
SSK20 - 90	3.6~20.0	90	48	50	75	SC20	1.4
- 120		120					2.0
- 150		150					2.5
SSK25 - 90	15.6~25.4	90	55	55	85	SC25	1.4
- 120		120					2.0
SK50 - SSK 6 - 105	0.9~6.0	105	19.5	21	32	SC6	3.8
- 135		135					4.0
- 165		165					4.2
SSK10 - 105	1.75~10.0	105	27.5	30	50	SC10	3.9
- 135		135					4.3
- 165		165					4.6
SSK13 - 105	2.75~13.0	105	33	36	60	SC13	4.0
- 135		135					4.4
- 165		165					4.6
SSK16 - 105	2.75~16.0	105	40	40	70	SC16	4.2
- 135		135					4.6
- 165		165					4.8
SSK20 - 105	3.6~20.0	105	48	50	75	SC20	4.5
- 135		135					4.7
- 165		165					4.9
SSK25 - 105	15.6~25.4	105	55	55	85	SC25	4.6
- 135		135					4.8
- 165		165					5.0

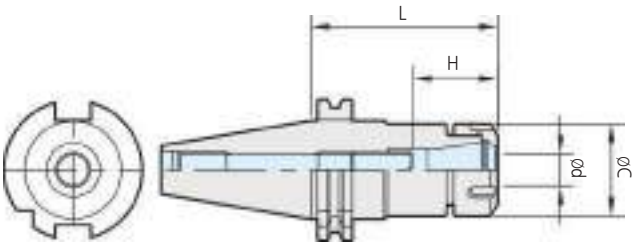
ER COLLET CHUCK

Coolant-through hole
Clamping Range : ø0.5 ~ ø26.0

CODE No.

SK50 | ER32 | 105

Shank — ER Collet Size — Length



PRODUCT INFORMATION

머시닝 센터의 기본 홀더입니다.
- 나사연마
- 공구 착탈이 용이
- Balanced/balanceable type도 주문 제작합니다.
- Coolant through type 사용할 경우
  1.방수형 Collet나 방수형 Nut을 사용
  2.Adjustable screw를 Coolant through type으로 교환.

Basic Holder of Machining Center
- Thread grinded.
- Convenient tool change.(chucking/unchucking)
- Balanced and balanceable type can be ordered.
- In case of using coolant through type.
  1.Must be using coolant through type collet and nut.
  2.Replacing coolant through type adjustable screw.

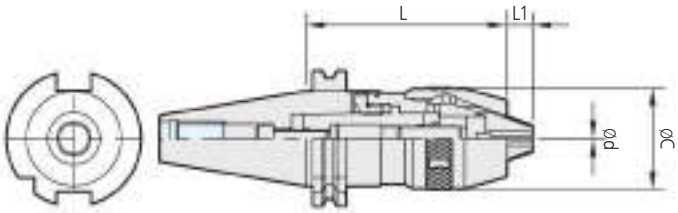
Code No.	ød	L	øC	H Min	H Max	Collet	Weight (kg)
SK40 - ER11 - 60	0.5~7.0	60	19	19	34	ER11	0.8
- 90		90					1.1
- 120		120					1.2
ER16 - 60	0.5~10.0	60	28	23	43	ER16	1.0
- 90		90					1.2
- 120		120					1.4
- 150		150					1.8
ER20 - 75	1.0~13.0	75	35	25	48	ER20	1.0
- 90		90					1.2
- 120		120					1.4
- 150		150					1.8
ER25 - 75	1.0~16.0	75	42	34	54	ER25	1.0
- 90		90					1.2
- 120		120					1.6
- 150		150					1.9
ER32 - 90	2.0~20.0	90	50	40	60	ER32	1.4
- 120		120					1.8
- 150		150					2.1
ER40 - 90	3.0~26.0	90	63	50	80	ER40	1.6
- 120		120					1.9
- 150		150					2.2
SK50 - ER11 - 75	0.5~7.0	75	19	19	34	ER11	3.5
- 105		105					3.7
- 135		135					3.9
ER16 - 75	0.5~10.0	75	28	23	43	ER16	3.6
- 105		105					3.8
- 135		135					4.1
- 165		165					4.3
ER20 - 75	1.0~13.0	75	35	25	48	ER20	3.6
- 105		105					3.8
- 135		135					4.1
- 165		165					4.2
ER25 - 75	1.0~16.0	75	42	34	54	ER25	3.7
- 105		105					3.9
- 135		135					4.1
- 165		165					4.4
ER32 - 90	2.0~20.0	90	50	40	60	ER32	3.9
- 105		105					4.3
- 135		135					4.9
- 165		165					5.0
ER40 - 90	3.0~26.0	90	63	50	80	ER40	4.0
- 105		105					4.6
- 135		135					5.2
- 165		165					6.0

NC DRILL CHUCK

Clamping Range : ø0.5 ~ ø13.0

CODE No.

SK50	NPU	13	90
Shank	Drill Chuck	Chucking Dia	Length



PRODUCT INFORMATION

머시닝 센터의 일반적인 드릴링 공구입니다.

- ■척과 샹크가 일체형 구조로 길이가 짧음
- ■가공정도 향상과 우수한 내구성
- ■척의 탈락이 없고 주축 정지시 풀리지 않음

General Drillings for Machining Centers

- ■Unified body of chuck and shank reduces the length of tool.
- ■Improved operation accuracy and excellent rigidity
- ■The drillchuck is never detached from holder and is not released when the operation is stop.

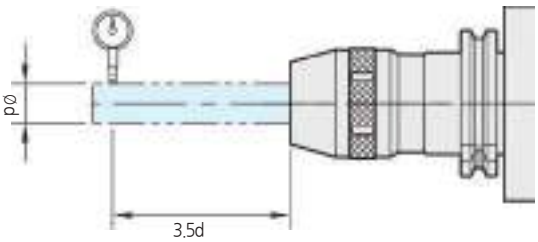
Code No.	ød	L	øC	L1	Weight (kg)
SK40 - NPU 8 - 80	0.3~8.0	80	36	8.5	2.0
- 105		105			2.4
NPU 13 - 105	1.0~13.0	105	48	11.5	2.4
- 130		130			2.8
- 175		175			3.3
SK50 - NPU 8 - 80	0.3~8.0	80	36	8.5	5.0
- 105		105			5.8
- 170		170			6.5
NPU 13 - 90	1.0~13.0	90	48	11.5	5.6
- 130		130			7.0
- 190		190			7.8

- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
  NPU8-20mm이상
  NPU13-30mm이상
- ▶ 스페너는 별매입니다. P149

- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum lengh of cutting tools.
  NPU8 : more 20mm
  NPU13 : more 30mm
- ▶ Spanner is ordered separately. P149

Runout Accuracy

- ▶0.040 이하의 흔들림 정도.
- ▶40㎛ (T.I.R)Runout at 3.5D Away form shank nose.



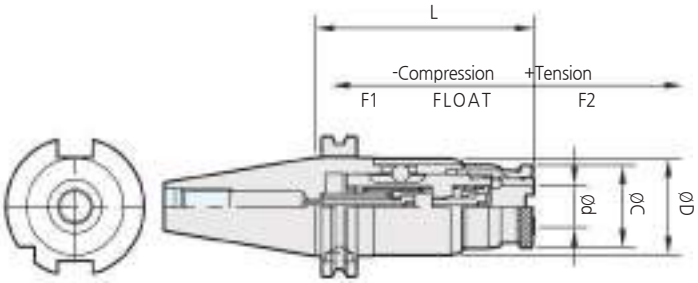
TAPPING CHUCK HOLDER

Tapping Range : M3 ~ M36

CODE No.

SK50 | TCH22 | 165

Shank · MAX Tapping · Length



PRODUCT INFORMATION

- ■플로팅 타입으로 인장수축 장치 내장
- ■공구교환이 빠르고 편리함
- ■관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능

- ■The tapping chuck is equipped with tension system by floating type.
- ■Easy and quick tool exchange.
- ■It is possible for tapping operation of blind hole and through hole.

Code No.	ød	øD	L	øC	Float F1	Float F2	Weight (kg)
SK40 - TCH12 - 120	19	44	95	35	6	12	1.8
TCH22 - 165	31	61	132	52	10	15	3.0
SK50 - TCH12 - 135	19	44	110	35	6	12	4.4
- 165			140				4.7
TCH22 - 165	31	61	132	52	10	15	5.0
- 195			162				5.5
TCH36 - 240	48	88	192	83	15	20	8.2

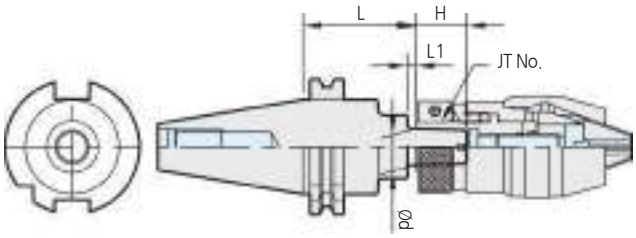
▶ 적용 탭콜렛은 P137 ▶ Private tap collets are refered. P137

JACOBS TAPER ARBOR

CODE No.

SK50 | JTA6 | 45

Shank · Jacobs No. · Length

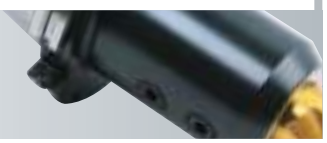


PRODUCT INFORMATION

■Drill chuck은 포함되어 있지 않습니다. ■Drill chuck is not included.

Code No.	ød	JT No.	L	L1	H	Weight (kg)
SK40 - JTA2 - 45	14.119	2	45	4	20	1.1
- 90			90			1.4
JTA6 - 45	17.170	6	45		24	1.1
- 90			90			1.4
SK50 - JTA2 - 45	14.119	2	45	4	20	4.0
- 105			105			4.4
JTA6 - 45	17.170	6	45		24	4.0
- 105			105			4.4

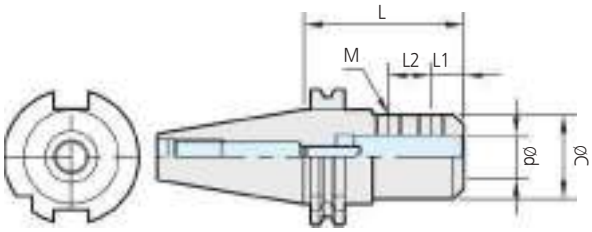
SIDE LOCK HOLDER



Coolant-through hole
Clamping Range : ø6.0 ~ ø42.0

CODE No.
SK50 | SLA32 | 105
Shank | Chucking Dia | Length

TAPER 접촉율 80% 이상 진동없음.



PRODUCT INFORMATION

- 각종 드릴, 엔드밀, 기타 스페셜 공구를 끼워 사용.
- 연결하여 사용 가능한 공구
  1.ST-ER, ST-SSK, ST-FMA(FMC), ST-SCA등
  2.ST-TCH
- Special도 제작가능 합니다.(flange type)

- Side lock holder can be using as a tool holder. (drill, endmill, special tool, etc)
- The following tools to suit side lock holder are available.
  1.Straight collet chuck shank.
  2.Straight tapping chuck shank.
- Special type can be ordered.(flange type)

Code No.	ød	L	øC	L1	L2	M	Weight (kg)
SK40 - SLA 6 - 75	6	75	25	18	-	M 6	1.1
SLA 8 - 75	8		28			M 8	1.1
SLA10 - 75	10		35	20		M10	1.2
SLA12 - 75	12		42	22		M12	1.4
SLA16 - 75	16		48	24		M14	1.5
SLA20 - 75	20		52	25		M16	1.8
SLA25 - 105	25	105	63	24	25	M18	1.9
SLA32 - 105	32		72		28	M20	2.0
SK50 - SLA 6 - 90	6	90	25	18	-	M 6	3.7
SLA 8 - 90	8		28			M 8	3.9
SLA10 - 90	10		35	20		M10	4.0
SLA12 - 90	12		42	22		M12	4.1
SLA16 - 90	16		48	24		M14	4.3
SLA20 - 90	20		52	25		M16	4.5
- 105		105		24	25		4.8
SLA25 - 105	25		65			M18	4.8
SLA32 - 105	32		72		28	M20	4.8
SLA40 - 105	40		80				4.9
SLA42 - 105	42		82				5.0

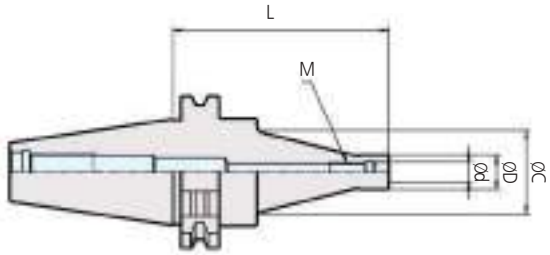
▶ 사이드락홀더 스페어 파트는 P60

▶ The spare parts for SIDE LOCK HOLDER are refered. P60

PRO MILL ARBOR

CODE No.

SK50	M06	135
Shank	Cutter Type	Length



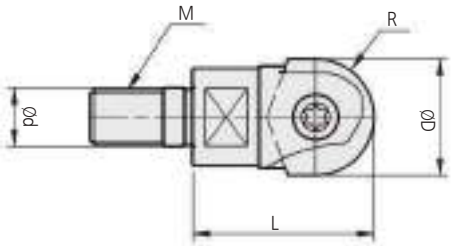
PRODUCT INFORMATION

- ■모듈라 방식으로 원가 절감
- ■높은 정밀도
- ■이면구속 체결로 흔들림 감소
- ■헤드 교체로 다양한 작업가능

- ■Cost reduction effect with modular system.
- ■Excellent accuracy.
- ■Vibration damping effect due to dual face contact.
- ■A various operation with exchanging head.

Code No.	ød	L	øD	øC	M	Weight (kg)
SK40 - M06 - 90	6.5	90	10	40	M6	1.2
- 120		120				1.5
M08 - 90	8.5	90	14.4		M8	1.2
- 120		120				1.5
M10 - 90	10.5	90	18		M10	1.3
- 120		120				1.5
- 150		150				1.9
M12 - 120	12.5	120	22.5		M12	1.5
- 150		150				1.9
SK50 - M06 - 135	6.5	135	10	65	M6	4.2
- 165		165				4.9
M08 - 135	8.5	135	14.4		M8	4.2
- 165		165				4.9
M10 - 135	10.5	135	18		M10	4.2
- 165		165				4.9
M12 - 135	12.5	135	22.5		M12	4.2
- 165		165				4.9

PRO MILL CUTTER(Ball Type)



PRODUCT INFORMATION

- ■HITACHI 인써트 호환
- ■정삭 R작업 최적화

- ■Compatible with HITACHI insert.
- ■Optimal for R-finishing operation.

Code No.	R	øD	L	ød	M	Insert	Screw	Wrench
R05M0630	5	10	30	6.5	M6	ZPFG100, ZCFW100	TNS-5842	TXL-10
R06M0630	6	12				ZPFG120, ZCFW120	TNS-5843	TXT-20
R08M0830	8	16		8.5	M8	ZPFG160, ZCFW160	TNS-5844	
R10M1035	10	20	35	10.5	M10	ZPFG200, ZCFW200	TNS-5845	TXT-25
R12M1240	12.5	25	40	12.5	M12	ZPFG250, ZCFW250	TNS-5846	TXT-30

▶다양한 Type의 컷터 제작가능합니다.
▶전용 spanner는 별매.

▶Cutters can be made of a variety of Type.
▶Spanner is orderd seperately.

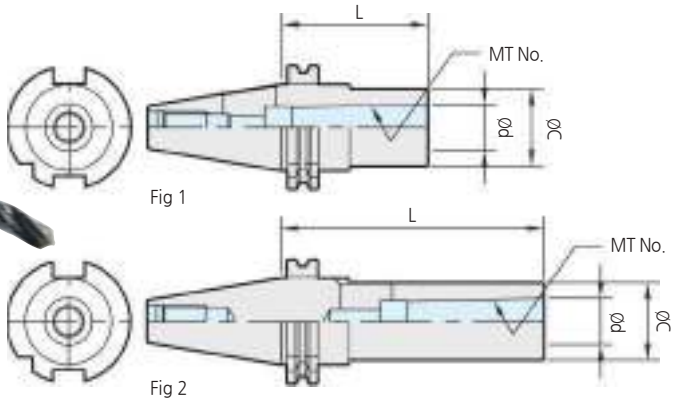
MORES TAPER HOLDER

□For morse taper shank with tang

CODE No.

SK40 | MTA1 | 45

- SK40 → Shank
- MTA1 → Morse taper No.
- 45 → Length



TAPER 접촉율 80% 이상 진동없음.

PRODUCT INFORMATION

■Drill, reamer, 기타(MT Shank type tool)등을 사용 할 수 있습니다.

■MORSE TAPER HOLDER can use tool holder for drill, reamer, etc.

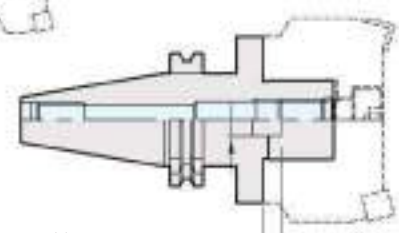
Code No.	ød	MT No.	L	øC	Fig	Weight (kg)
SK40 - MTA1 - 45	12.065	1	45	25	1	1.1
- 120			120		2	1.3
MTA2 - 60	17.780	2	60	32	1	1.1
- 120			120		2	1.4
MTA3 - 75	23.825	3	75	40	1	1.2
- 135			135		2	1.7
MTA4 - 95	31.267	4	95	50	1	1.4
- 165			165		2	2.4
SK50 - MTA1 - 45	12.065	1	45	25	1	3.9
- 120			120		2	4.2
- 180			180			4.3
MTA2 - 45	17.780	2	45	32	1	3.9
- 135			135		2	4.3
- 180			180			4.6
MTA3 - 45	23.825	3	45	40	1	3.8
- 150			150		2	4.6
- 180			180			4.9
MTA4 - 75	31.267	4	75	50	1	3.9
- 180			180		2	5.4
MTA5 - 105	44.399	5	105	65	1	4.5
- 210			210		2	7.2

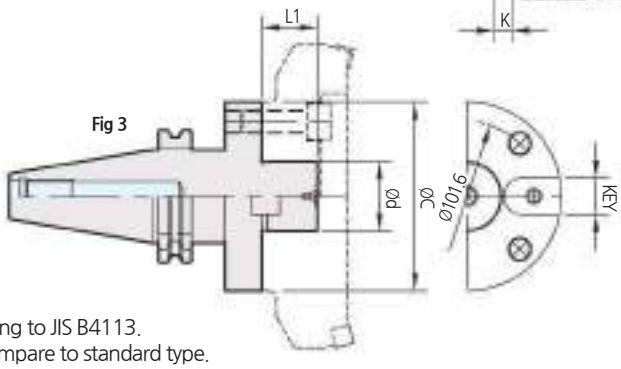
Shank		MT1	MT2	MT3	MT4	MT5
Drill dia	Min	3.0	14.5	23.5	32.0	51.0
	Max	14.0	23.0	31.5	50.0	76.0

FACE MILL ARBOR

CODE No.

SK50	FMA25.4	45
Shank	Cutter Type	Length





PRODUCT INFORMATION

- JIS B4113 face milling용 입니다.
- (S)Type은 표준길이(+38mm)
- For face-milling cutter conforming to JIS B4113.
- S type is extended by 38mm compare to standard type.

FMA Type

Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Fig	Weight (kg)
SK40 - FMA25.4 - 45	25.4	80	45	50	22	K9.5-L	5	1	1.5
- 90			90						2.2
FMA31.75 - 45	31.75	100	45	60	30	K12.7-L	7		1.6
- 75			75						2.3
FMA38.1 - 60	38.1	125	60	80	34	K15.87-L	9	2	2.9
SK50 - FMA25.4 - 45	25.4	80	45	50	22	K9.5-L	5	1	3.8
- 90			90						4.5
-150			150						5.5
FMA31.75 - 45	31.75	100	45	60	30	K12.7-L	7		4.6
- 75			75						5.2
-105			105						6.0
FMA38.1 - 45	38.1	125	45	80	34	K15.87-L	9	2	4.3
- 75			75						5.5
FMA50.8 - 45	50.8	160	45	100	36	K19.05-L	10		4.8
- 75			75						6.8
FMA47.625 - 75	47.625	200		128	38	K25.4	12.5	3	7.6

FMC Type

Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Fig	Weight (kg)
SK40 - FMC22 - 45	22	50/63	45	45	18	K10-L	5.5	1	1.9
FMC27 - 50	27	63/80	50	60	20	K12-L	6	2	2.0
FMC32 - 60	32	100	60	85	22	K14-L	7		2.2
SK50 - FMC22 - 50	22	50/63	50	45	18	K10-L	5.5	1	3.6
FMC27 - 60	27	63/80	60	60	20	K12-L	6		4.1
FMC32 - 60	32	100		85	22	K14-L	7	2	5.5

▶ 페이스밀아바 스페어 파트는 P71
▶ The spare parts for FACE MILL ARBOR are refered. P71

Excellent Precision
Excellent Quality

SELUX
NC TOOLING SYSTEM

NT/MT

CHUCK & Item

NT MILLING CHUCK
MILLING CHUCK SET (NT TYPE)
MT MILLING CHUCK (TANG)
MT MILLING CHUCK (SCREW)
ER COLLET CHUCK
MT ER COLLET CHUCK(TANG)
MT ER COLLET CHUCK(SCREW)
MT SIDE LOCK HOLDER (TANG)
FACE MILL ARBOR

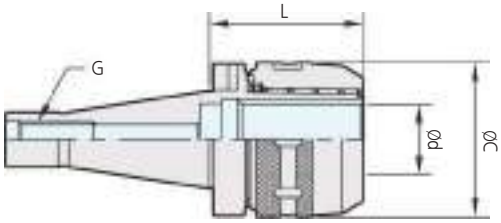
NT MILLING CHUCK

Clamping Range : ø3.0 ~ ø42.0

CODE No.

NT40 | U | MC32

- NT40 → Shank
- U → Tap style
- MC32 → Chucking Dia



PRODUCT INFORMATION

- ■간편한 척킹 시스템
- ■완전한 단면 밀착으로 강력 절삭
- ■4배열 Roller System 방식으로 강력한 파지력

- ■Easy chucking system.
- ■The strongest cutting power due to perfect face contact construction.
- ■Powerful clamping force by 4 needle roller system.

Code No.	øC	L	ød	G		Collet	Weight (kg)
				UNC	M		
NT30U(M) - MC20	53	70	20	U1/2-13	M12	K20	1.6
- MC25	62	75	25			K25	1.8
- MC32	72	95	32			K32	2.0
NT40U(M) - MC20	53	70	20	U5/8-11	M16	K20	2.2
- MC25	62	70	25			K25	2.4
- MC32	72	75	32			K32	2.9
NT50U(M) - MC25	62	70	25	U1”-8	M24	K25	5.0
- MC32	72	90	32			K32	5.5
- MC42	94	90	42			K42	6.0

- ▶밀링척은 콜렛을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶밀링척 전용 콜렛은 P134~P136
- ▶밀링척 스페너는 별도 판매품 입니다. P149

- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are refered. P134~P136
- ▶ Spanner is ordered separately. P149

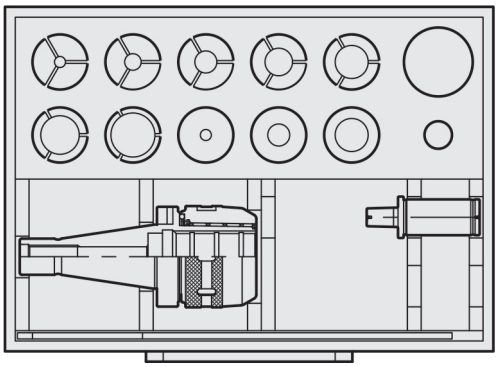
MILLING CHUCK SET (NT TYPE)

Clamping Range : ø3.0 ~ ø42.0

CODE No.

NT40 | U | MC32 | SET

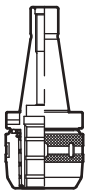
- NT40 – Shank
- U – Tap style
- MC32 – Chucking Dia
- SET – Set



PRODUCT INFORMATION

- ■간편한 척킹 시스템
- ■완전한 단면 밀착으로 강력 절삭
- ■4배열 Roller System 방식으로 강력한 파지력

- ■Easy chucking system.
- ■The strongest cutting power due to perfect face contact construction.
- ■Powerful clamping force by 4 needle roller system.

Code No.	SET CONTENTS				
	Body	K-Collet	MT Collet	JT Collet	Spanner
					
NT40U - MC20,SET	NT40U - MC20	K20 - 6,8,10,12,16	K20 - MT1,MT2	K20 - JT6	MC20 - SP
- MC25,SET	NT40U - MC25	K25 - 6,8,10,12,16,20	K25 - MT1,MT2	K25 - JT6	MC25 - SP
- MC32,SET	NT40U - MC32	K32 - 6, 8, 10, 12,16,20,25	K32 - MT1,MT2,MT3	K32 - JT6	MC32 - SP
NT50U - MC32,SET	NT50U - MC32	K32 - 6, 8, 10, 12,16,20,25	K32 - MT1,MT2,MT3	K32 - JT6	MC32 - SP
- MC42,SET	NT50U - MC42	K42 - 6,8,10,12,16, 20, 25, 32	K42 - MT1,MT2,MT3,MT4	K42 - JT6	MC42 - SP

▶포장용 나무케이스는 별도로 판매하지 않습니다.

▶ You can not order only wooden case for set.

TANG Type

NT/MT Shank

SELUX

MT MILLING CHUCK (TANG)

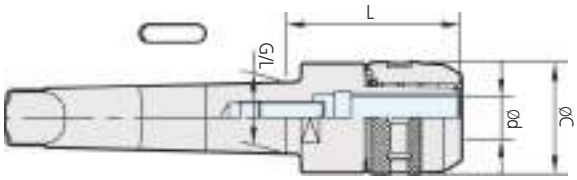
Clamping Range : ø3.0 ~ ø42.0

CODE No.

MT6T MC32

Chucking Dia

Shank



PRODUCT INFORMATION

- 간편한 척킹 시스템
- 완전한 단면 밀착으로 강력 절삭
- 4배열 Roller System 방식으로 강력한 파악력

- Easy chucking system.
- The strongest cutting power due to perfect face contact construction.
- Powerful clamping force by 4 needle roller system.

Code No.	ød	G/L	L	øC	Collet
MT4T - MC20(I)	20	31.267	80	53	K20, NC20
- MC32(T)	32		90	72	K32, NC32
MT5T - MC32(I)	32	44.399	90	74	K32, NC32
- MC32(T)					
- MC32(D)					
MT6T - MC42(I)	42	63.348	98	94	K42, NC42
- MC42(T)					
- MC42(D)					
- MC42(W)					

▶ Special size도 주문 제작합니다.
▶ 주문시 장비에 cotter pin 사양을 꼭 확인해서 주문 해 주십시오. P156

▶ Special size can be ordered.
▶ Cotter pin size check. P156

SCREW Type

NT/MT Shank

SELUX

MT MILLING CHUCK (SCREW)

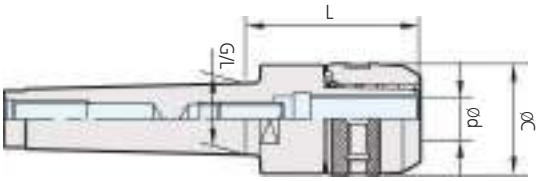
Clamping Range : ø3.0 ~ ø32.0

CODE No.

MT5S MC20

Chucking Dia

Shank



PRODUCT INFORMATION

- 간편한 척킹 시스템
- 완전한 단면 밀착으로 강력 절삭
- 4배열 Roller System 방식으로 강력한 파악력

- Easy chucking system.
- The strongest cutting power due to perfect face contact construction.
- Powerful clamping force by 4 needle roller system.

Code No.	ød	G/L	L	øC	Collet
MT3S - MC20	20	23.825	85	53	K20, NC20
MT4S - MC20	32	31.267	80	72	K32, NC32
- MC32			90	53	K20, NC20
MT5S - MC20	20	44.399	80	74	K32, NC32
- MC32	32		90		

▶ Special size도 주문 제작합니다.

▶ Special size can be ordered.

ER COLLET CHUCK

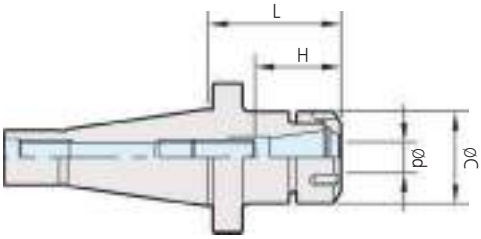
Clamping Range : ø0.5 ~ ø26.0

CODE No.

NT40 | ER32 | 60

- NT40 → Shank
- ER32 → ER Collet Size
- 60 → Length

레디알 밀링에서 작업가능!!



PRODUCT INFORMATION

- ■안정적인 정밀도와 파지력
- ■쉽고빠른 공구교환
- ■드릴, 엔드밀, 탭 다양한 사용범위

- ■Reliable accuracy and Powerful clamping force.
- ■Easy and quick tool exchange.
- ■ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	L	øC	H		Collet
				Min	Max	
NT40U - ER16 - 40	0.5~10.0	40	28	23	43	ER16
ER20 - 40	1.0~13.0		35	25	48	ER20
ER25 - 50	1.0~16.0	50	42	34	54	ER25
ER32 - 60	2.0~20.0	60	50	40	60	ER32
ER40 - 80	3.0~26.0	80	63	50	80	ER40
NT50U - ER16 - 40	0.5~10.0	40	28	23	43	ER16
ER20 - 40	1.0~13.0		35	25	18	ER20
ER25 - 50	1.0~16.0	50	42	34	54	ER25
ER32 - 60	2.0~20.0	60	50	40	60	ER32
ER40 - 60	3.0~26.0		63	50	80	ER40

- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149
- ▶ ER척 스페어 파트는 P53

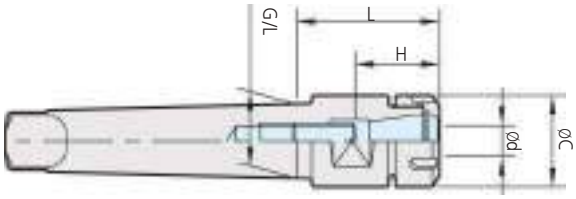
- ▶ ER COLLET is refered. P140 ~ P141
- ▶ Spanner is ordered separately. P149
- ▶ The spare parts for ER CHCUK are refered. P53

MT ER COLLET CHUCK (TANG)

Clamping Range : ø0.5 ~ ø26.0

CODE No.

MT5	T	ER32	60
Shank	Tang	ER Collet Size	Length



PRODUCT INFORMATION

- ■안정적인 정밀도와 파지력
- ■쉽고빠른 공구교환
- ■드릴, 엔드밀, 탭 다양한 사용범위

- ■Reliable accuracy and Powerful clamping force.
- ■Easy and quick tool exchange.
- ■ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	L	øC	H		Collet	Weight (kg)
				Min	Max		
MT1T - ER11 - 40	0.5 ~ 7.0	40	19	19	34	ER11	0.3
MT2T - ER11 - 40	0.5 ~ 7.0	40	19	19	34	ER11	0.4
ER16 - 50	0.5 ~ 10.0	50	28	23	43	ER16	0.4
MT3T - ER16 - 40	0.5 ~ 10.0	40	28	19	43	ER16	0.5
ER20 - 50	1.0 ~ 13.0	50	35	25	48	ER20	0.5
MT4T - ER16 - 40	0.5 ~ 10.0	40	28	23	43	ER16	0.9
ER20 - 55	1.0 ~ 13.0	55	35	25	48	ER20	1.0
ER25 - 55	1.0 ~ 16.0		42	34	54	ER25	1.1
ER32 - 60	2.0 ~ 20.0	60	50	40	60	ER32	1.3
MT5T - ER20 - 50	1.0 ~ 13.0	50	35	25	48	ER20	2.0
ER25 - 60	1.0 ~ 16.0	60	42	34	54	ER25	2.1
ER32 - 60	2.0 ~ 20.0		50	40	60	ER32	2.2
ER40 - 70	3.0 ~ 26.0	70	63	50	80	ER40	2.4

- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149
- ▶ ER척 스페어 파트는 P53

- ▶ ER COLLET is refered. P140 ~ P141
- ▶ Spanner is ordered separately. P149
- ▶ The spare parts for ER CHCUK are refered. P53

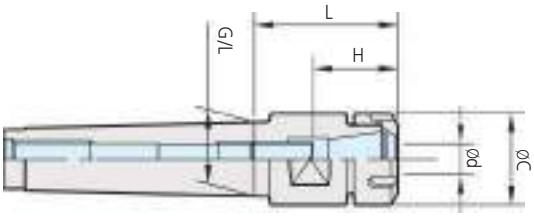
MT ER COLLET CHUCK (SCREW)

Clamping Range : ø0.5 ~ ø26.0

CODE No.

MT5 | S | ER20 | 50

- MT5 – Shank
- S – Screw
- ER20 – ER Collet Size
- 50 – Length



PRODUCT INFORMATION

- ■안정적인 정밀도와 파지력
- ■쉽고빠른 공구교환
- ■드릴, 엔드밀, 탭 다양한 사용범위

- ■Reliable accuracy and Powerful clamping force.
- ■Easy and quick tool exchange.
- ■ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	L	øC	H		Collet	Weight (kg)
				Min	Max		
MT1S - ER11 - 40	0.5 ~ 7.0	40	19	19	34	ER11	0.3
MT2S - ER11 - 40	0.5 ~ 7.0	40	19	19	34	ER11	0.4
ER16 - 50	0.5 ~ 10.0	50	28	23	43	ER16	0.4
MT3S - ER16 - 40	0.5 ~ 10.0	40	28	23	43	ER16	0.5
ER20 - 50	1.0 ~ 13.0	50	35	25	48	ER20	0.5
MT4S - ER16 - 40	0.5 ~ 10.0	40	28	23	43	ER16	0.9
ER20 - 55	1.0 ~ 13.0	55	35	25	48	ER20	1.0
ER25 - 55	1.0 ~ 16.0		42	34	54	ER25	1.1
ER32 - 60	2.0 ~ 20.0	60	50	40	60	ER32	1.3
MT5S - ER20 - 50	1.0 ~ 13.0	50	35	25	48	ER20	2.0
ER25 - 60	1.0 ~ 16.0	60	42	34	54	ER25	2.1
ER32 - 60	2.0 ~ 20.0		50	40	60	ER32	2.2
ER40 - 70	3.0 ~ 26.0	70	63	50	80	ER40	2.4

- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149
- ▶ ER척 스페어 파트는 P53

- ▶ ER COLLET is refered. P140 ~ P141
- ▶ Spanner is ordered separately. P149
- ▶ The spare parts for ER CHCUK are refered. P53

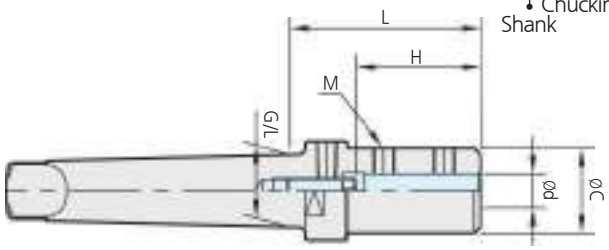
MT SIDE LOCK HOLDER (TANG)

Clamping Range : ø20.0 ~ ø50.0

CODE No.

MT5 | SLA32 | 105

Shank — Chucking Dia — Length



PRODUCT INFORMATION

■드릴, 엔드밀 기타(Small chuck, Special tool)을 사용할 수 있습니다.

■SIDE LOCK HOLDER can use tool holder for drill, endmill, etc.

Code No.	ød	G/L	L	øC	H Min	H Max	M
MT4 - SLA20 - 90	20	31.267	90	50	60	75	M14
SLA25 - 90	25			52			
SLA32 - 105	32		105	65	65	80	M16
MT5 - SLA20 - 90	20	44.399	90	50	60	80	M14
SLA25 - 105	25		105	52	65	75	M16
SLA32 - 105	32			65			
SLA40 - 120	40		120	75	60	80	M18
SLA42 - 120	42			80			
MT6 - SLA25 - 105	25	63.348	105	52	65	75	M14
SLA32 - 105	32			65			M16
SLA40 - 120	40		120	75	50	80	M18
SLA42 - 120	42			80			
SLA50 - 120	50			90			

▶ 사이드락홀더 스페어 파트는 P60

▶ The spare parts for SIDE LOCK HOLDER are refered. P60

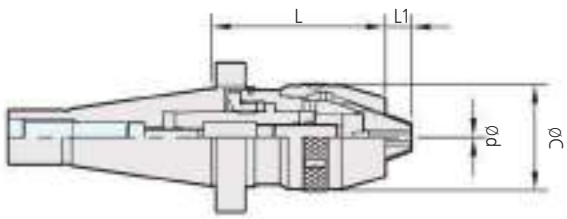
NC DRILL CHUCK

Clamping Range : ø0.5 ~ ø13.0

CODE No.

NT40 | NPU13 | 90

Shank — Chucking Dia — Length



Code No.	ød	L	øC	L1	Weight (kg)
NT40U - NPU 8 -	0.3~8.0	70	38	8.5	1.4
70	1.0~13.0	90	50	11.5	2.3
NPU13 - 90	1.0~13.0	90	50	11.5	4.3

▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
NPU8-20mm이상
NPU13-30mm이상
▶ 스페너는 별매입니다. P149

▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
▶ Please follow minimum lengh of cutting tools.
NPU8 : more 20mm.
NPU13 : more 30mm.
▶ Spanner is ordered separately. P149

FACE MILL ARBOR

CODE No.

NT40	U	FMA25.4
Shank	Tap style	Cutter Type

Fig 1

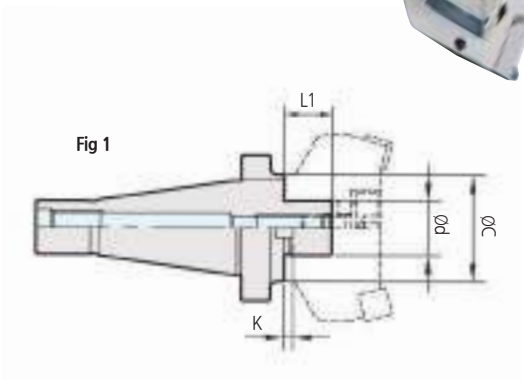
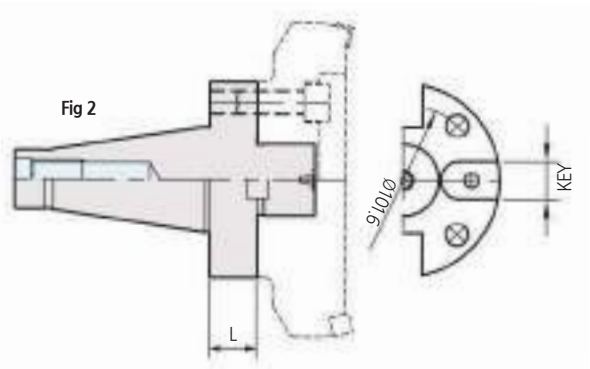


Fig 2



PRODUCT INFORMATION

■JIS B4113 Face Milling용 입니다. ■For face-milling cutter conforming to JIS B4113.

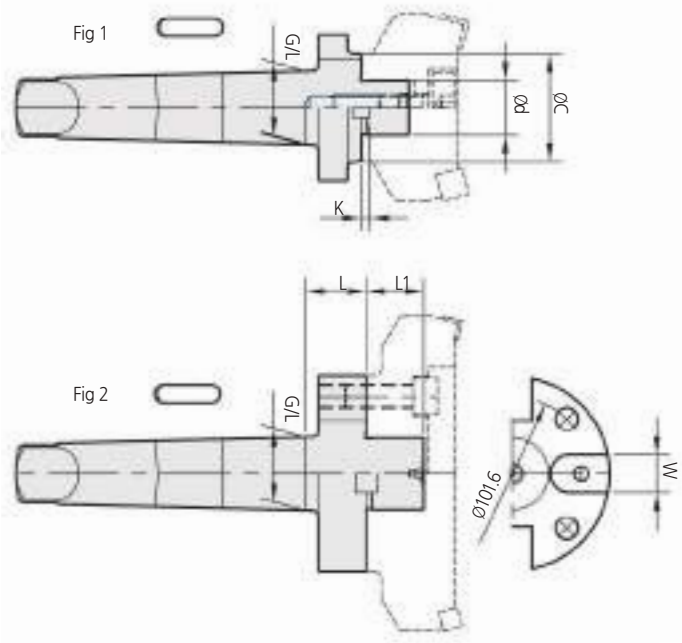
Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Fig	Weight (kg)
NT40U - FMA25.4 (3R)	25.4	80	25	50	22	K9.5-S	5	1	1.2
FMA31.75 (4R)	31.75	100		60	30	K12.7-S	7	1	1.4
FMA38.1 (5R)	38.1	125		80	34	K15.87-S	9	1	2.0
FMA50.8 (6R)	50.8	160		98	36	K19-S	10	1	2.9
NT50U - FMA25.4 (3R)	25.4	80	30	50	22	K9.5-S	5	1	3.6
FMA31.75 (4R)	31.75	100		60	30	K12.7-S	7	1	4.0
FMA38.1 (5R)	38.1	125		80	34	K15.87-S	9	1	4.4
FMA50.8 (6R)	50.8	160		98	36	K19-S	10	1	4.6
FMA47.625(8R)	47.625	200		128	38	K25.4-S	12.5	2	6.0

▶ 페이스밀아바 스페어 파트는 P71 ▶ The spare parts for FACE MILL ARBOR are refered. P71

MT FACE MILL ARBOR

CODE No.

MT5	T	FMA25.4
Shank	Tang	Cutter Type



PRODUCT INFORMATION

- JIS B4113 Face Milling용 입니다.
- Cotter pin : 156page 참조.
- 대형 Endmill이나 Tapping등의 중절삭 가공시 추력의 발생으로 Tool의 빠짐을 Cotter pin을 박음으로 방지할 수 있음.
- 장비 업체에 따라 Cotter pin 구멍이 다르므로 기계 회사명 및 A, B, L 치수를 알려주십시오.

- For face-milling cutter conforming to JIS B4113.
- Cotter pin : see 156page.
- Mounting cotter pin can protect the tools drap, such as big endmill or tap due to occurring thrust in heavy duty.
- Cotter pin types are different according to machine manufacturer, please point out machine manufacturer and the size of "A","B","L", when you order.

Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Fig
MT5T - FMA25.4	25.4	80	30	50	22	K9.5 - L	5	1
(3R)	31.75	100		60	30	K12.7 - L	7	
FMA31.75 (4R)	38.1	125		80	34	K15.87 - L	9	
FMA38.1 (5R)	50.8	160	45	98	36	K19 - L	10	
FMA50.8 (6R)	25.4	80	30	50	22	K9.5 - L	5	1
MT6T - FMA25.4	31.75	100		60	30	K12.7 - L	7	
(3R)	38.1	125		80	34	K15.87 - L	9	
FMA31.75 (4R)	50.8	160	45	98	36	K19 - L	10	
FMA38.1 (5R)	47.625	200		128	38	K25.4	12.5	2

▶ 페이스밀아바 스페어 파트는 P71

▶ The spare parts for FACE MILL ARBOR are refered. P71

Excellent Precision
Excellent Quality

SELUX

NC TOOLING SYSTEM

ST

CHUCK & Item

STRAIGHT SSK COLLET CHUCK (MILLING)
STRAIGHT SSK COLLET CHUCK (CNC)
SHRINK FIT HOLDER
STRAIGHT ER COLLET CHUCK (MILLING)
STRAIGHT ER COLLET CHUCK (CNC)
STRAIGHT SLIM ER COLLET CHUCK (MILLING)
GYRO CHUCK
STRAIGHT NC DRILL CHUCK
STRAIGHT TAPPING CHUCK
FLOATING ER TAP CHUCK
STRAIGHT FACE MILL ARBOR
ST PRO MILL ARBOR (CARBIDE)
ST PRO MILL CUTTER (BALL TYPE)

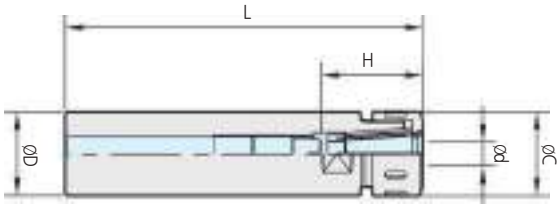
STRAIGHT SSK COLLET CHUCK (MILLING)

Coolant-through hole
Clamping Range : ø1.0 ~ ø25.4

CODE No.

ST42 | SSK16 | 165

Shank — SC Collet Size — Length



PRODUCT INFORMATION

- ■8。Taper 의 강력한 파지력
- ■높은 정밀도와 빠른 가공에 적합
- ■드릴, 센터드릴, 엔드밀, 탭, 리머용으로 사용

- ■Powerful clamping force of 8。Taper.
- ■Excellent Run-out Accuracy.
- ■SSK COLLET CHUCK is suitable for a various operation using drill, endmill, tap and reamer.

Code No.	ød	øD	L	øC	H Min	H Max	Collet	Weight (kg)
ST20 - SSK 6 - 120	0.9~6.0	20	120	19.5	21	35	SC6	0.2
- 180			180					0.4
SSK10 - 140	1.75~10.0		140	27.5	30	50	SC10	0.3
- 200			200					0.5
SSK13 - 150	2.75~13.0		150	33	36	60	SC13	0.5
- 180			180					0.6
- 250			250					0.9
ST25 - SSK10 - 150	1.75~10.0	25	150	27.5	30	50	SC10	0.6
- 210			210					0.9
SSK13 - 150	2.75~13.0		150	33	36	60	SC13	0.7
- 210			210					0.9
SSK16 - 150	2.75~16.0		150	40	45	70	SC16	0.8
- 200			200					1.0
ST32 - SSK10 - 150	1.75~10.0	32	150	27.5	30	50	SC10	0.7
- 200			200					1.1
SSK13 - 150	2.75~13.0		150	33	36	60	SC13	0.9
- 250			250					1.2
SSK16 - 150	2.75~16.0		150	40	45	70	SC16	1.2
- 220			220					1.5
- 280			280					1.8
SSK20 - 165	3.6~20.0		165	48	50	75	SC20	2.0
ST42 - SSK16 - 180	2.75~16.0	42	180	40	45	70	SC16	1.4
- 240			240					1.8
SSK20 - 180	3.6~20.0		180	48	50	75	SC20	1.6
- 240			240					2.0
- 280			280					2.3
SSK25 - 200	15.6~25.4		200	55	55	85	SC25	1.8
- 250			250					2.1
- 300			300					2.5

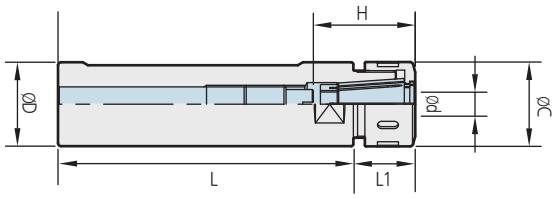
- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. P149
- ▶ Synchronized Tap 사용시 SSK10을 사용하십시오.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  위 사양 이상인경우는 Milling Chuck에 K-Collet을 사용하시길 바랍니다.
- ▶ SSK척 콜렛은 P138~P139
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.

- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. P149
- ▶ Please use SSK10 when you use Synchronized Tap.
  Aluminum MAX Tapping M12
  Steel MAX Tapping M10
  Stainless Steel MAX Tapping M8
  If it has problem, We recommend K COLLET with Milling Chuck.
- ▶ SC COLLET is refered. P138 ~ P139
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder.

STRAIGHT SSK COLLET CHUCK (CNC)

Coolant-through hole
Clamping Range : ø1.0 ~ ø16.0

CODE No.
NC40 SSK16
Shank
SC Collet Size

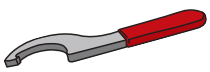
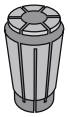


PRODUCT INFORMATION

■8。Taper 의 강력한 파지력
■높은 정밀도와 빠른 가공에 적합
■드릴, 센터드릴, 엔드밀, 탭, 리머용으로 사용

■Powerful clamping force of 8。Taper.
■Excellent Run-out Accuracy.
■SSK COLLET CHUCK is suitable for a various operation using drill, endmill, tap and reamer.

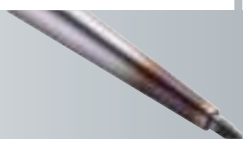
Code No.	ød	øD	L	L1	øC	H		Collet	Weight (kg)
						Min	Max		
NC25 - SSK 6	0.9~6.0	25	68	20	19.5	21	35	SC 6	0.3
SSK10	1.75~10.0		67	22	27.5	30	50	SC10	0.3
NC32 - SSK10	1.75~10.0	32	72	22	27.5	30	50	SC10	0.7
SSK16	2.75~16.0		92	30	40	45	70	SC16	0.8
SSK20	3.6~20.0		72	59	48	50	75	SC20	0.9
NC40 - SSK10	1.75~10.0	40	75	22	27.5	30	50	SC10	1.1
SSK16	2.75~16.0		95	30	40	45	70	SC16	1.2
SSK20	3.6~20.0		93	33	48	50	75	SC20	1.2

Spare Parts				
	Basic		Option	
	Nut	Adjust Screw	Spanner	Collet
Type				
SSK 6	SCN- 6 (HEXA)	BTD0825-C	SC 6-SP	SC 6-ø
SSK10	SCN-10 (HEXA)	BTD1225-C	SC10-SP	SC10-ø
SSK13	SCN-13	BTD1525-C	SC13-SP	SC13-ø
SSK16	SCN-16	BTD1830-C	SC16-SP	SC16-ø
SSK20	SCN-20	BTD2230-C	SC20-SP	SC20-ø
SSK25	SCN-25	BTD2838-C	SC25-SP	SC25-ø

▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
▶ 스페너는 별매입니다. P149
▶ Synchronized Tap 사용시 SSK10을 사용하십시오.
Aluminum MAX Tapping M12
Steel MAX Tapping M10
Stainless Steel MAX Tapping M8
위 사양 이상인경우는 Milling Chuck에 K-Collet을 사용하시길 바랍니다.
▶ SSK척 콜렛은 P138~P139
▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.

▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
▶ Spanner is ordered separately. P149
▶ Please use SSK10 when you use Synchronized Tap.
Aluminum MAX Tapping M12
Steel MAX Tapping M10
Stainless Steel MAX Tapping M8
If it has problem, We recommend K COLLET with Milling Chuck.
▶ SC COLLET is refered. P138 ~ P139
▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder.

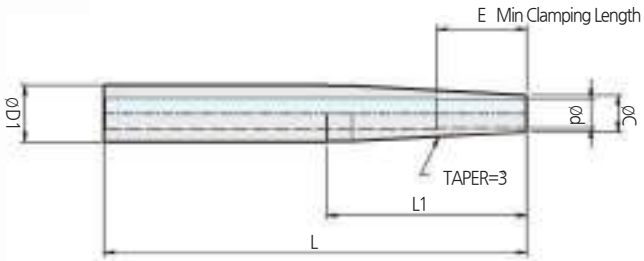
SHRINK FIT HOLDER



Coolant-through hole
Clamping Range : ø3.0 ~ ø12.0

CODE No.

ST20	SSF10	S	150
Shank	Chucking Dia	Shim	Length



PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 Coolant Through Hole

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant

Code No.	ød	øC	øD1	L	L1	E	Weight (kg)
ST16 - SSF 3S - 120	3	6	16	120	51	16	0.1
SSF 4S - 120	4	7					0.1
SSF 6S - 120	6	9					0.15
ST20 - SSF 3S - 150	3	6	20	150	40	16	0.25
SSF 4S - 150	4	7					0.25
SSF 6S - 150	6	9			60	26	0.25
- 200				200	110		0.3
- 250				250			0.4
SSF 8S - 150	8	11		150	90		0.25
- 200				200			0.3
- 250				250			0.4
SSF10S - 150	10	13		150	71	32	0.25
- 200				200			0.35
- 250				250			0.4
SSF12S - 150	12	15		150	52	36	0.25
- 200				200			0.35
- 250				250			0.45

- ▶ 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- ▶ 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)
- ▶ 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- ▶ SELUX 고주파 히팅기는 P145
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P145
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- ▶ Please use only carbide cutting tools of a shank tolerlance within H6 .
- ▶ Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shink fit holder.
- ▶ SELUX shrink fit equipment is refered. P145
- ▶ Please follow minimum insertion lengh of the cutting tools.
- ▶ Stopper for adjusting cutting tool lengh order separately. P145
- ▶ Please clean the shank outside and inside of shrink fit before use. If you don't clean the shrink fit, it has problem about Run-out and toollife.

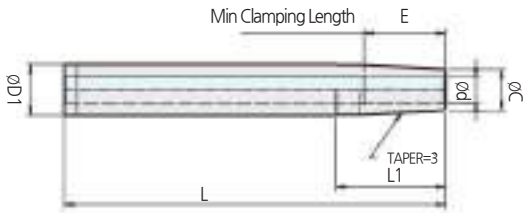
SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : ø3.0 ~ ø20.0

CODE No.

ST32 | SSF10 | 150

Shank — Chucking Dia — Length



PRODUCT INFORMATION

- ■4D선단에서 3㎛이내의 흔들림 정도
- ■높은 정밀도와 강력한 파지력
- ■대칭적,슬림한 디자인으로 가공최적화
- ■전제품 내부급유 Coolant Through Hole

- ■3㎛(T.I.R) Run-out at 4D away from shank nose.
- ■Excellent Run-out accuracy and powerful clamping.
- ■Optimal operation with slim and symmetrical design.
- ■All products can be used for center through coolant type.

Code No.	ød	øC	øD1	L	L1	E	Weight (kg)
ST20 - SSF 4 - 150	4	8	20	150	40	16	0.3
SSF 6 - 150	6	10			62	26	0.3
- 200				200	100		0.35
- 250				250			0.4
SSF 8 - 150	8	13		150	71		0.3
- 200				200			0.35
- 250				250			0.4
SSF10 - 150	10	16		150	43	32	0.4
- 200				200			0.5
- 250				250			0.6
ST32 - SSF10 - 150	10	16	32	150	70	32	0.5
- 200				200			0.8
- 300				250			1.2
SSF12 - 150	12	19		150		36	0.55
- 200				200			0.8
- 300				300	129		1.25
SSF16 - 150	16	24		150	83	38	0.6
- 200				200			0.9
- 300				300			1.3
SSF20 - 150	20	28		150	50		0.6
- 200				200			0.9
- 300				300			1.3

- ▶ 열박음홀더 사용시 절삭공구 Shank경은 h6의 제품을 사용해 주십시오.
- ▶ 절삭공구는 초경 Shank만 대응합니다. (하이스 제품 사용금지)
- ▶ 열박음홀더 사용시 지정된 고주파 히팅기를 사용해서 절삭공구 체결을 권장합니다.
- ▶ SELUX 고주파 히팅기는 P145
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P145
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- ▶ Please use only carbide cutting tools of a shank tolerlance within H6.
- ▶ Please use only carbide cutting tools for shink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shink fit holder.
- ▶ SELUX shrink fit equipment is refered. P145
- ▶ Please follow minimum insertion lengh of the cutting tools.
- ▶ Stopper for adjusting cutting tool lengh order separately. P145
- ▶ Please clean the shank outside and inside of shrink fit before use. If you don't clean the shrink fit, it has problem about Run-out and toollife.

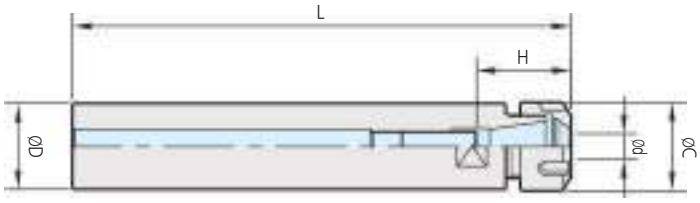
STRAIGHT ER COLLET CHUCK (MILLING)

Coolant-through hole
Clamping Range : ø0.5 ~ ø20.0

CODE No.

ST32 | ER20 | 150

Shank — ER Collet Size — Length



PRODUCT INFORMATION

- ■안정적인 정밀도와 파지력
- ■쉽고빠른 공구교환
- ■드릴, 앤트밀, 탭 다양한 사용범위

- ■Reliable accuracy and Powerful clamping force.
- ■Easy and quick tool exchange.
- ■ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	øD	L	øC	H		Collet	Weight (kg)
					Min	Max		
ST16 - ER11 - 120	0.5~7.0	16	120	19	19	34	ER11	0.2
ER16 - 150	0.5~10.0		150	28	23	43	ER16	0.2
ST20 - ER16 - 150	0.5~10.0	20	150	28	23	43	ER16	0.3
ER20 - 150	1.0~13.0			35	25	48	ER20	0.3
ST25 - ER16 - 150	0.5~10.0	25	150	28	23	43	ER16	0.5
ER20 - 150	1.0~13.0			35	25	48	ER20	0.5
ER25 - 150	1.0~16.0			42	34	54	ER25	0.6
ST32 - ER20 - 150	1.0~13.0	32	150	35	25	48	ER20	0.7
ER25 - 150	1.0~16.0			42	34	54	ER25	0.7
ER32 - 165	2.0~20.0		165	50	40	60	ER32	0.8
- 300			300					1.2

- ▶ 내부급유 사용시에는 방수형콜렛이나 방수형 너트를 사용 해주십시오.
- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149

- ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER COLLET is refered. P140 ~ P141
- ▶ Spanner is ordered separately. P149

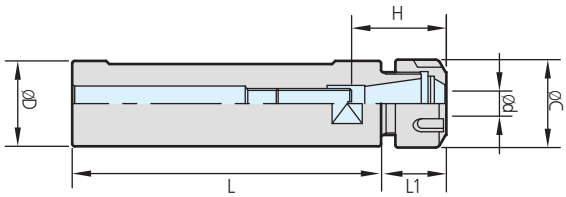
STRAIGHT ER COLLET CHUCK (CNC)

Coolant-through hole
Clamping Range : ø0.5 ~ ø20.0

CODE No.

NC32 ER20

Shank — ER Collet Size

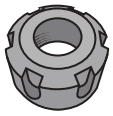
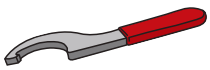


PRODUCT INFORMATION

- NC 선반, 소형 CNC 선반의 기본 Holder로써 (드릴, 센터드릴, 엔드밀, 탭, 소경 보링바, 리머)등을 사용. 특히 내경 보링바 (바이트)의 슬리브용으로 절삭 진동을 흡수하는 효과를 발휘하여 능률을 대폭 향상.
- 안정적인 정밀도와 파지력
- 쉽고빠른 공구교환
- 드릴, 엔드밀, 탭 다양한 사용범위

- Chuck is using as a tool holder(drill, center drill, endmill,tap, boring bar, reamer) for NC lathe and small CNC lathe, when it is used for sleeve of internal boring bar (bite), in particular, it is excellent increases the pro-ductivity by absorbing cutting vibration.
- Reliable accuracy and Powerful clamping force.
- Easy and quick tool exchange.
- ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	ød	øD	L	L1	øC	H		Collet	Weight (kg)
						Min	Max		
NC25 - ER11	0.5~7.0	25	68	20	19	19	34	ER11	0.3
ER16	0.5~10.0		68	25	28	23	43	ER16	0.5
ER20	1.0~13.0		86	27	35	25	48	ER20	0.5
ER25	1.0~16.0		68	50	42	34	54	ER25	0.6
NC32 - ER16	0.5~10.0	32	72	25	28	23	43	ER16	0.5
ER20	1.0~13.0		72	27	35	25	48	ER20	0.6
ER25	1.0~16.0		100	28	42	34	54	ER25	0.7
ER32	2.0~20.0		72	57	50	40	60	ER32	0.8
NC40 - ER16	0.5~10.0	40	75	25	28	23	43	ER16	1.0
ER20	1.0~13.0		75	27	35	25	48	ER20	1.1
ER25	1.0~16.0		91	28	42	34	54	ER25	1.2
ER32	2.0~20.0		93	31	50	40	60	ER32	1.3

Spare Parts				
	Option			
	NUT	Adjust Screw	Spnner	ER Collet
Type				
ER11	UM/ER11(HEXA)	BTD0716-C	ER11-SP	ER11-ø
ER16	UM/ER16(HEXA)	BTD1025-C	ER16-SP	ER16-ø
ER20	UM/ER20(HEXA)	BTD1325-C	ER20-SP	ER20-ø
ER25	UX/ER25	BTD1830-C	ER25-SP	ER25-ø
ER32	UX/ER32	BTD2230-C	ER32-SP	ER32-ø
ER40	UX/ER40	BTD2838-C	ER40-SP	ER40-ø

▶ 내부급유 사용시에는 방수형 콜렛이나 방수형 너트를 사용 해주십시오.
▶ ER콜렛은 P140~P141
▶ 스페너는 별매입니다. P149

▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
▶ ER COLLET is refered. P140 ~ P141
▶ Spanner is ordered separately. P149

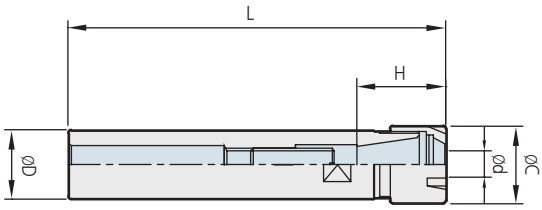
STRAIGHT SLIM ER COLLET CHUCK (MILLING)

Coolant-through hole
Clamping Range : ø0.5 ~ ø16.0

CODE No.

ST25 | ER16 | M | 105

- ST25 → Shank
- ER16 → ER Collet Size
- M → Slim
- 105 → Length

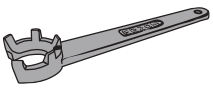


PRODUCT INFORMATION

- ■좁고 깊은 곳에 적합
- ■뛰어난 정밀도와 파지력
- ■척킹 범위ø0.5mm~ø16.0mm

- ■Narrow and depth operation.
- ■High accuracy and powerful clamping force.
- ■Chucking Diaø0.5mm~ø16.0mm.

Code No.	ød	øD	L	øC	H Min	H Max	Collet	Weight (kg)
ST16 - ER11M - 170	0.5~7.0	16	170	16	19	34	ER11	0.2
ST20 - ER16M - 180	0.5~10.0	20	180	22	23	43	ER16	0.3
- 250			250					0.4
ER20M - 180	1.0~13.0		180	28	25	48	ER20	0.3
- 250			250					0.4
ST25 - ER16M - 180	0.5~10.0	25	180	22	23	43	ER16	0.4
- 250			250					0.6
ER20M - 185	1.0~13.0		185	28	25	48	ER20	0.6
- 250			250					0.8
ST32 - ER20M - 200	1.0~13.0	32	200	28	25	48	ER20	1.0
- 300			300					1.3
ER25M - 200	1.0~16.0		200	35	34	54	ER25	1.0
- 300			300					1.3

Spare Parts	Basic		Option	
	NUT	Adjust Screw	Spanner	Collet
Type				
ER11M	SM/ER11M	BTD0716-C	ER11M-SP	ER11-ø
ER16M	SM/ER16M	BTD1025-C	ER16M-SP	ER16-ø
ER20M	SM/ER20M	BTD1325-C	ER20M-SP	ER20-ø
ER25M	SM/ER25M	BTD1830-C	ER25M-SP	ER25-ø

▶ER콜렛은 P140~P141
▶스페너는 별매입니다.

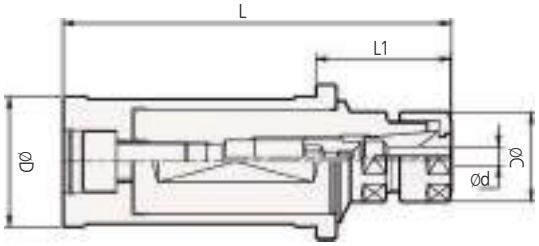
▶ ER COLLET is refered. P140~P141
▶ Spanner is ordered separately.

GYRO CHUCK

Clamping Range : ø0.5 ~ ø16.0

CODE No.

ST32	GYRO	ER127	56
Shank		ER Collet Size	Length



PRODUCT INFORMATION

- ■CNC선반에서 드릴, 탭, 리머 작업시 장비의 공구편심으로 발생하는 문제를 단시간에 해결.
- ■GYRO척은 기존 X, Z축 터렛움직임에 Y축 미세조정을 할 수 있습니다.
- ■CNC선반 홀 가공에서 혁신적인 생산성 향상과 공구비용 절감효과
- ■정밀한 가공으로 추가 보링작업 생략가능.

- ■GYRO CHCUK solve simply the chronic problems of the CnC Lathe about eccentric cutting tool when drilling, tapping, reamer.
- ■GYRO CHUCK allow sensitivity adjustment of Y (inculde X,Z).
- ■It Improves tool life and is effective the production of growth when operating hole.
- ■Pricision operation. (Don't need boring after drilling)

Code No.	ød	øD	L	L1	øC	Max Length.	Weight (kg)
ST32E - GYRO ER16 - 56	0.5~10.0	32	127	56	28	50	2.2
GYRO SSK10 - 56	1.75~10.0				27.5	60	2.2
ST40E - GYRO ER16 - 67	0.5~10.0	40	140	67	28	50	2.8
GYRO ER25 - 67	1.0~16.0				42	60	3.0
GYRO SSK10 - 67	1.75~10.0		137	64	27.5	60	2.8

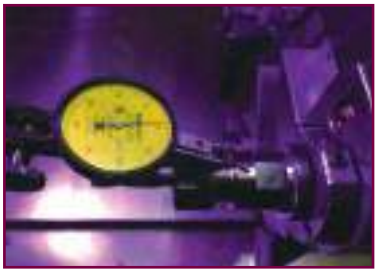
사용방법 instructions

1.터렛에 있는 홀더고정 볼트와 GYRO척 뒤쪽에 있는 볼트를 풀어준다.
Please release bolt in turret and bolt in GRYO chuck

2.선반척에 인디게이터 부착후 돌려가며 GYRO척의 샹크부의 동심도를 체크한다.
check RUN-OUT at shank of GYRO by turning the chuck of cnc lathe after fix the indicater on the chuck of cnc lathe for check how much the lathe have eccentric value

3.동심도 체크후 틀어진 양만큼 터렛의 X축과 GYRO척의 헤드로 돌려가며 원하는 보정값을 맞춘다.
adjusting head of GYRO chuck and X of cnc lathe by turning the chuck of cnc lathe

4.풀었던 GYRO척 뒤쪽 볼트를 잠그고 터렛의 홀더 고정볼트 위,아래를 한번에 천천히 잠가준다.
Please fasten bolt in turret and bolt in GRYO chuck



5.완료후 다시한번 보정값을 체크한 후에 가공을 시작한다.
Please finally check the RUN-OUT and start the operation

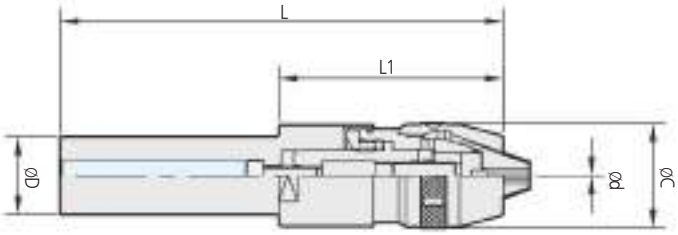
STRAIGHT NC DRILL CHUCK

Clamping Range : ø0.5 ~ ø13.0

CODE No.

ST32 NPU13

Shank — Chucking Dia



PRODUCT INFORMATION

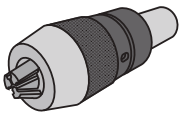
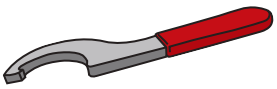
머시닝 센터의 일반적인 드릴링 공구입니다.

- ■척과 샹크가 일체형 구조로 길이가 짧음
- ■가공정도 향상과 우수한 내구성
- ■척의 탈락이 없고 주축 정지시 풀리지 않음

General Drillings for Machining Centers

- ■Unified body of chuck and shank reduces the length of tool.
- ■Improved working accuracy and superior durability.
- ■Chuck never detached at the sudden stop of main shaft.

Code No.	ød	øD	L	L1	øC	Weight (kg)
ST32 - NPU 8	0.3~0.8	32	150	80	38	1.0
NPU 13	1.0~13.0		175	105	50	1.5
ST42 - NPU 8	0.3~0.8	42	155	80	38	2.3
NPU 13	1.0~13.0		180	105	50	2.8

Spare Parts		
	Basic	
	Chuck	Spanner
Type		
NPU 8	NPU 8	NPU08-SP
NPU13	NPU13	NPU13-SP

- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
  NPU8-20mm이상
  NPU13-30mm이상
- ▶ 스페너는 별매입니다.

- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum lengh of cutting tools.
  NPU8 : more 20mm
  NPU13 : more 30mm
- ▶ Spanner is ordered separately.

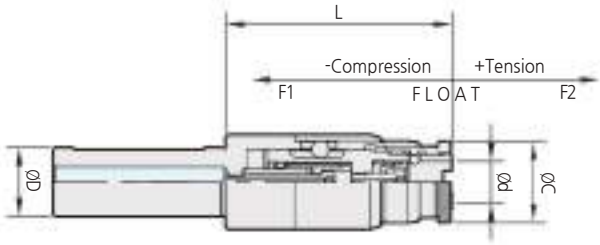
STRAIGHT TAPPING CHUCK

Tapping Range : M3 ~ M24

CODE No.

ST32 | TCH22 | 165

Shank / MAX Tapping / Length



PRODUCT INFORMATION

- ■플로팅 타입으로 인장수축 장치 내장
- ■공구교환이 빠르고 편리함
- ■관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능

- ■The tapping chuck is equipped with tension system by floating type.
- ■Easy and quick tool exchange.
- ■It is possible for tapping operation of blind hole and through hole.

Code No.	ød	L	øC	øD	L1		Weight (kg)
					F1	F2	
ST32- TCH12- 125	19	100	35	32	6	12	1.4
TCH22- 165	31	130	52		10	15	1.8
ST40- TCH12- 120	19	95	35	40	6	12	2.2
TCH22- 160	31	125	52		10	15	2.4
ST42- TCH12- 120	19	95	35	42	6	12	2.8
TCH22- 160	31	125	52		10	15	3.0

▶ 적용 탭콜렛은 P137 ▶ Private tap collets are refered. P137

FLOATING ER TAP CHUCK

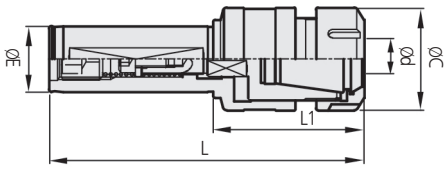
Clamping Range : ø0.5 ~ ø20.0

※ CNC 선반 TAP작업시 능률 UP!!

CODE No.

ST40 | FTER32 | 85

Shank / ER Collet Size / Length



PRODUCT INFORMATION

- ■플로팅 타입으로 탭 파손 방지

- ■Prevent the tap from breaking by frotting type.

Code No.	ød	øC	L	L1	Collet	øE	Weight (kg)
ST32 - FTER16 - 65	0.5~10.0	23	145	65	ER16	32	2.0
ST40 - FTER32 - 85	2.0~20.0	50	165	85	ER32	40	2.8

- ▶ CNC 선반 에서 탭작업가능
- ▶ SLA, MC척에 사용사가능 합니다.
- ▶ ER콜렛은 P140~P141
- ▶ 스페너는 별매입니다. P149

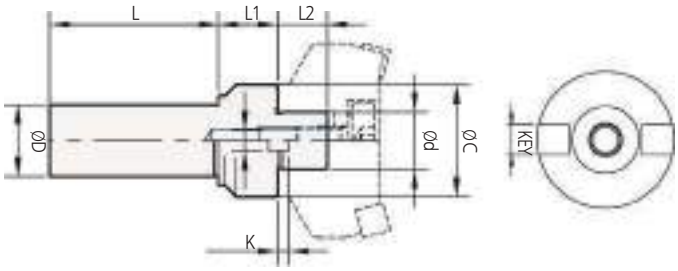
- ▶ It can do tapping operation at the CNC lathe.
- ▶ It can use with SIDE LOCK ARBOR and MILLING CHUCK.
- ▶ ER COLLET is refered. P140~P141
- ▶ Spanner is ordered separately. P149

STRAIGHT FACE MILL ARBOR

CODE No.

ST32 | FMA25.4

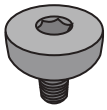
Shank — Cutter Type



PRODUCT INFORMATION

■Sandvik T-MAX face mill cutter 전용 arbor 입니다. ■Only For T-MAX face mill cutter arbor manufactured by sandvik.

Code No.	ød	Cutter Dia	øD	L	L1	L2	øC	Key	K
ST20 - FMA25.4	25.4	80	20	68	22	25	50	K9.5 - S	5
(3R)			32	75					
ST32 - FMA25.4	31.75	100			25	30	60	K12.7 - S	7
(3R)	25.4	80	42	80	22	25	50	K9.5 - S	5
FMA31.75 (4R)	31.75	100			25	30	60	K12.7 - S	7

Spare Parts				
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
Type				
FMA25.4	K9.5	MBA-M12	BX0412	BX1230(Option)
FMA31.75	K12.7	MBA-M16	BX0515	-
FMA38.1	K15.85	MBA-M20	BX0616	-
FMA50.8	K19	MBA-M24	BX0820	-
FMA47.625	K25.4	-	BX1020	BX1645

▶스페어 파트 주문시에는 반드시 품명의 정확한 확인이 필요합니다.
▶Key 주문시에는 제품상세표에서 LONG/Short Key를 확인해주십시오.

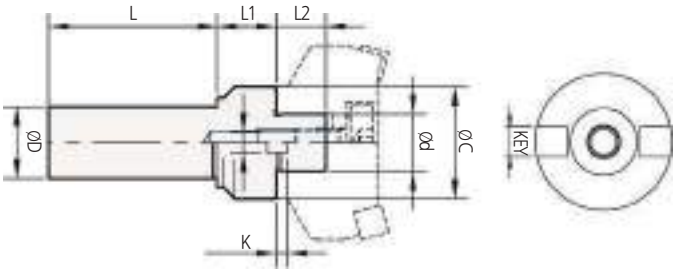
▶Please pay attention to check spare parts list when you order.
▶Please check long/short key when you order.

STRAIGHT FACE MILL ARBOR

CODE No.

ST32 | FMC22

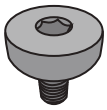
Shank — Cutter Type



PRODUCT INFORMATION

■Sandvik T-MAX face mill cutter 전용 arbor 입니다. ■Only For T-MAX face mill cutter arbor manufactured by sandvik.

Code No.	ød	Cutter Dia	øD	L	L1	L2	øC	Key	K
ST20 - FMC16	16	40	20	68	18	17	38	K8-S	5
FMC22	22	50/63			20	18	45	K10-S	5.5
ST32 - FMC16	16	40	32	75	18	17	38	K8-S	5
FMC22	22	50/63			20	18	45	K10-S	5.5
FMC27	27	63/80			22	20	60	K12-S	6
ST42 - FMC22	22	50/63	42	80	20	18	45	K10-S	5.5
FMC27	27	63/80			22	20	60	K12-S	6

SpareParts				
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
Type				
FMC16	K8	-	BX0310	BX0820
FMC22	K10	-	BX0412	BX1025
FMC25.4	K9.5	MBA-M12	BX0412	BX1230(Option)
FMC27	K12.0	MBA-M12	BX0515	BX1230(Option)
FMC32	K14.0	MBA-M16	BX0615	BX1635(Option)
FMC38.1	K15.85	MBA-M16	BX0615	BX1635(Option)
FMC40	K15.85	MBA-M20	BX0615	BX1230(Option)

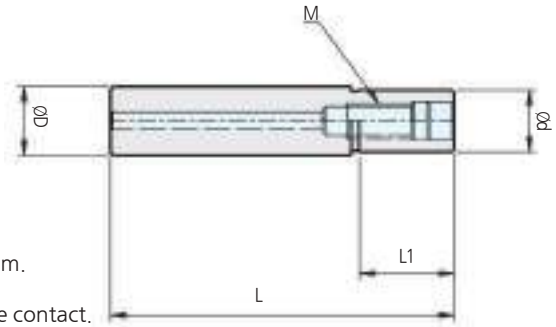
▶스페어 파트 주문시에는 반드시 품명의 정확한 확인이 필요합니다.
▶Key 주문시에는 제품상세표에서 LONG/Short Key를 확인해주십시오.

▶Please pay attention to check spare parts list when you order.
▶Please check long/short key when you order.

ST PRO MILL ARBOR (CARBIDE)

CODE No.

ST16	M06	150
Shank	Cutter Type	Length



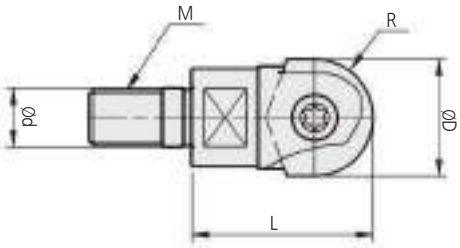
PRODUCT INFORMATION

- ■모듈라 방식으로 원가 절감
- ■높은 정밀도
- ■이면구속 체결로 흔들림 감소
- ■헤드 교체로 다양한 작업가능

- ■Cost reduction effect with modular system.
- ■Excellent accuracy.
- ■Vibration damping effect due to dual face contact.
- ■A various operation with exchanging head.

Code No.	øD	ød	L	L1	M
ST10 - M06 - 150	10	9.8	150	24	M6
ST12 - M06 - 150	12	10.8	150	30	M6
ST16 - M06 - 150	16	14.4	120	24	M8
- 200			200		
ST20 - M10 - 200	20	18	200	40	M10
- 250			250		
ST25 - M12 - 250	25	22.5	250	48	M12
- 300			300	100	

ST PRO MILL CUTTER(Ball Type)



PRODUCT INFORMATION

- ■HITACHI 인써트 호환
- ■정삭 R작업 최적화

- ■Compatible with HITACHI insert.
- ■Optimal for R-finishing operation.

Code No.	R	øD	L	ød	M	Insert	Screw	Wrench
R05M0630	5	10	30	6.5	M6	ZPFG100, ZCFW100	TNS-5842	TXL-10
R06M0630	6	12				ZPFG120, ZCFW120	TNS-5843	TXT-20
R08M0830	8	16		8.5	M8	ZPFG160, ZCFW160	TNS-5844	
R10M1035	10	20	35	10.5	M10	ZPFG200, ZCFW200	TNS-5845	TXT-25
R12M1240	12.5	25	40	12.5	M12	ZPFG250, ZCFW250	TNS-5846	TXT-30

▶다양한 Type의 컷터 제작가능합니다.
▶전용 스페너는 별매.

▶Cutters can be made of a variety of Type.
▶Spanner is orderd seperately.

Excellent Precision
Excellent Quality

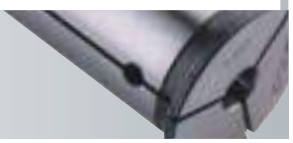
SELUX
NC TOOLING SYSTEM

ACCESSORY

CHUCK & Item

- HYDRAULIC COLLET
- K-COLLET (K TYPE)
- K-COLLET (NC TYPE)
- TAPER COLLET
- DRILL CHUCK COLLET
- TAP ADAPTER (TCA)
- SC COLLET
- ER COLLET
- ER COLLET SET
- TEST BAR
- CENTERING PLUG
- BLANK TOOL
- TAPER SLEEVE ADAPTER
- SLEEVE ADAPTER
- SHRINK FIT MACHINE
- TOOL SETTING STAND
- UNIVERSAL MAGNETIC BASE
- SPINDLE CLEANER
- TOUCH POINT SENSOR
- HEIGHT PRESETER
- ZOP-50
- SPANNER
- GH SPANNER
- PULL STUD BOLT
- PULL STUD BOLT SPEC

HYDRAULIC COLLET

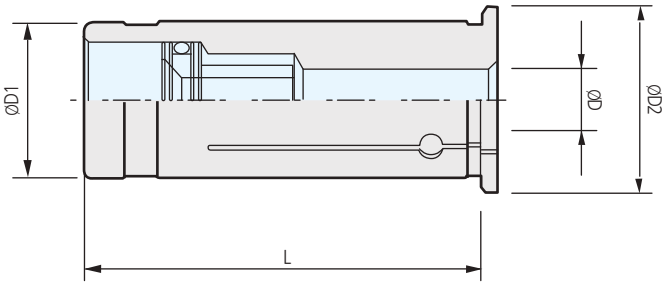


Coolant-through hole
Clamping Range : ⌀3.0 ~ ⌀25.0

D-Collet

CODE No.

D32	20
Shank	Chucking Dia



PRODUCT INFORMATION

- 4D 선단에서 3㎛이내의 흔들림정도
- 스페셜 SIZE는 주문제작.
- 공구 체결시 COLLET에 공구를 먼저 삽입한후 유압척에 콜렛을 삽입하시길 바랍니다.

- 3㎛(T.I.R) Run-out at 4D away from shank nose.
- The speical size is made by order.
- Please insert collet in HYDRAURIC CHCUK after inserting the cutting tool in the collet.

Style	D1	D2	L	Weight (kg)
D12	12	16	46	0.1
D20	20	24	52	0.15
D32	32	36	63	0.2

Style	HYDRAULIC COLLET
D12	3,4,5,6,7,8
D20	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
D32	6,8,10,12,14,16,18,20,25

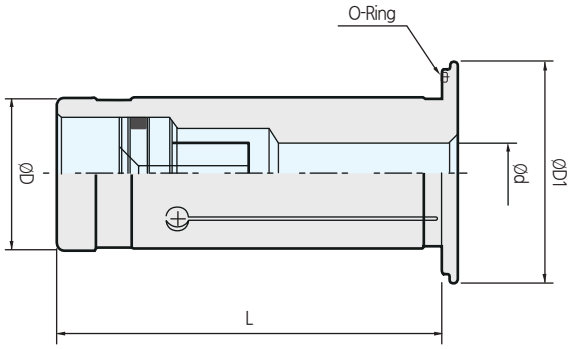
HYDRAULIC COLLET

Coolant-through hole
Clamping Range : ⌀3.0 ~ ⌀25.0

OD-Collet

CODE No.

OD32	20
Shank	Chucking Dia



PRODUCT INFORMATION

- 4D 선단에서 3㎛이내의 흔들림 정도.
- 스페셜 SIZE는 주문제작.
- 공구 체결시 COLLET에 공구를 먼저 삽입한후 유압척에 콜렛을 삽입하시길 바랍니다.
- 방수타입콜렛은 정밀도를 보증하기 위해 정밀 컷팅으로 작업되어 있습니다.

- 3㎛(T.I.R) Run-out at 4D away from shank nose.
- The speical size is made by order.
- Please insert collet in HYDRAURIC CHCUK after inserting the cutting tool in the collet.
- Waterproof collet has been cut very precisely to guarantee accuracy.

Style	D1	D2	L	Weight (kg)
OD12	12	21	47	0.1
OD20	20	29	52	0.15
OD32	32	39	63	0.2

Style	HYDRAULIC COLLET (Coolant type)
OD12	3,4,5,6,7,8
OD20	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
OD32	6,8,10,12,14,16,18,20,25

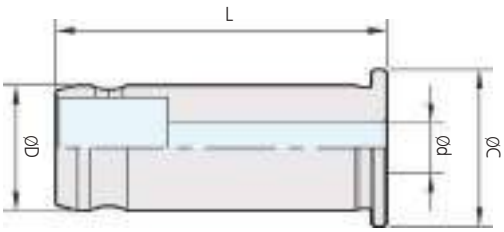
K-COLLET (K TYPE)

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

K32 | 8

Shank — Chucking Dia



PRODUCT INFORMATION

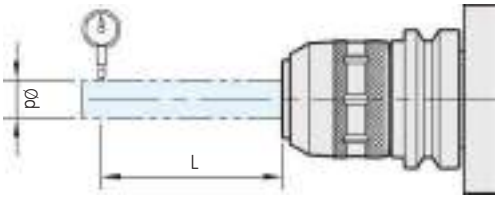
- 밀링척용 collet
- 스페셜 size는 주문제작
- Synchro Tap size 주문제작
- 인치 size 주문제작
- K-COLLET 전Size 재고관리
- ●표는 표준외 품목

- Straight Collet is for Milling Chuck.
- The speical size is made by order.
- The synchro tap size is made by order.
- The inch size is made by order.
- We keep the stock for all size K-COLLET.
- The mark ● indicates the special size.

Style	øD	L	øC	Weight (kg)
K20	20	55	25	0.1
K25	25	59	30	0.2
K32	32	65	37	0.3
K42	42	70	47	0.5

Style	K-COLLET
K20	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
K25	6, 8, 10, 12, 14, 15, 16, 18, 20
K32	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 21, 22, 23, 24, 25, 26, 27, 28
K42	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38

Style & ød		L	T.I.R(㎛)
K20	6,8,10	50	0.015
K25	12,16	75	
K32			
K42	20,25,32	100	

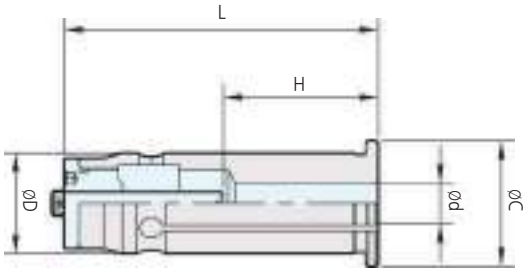


K-COLLET (NC TYPE)

Clamping Range : ø3.0 ~ ø32.0

길이 조절형 타입

CODE No.
NC32 8
Shank — Chucking Dia



PRODUCT INFORMATION

■조절나사에 의해 공구길이조정
■스페셜 size 주문가능

■The length is adjustable with an adjustable screw.
■The speical size is made by order

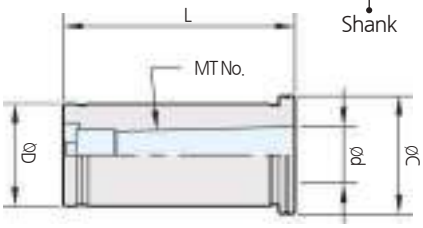
Code No.	ød	øD	L	øC	H Min	H Max	Weight (kg)
NC20 - 6	6	20	63	25	30	50	0.1
- 8	8						
- 10	10						
- 12	12						
- 16	16						
NC25 - 6	6	25	68	30	30	58	0.25
- 8	8						
- 10	10						
- 12	12						
- 16	16						
- 20	20						
NC32 - 6	6	32	75	37	30	62	0.4
- 8	8						
- 10	10						
- 12	12						
- 16	16						
- 20	20						
- 25	25						
NC42 - 6	6	42	87	47	30	72	0.6
- 8	8						
- 10	10						
- 12	12						
- 16	16						
- 20	20						
- 25	25						
- 32	32		92				

TAPER COLLET

CODE No.

K32 MT1

Shank — Taper



PRODUCT INFORMATION

■MT샹크 공구 체결용 collet ■Should be used in MT Shank Tool.

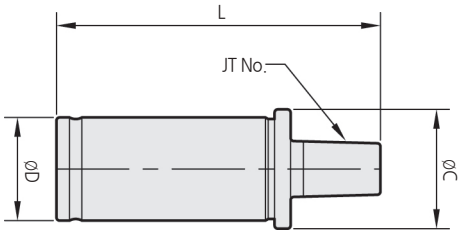
Code No.	ød	MT No.	øD	L	øC	Weight (kg)
K20 - MT1	12.065	MT1	20	60	25	0.2
- MT2	17.780	MT2		72		
K25 - MT1	12.065	MT1	25	60	30	0.3
- MT2	17.780	MT2		72		
K32 - MT1	12.065	MT1	32	60	37	0.5
- MT2	17.780	MT2		72		
- MT3	23.825	MT3		90		
K42 - MT1	12.065	MT1	42	60	47	0.7
- MT2	17.780	MT2		72		
- MT3	23.825	MT3		90		
- MT4	31.267	MT4		113		

DRILL CHUCK COLLET

CODE No.

K20 JT6

Shank — Jacobs Taper

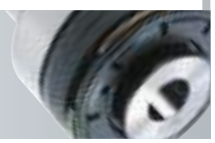


PRODUCT INFORMATION

■JT샹크 공구 체결용 collet ■Should be used in JT Shank Tool.

Code No.	JT No.	øD	L	øC	Weight (kg)
K20 - JT6	JT6	20	93	25	0.2
K25 - JT6		25	93	30	0.3
K32 - JT6		32	101	37	0.5
K42 - JT6		42	101	47	0.8

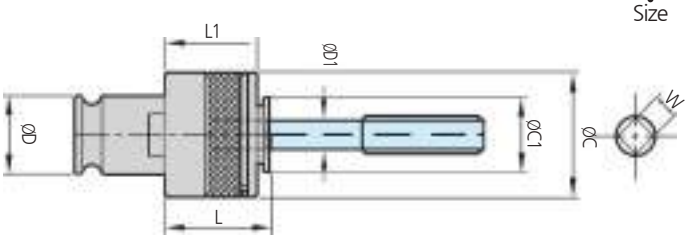
TAP ADAPTER (TCA)



CODE No.

TCA2 M10

Size Tap



PRODUCT INFORMATION

■토크 안전장치가 내장되어 탭 파손을 방지할 수 있습니다.

■Due to being built in torque safety equipment prevent from tap breaking.

DESIGNATION	øD	Tapping Range			øD	øC	øC1	L	L1
		M	U(M)	P					
TCA 1-M	19	3~12	1/4~9/16	1/8	5~10.5	32	19	24~28	22
2-M	31	6~24	3/8~7/8	1/8~1/2	6.2~17	50	30	38~46	28
3-M	48	16~36	5/8~1⅜	1/4~1⅛	12~28	72	47	35~68	37

		M(MetricThread)									U.W(Unify,WhitworthThread)								PT,PF(Pipe Screw)									W	TCA1	TCA2	TCA3
		D	øD1	L				L3				D	øD1	L			L3				D	øD1	L			L3					
				TCA1	TCA2	TCA3		TCA1	TCA2	TCA3				TCA1	TCA2	TCA3	TCA1	TCA2	TCA3				TCA1	TCA2	TCA3	TCA1	TCA2	TCA3		Stock	Stock	Stock
TCA1	TCA2	M3	4					163																						3.2			
		M4	5										-	-			-	-												4			
		M4.5		24				166					-	-			-	-															
		M5	5.5					171					-	-			-	-												4.5			
		M6	6					177				1/4U	6	24			173	-															
		-	-	-				-				5/16	6.1		-		180	-												5			
		M7	6.2					175	192			U	-	25	-		-	-	-														
		M8		25	38			180	197			-	-	25	38		-	-	-														
		M9	7		38			182	199			-	7	25	-		185	202	-											5.5			
		M10			38	-	-	185	202	-	-	3/8U	-	-	39		-	-	-														
		M11	8	26	39			189	206			-	8	26	-		189	206	-	PT1/8	PF1/8	8	26	28		164	192		6			
		M12	8.5		39			191	208			7/16	-	-	40				-										6.5			
		-	-	-	-			-	-			U	9	27	41		193	210	-	-	-	-	-		-	-			7			
		M14	10.5	28	41			195	212			-	10.5	28	-		197	214	-										8			
		-	-	-	-			-	-			1/2U	-	-	42		-	-	-	PT1/4	PF1/4	11	29	31	34	168	196	238	9			
												9/16	12		-	34		218	217	-	-	-		-	-		-	-				
	TCA3	M16	12.5		43	35			217	270		U	-		44	-		-	-	-	-	-		-	-		-	-	10			
		M18	14		44	36			211	274		-	14		-	36		226	279	PT3/8	PF3/8	14		33	36		-	239	11			
		M20	15		45	37			225	278		5/8U	-		46	-		-	-	-	-	-		-	-		197		12			
		M22	17		46	38			234	287		-	17		-	38		234	287	-	-	-		-	-				13			
			-		-	-			-	-		3/4U						-	-	PT1/2	PF1/2	18		36	39		209	251	14			
		M24	19			44				290		-							-	-	-	-			-				15			
		M27	20			62	40			278	265	7/8U	20			62			273	-	-	-			-							
		-	-			-				-	-		22			64			281	-	-	-			-				17			
		M30	23			62	42			281	303		-			-			-	PT3/4	PF3/4	P23			42			253				
		-	-			-	-			-	-	1U	24			66			289		PF7/8	P24			44			256	19			
		M33	25			66	44			289	311	11/8	-			-			-			-			-			-				
		M34	-			-	-			-	-	U	26			68			297	PT1	PT1	26			46			259	21			
		M36	28			68	46			297	319	-	-							-	PF11/8	28			46			264				

SC COLLET

Coolant-through hole
Clamping Range : ⌀0.9~ ⌀25.4

CODE No.

SC6 | 6

SC Collet Size — Chucking Dia

P Class Collet은 전체 Series에 대응이 가능합니다.

PRODUCT INFORMATION

- 8。Taper 의 강력한 파지력
- 일반 타입 콜렛은 5㎛ 정도를 보증
- P Class 콜렛은 3㎛ 정도를 보증
- 전 제품 전수 검사, 품질 보증
- A타입은 End mill 정 size 사용
- C타입은 방수형 전용. 정 SIZE 사용

- Powerful clamping force of 8。taper.
- The standard type is 5㎛(T.I.R) RUN-OUT accuracy.
- The P CLASS is 3㎛(T.I.R) RUN-OUT accuracy.
- The quality guaranteed by inspection all products.
- A type is just for endmill of natural number.
- C type is just for waterproof. natural number.

Code No.	Range
SC6 - 1.0	0.9 ~ 1.0
1.25	1.1 ~ 1.25
1.5	1.25~ 1.5
1.75	1.5 ~ 1.75
2.0	1.75~ 2.0
2.25	2.0 ~ 2.25
2.5	2.25~ 2.5
2.75	2.5 ~ 2.75
3.0	2.8 ~ 3.0
3.5	3.0 ~ 3.5
4.0	3.5 ~ 4.0
4.5	4.0 ~ 4.5
5.0	4.5 ~ 5.0
5.5	5.0 ~ 5.5
6.0	5.5 ~ 6.0
SC10 - 2.0	1.75 ~ 2.0
2.25	2.0 ~ 2.25
2.5	2.25 ~ 2.5
2.75	2.5 ~ 2.75
3.0	2.75 ~ 3.0
3.5	3.0 ~ 3.5
4.0	3.5 ~ 4.0
4.5	4.0 ~ 4.5
5.0	4.5 ~ 5.0
5.5	5.0 ~ 5.5
6.0	5.5 ~ 6.0
6.5	6.0 ~ 6.5
7.0	6.5 ~ 7.0
7.5	7.0 ~ 7.5
8.0	7.5 ~ 8.0
8.5	8.0 ~ 8.5
9.0	8.5 ~ 9.0
9.5	9.0 ~ 9.5
10.0	9.5 ~10.0

Code No.	Range
SC13 - 3.0	2.75 ~ 3.0
3.5	3.0 ~ 3.5
4.0	3.5 ~ 4.0
4.5	4.0 ~ 4.5
5.0	4.5 ~ 5.0
5.5	5.0 ~ 5.5
6.0	5.5 ~ 6.0
6.5	6.0 ~ 6.5
7.0	6.5 ~ 7.0
7.5	7.0 ~ 7.5
8.0	7.5 ~ 8.0
8.5	8.0 ~ 8.5
9.0	8.5 ~ 9.0
9.5	9.0 ~ 9.5
10.0	9.5 ~ 10.0
10.5	10.0 ~ 10.5
11.0	10.5 ~ 11.0
11.5	11.0 ~ 11.5
12.0	11.5 ~ 12.0
12.5	12.0 ~ 12.5
13.0	12.5 ~ 13.0

Code No.	Range
SC16 - 3.0	2.75~ 3.0
3.5	3.0 ~ 3.5
4.0	3.5 ~ 4.0
4.5	4.0 ~ 4.5
5.0	4.5 ~ 5.0
5.5	5.0 ~ 5.5
6.0	5.5 ~ 6.0
6.5	6.0 ~ 6.5
7.0	6.5 ~ 7.0
7.5	7.0 ~ 7.5
8.0	7.5 ~ 8.0
8.5	8.0 ~ 8.5
9.0	8.5 ~ 9.0
9.5	9.0 ~ 9.5
10.0	9.5 ~ 10.0
10.5	10.0 ~ 10.5
11.0	10.5 ~ 11.0
11.5	11.0 ~ 11.5
12.0	11.5 ~ 12.0
12.5	12.0 ~ 12.5
13.0	12.5 ~ 13.0
13.5	13.0 ~ 13.5
14.0	13.5 ~ 14.0
14.5	14.0 ~ 14.5
15.0	14.5 ~ 15.0
15.5	15.0 ~ 15.5
16.0	15.5 ~ 16.0

SC COLLET

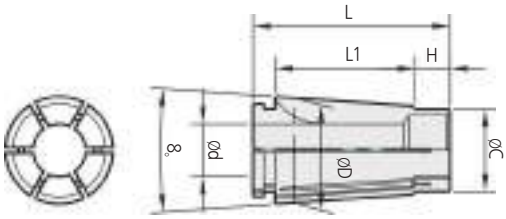
Coolant-through hole
Clamping Range : ø0.9~ ø25.4

CODE No.

SC6 | 6

SC Collet Size — Chucking Dia

Style	øD	L	øC	L1	H
SC 6	10	25	7.5	17.6	3.8
SC10	15	30.5	12	21.3	5
SC13	19.5	39	15.5	32	5.5
SC16	24	45	18.8	32	8
SC20	28.5	54	23.4	41	8
SC25	35	57	28.9	43	8.5



Code No.	Range
SC20 - 4.0	3.6 ~ 4.0
4.5	4.0 ~ 4.5
5.0	4.5 ~ 5.0
5.5	5.0 ~ 5.5
6.0	5.5 ~ 6.0
6.5	6.0 ~ 6.5
7.0	6.5 ~ 7.0
7.5	7.0 ~ 7.5
8.0	7.5 ~ 8.0
8.5	8.0 ~ 8.5
9.0	8.5 ~ 9.0
9.5	9.0 ~ 9.5
10.0	9.5 ~ 10.0
10.5	10.0 ~ 10.5
11.0	10.5 ~ 11.0
11.5	11.0 ~ 11.5
12.0	11.5 ~ 12.0

Code No.	Range
SC20 - 12.5	12.0 ~ 12.5
13.0	12.5 ~ 13.0
13.5	13.0 ~ 13.5
14.0	13.5 ~ 14.0
14.5	14.0 ~ 14.5
15.0	14.5 ~ 15.0
15.5	15.0 ~ 15.5
16.0	15.5 ~ 16.0
16.5	16.0 ~ 16.5
17.0	16.5 ~ 17.0
17.5	17.0 ~ 17.5
18.0	17.5 ~ 18.0
18.5	18.0 ~ 18.5
19.0	18.5 ~ 19.0
19.5	19.0 ~ 19.5
20.0	19.5 ~ 20.0

Code No.	Range
SC25 - 16.0	15.6 ~ 16.0
16.5	16.0 ~ 16.5
17.0	16.5 ~ 17.0
17.5	17.0 ~ 17.5
18.0	17.5 ~ 18.0
18.5	18.0 ~ 18.5
19.0	18.5 ~ 19.0
19.5	19.0 ~ 19.5
20.0	19.5 ~ 20.0
20.5	20.0 ~ 20.5
21.0	20.5 ~ 21.0
21.5	21.0 ~ 21.5
22.0	21.5 ~ 22.0
22.5	22.0 ~ 22.5
23.0	22.5 ~ 23.0
23.5	23.0 ~ 23.5
24.0	23.5 ~ 24.0
24.5	24.0 ~ 24.5
25.0	24.5 ~ 25.0
25.4	25.0 ~ 25.4

- SC 콜렛 정밀급 주문시 SC10-ØP로 주문하여 주십시오.
- SC 콜렛 방수형 주문시 SC10-ØC로 주문하여 주십시오.
- SSK척 /GSK척은 P48~51
- 너트에서 콜렛 추출시 반드시 콜렛 추출도구를 사용하십시오. SSK척에 부속되어 있습니다.

- Please order SC10-ØP for accuracy SC COLLET. (" P CLASS")
- Please order SC10-ØC for waterproof SC COLLET.
- SSK / GSK CHUCK is refered. P48~51
- Please use collet remover when you separate SK COLLET from NUT. (Collet remover is included)

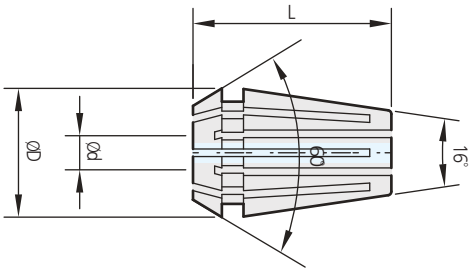
ER COLLET

Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

ER11 6

ER Collet Type — 내경



PRODUCT INFORMATION

- 높은 정밀도와 다양한 규격
- 강력한 파지력
- ø0.5~ø26.0mm 척킹

- Excellent accuracy and various specification.
- Powerful gripping.
- Chucking diameter ø0.5~ø26.0mm

Code No.	Range	øD	L	Run-out
ER11-ø	0.5	11.5	17.0	0.010
ER16-ø		17.0	27.5	
ER20-ø		21.0	31.5	
ER25-ø	1.0	26.0	34.0	
ER32-ø		33.0	40.0	
ER40-ø		41.0	46.0	

▶ GER정밀급 콜렛은 당사에 문의 하여 주십시오
▶ ER척은 P52~54

▶ Please contact us for acurracy collet "GER".
▶ ER CHUCK is refered. P52~54

ER COLLET SET

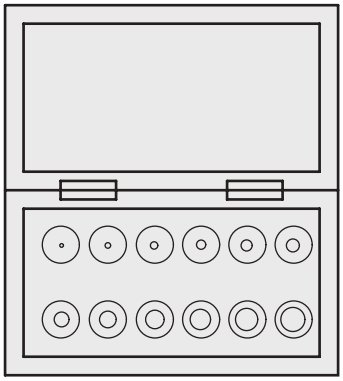
Coolant-through hole
Clamping Range : ø3.0 ~ ø32.0

CODE No.

ER11 SET

ER Collet Type

셋트



PRODUCT INFORMATION

- ■높은 정밀도와 다양한 규격
- ■강력한 파지력
- ■ø0.5~ø26.0mm 척킹

- ■Excellent accuracy and various specification.
- ■Powerful gripping.
- ■Chucking diameter ø0.5~ø26.0mm

Code No.	Range	Clamping Range	PCS
ER11-Set	0.5	0.5 ~ 7.0	13
ER16-Set		0.5 ~ 10.0	10
ER20-Set		1.0 ~ 13.0	12
ER25-Set	1.0	1.0 ~ 16.0	15
ER32-Set		2.0 ~ 20.0	18
ER40-Set		3.0 ~ 26.0	23

TEST BAR

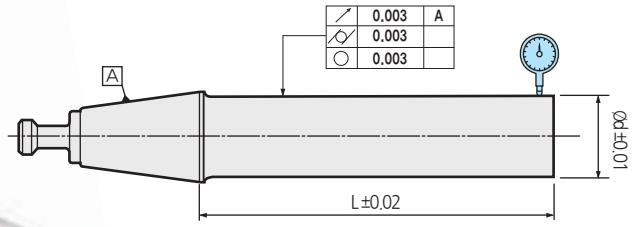
기계점검 정도 Check의 필수품

Sub-Zero 처리에 의한 경년변화 방지,
관리에 편리하도록 나무 Box에 보관

CODE No.

HSK63A	TB40	310
Shank	Dia	Length

출하시 ød와 L의 실측치수가
마킹되어 있습니다.



PRODUCT INFORMATION

■ød에 대한 진원도, 직진도, 원통도 0.003mm이내
■스패셜 Size 주문제작

■3mm(T.I.R) Runout Accuracy.
■The speical size is made by order.

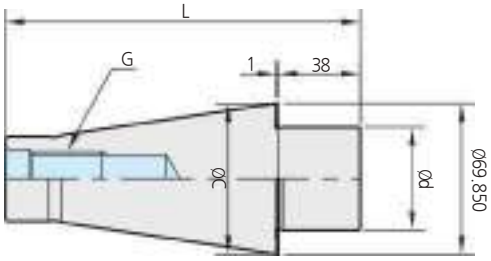
Code No.	ød	L
BT30 - TB28 - 220	28	220
BT40 - TB40 - 310	40	310
BT50 - TB60 - 310	60	310
HSK 40A - TB30 - 170	30	170
HSK 50A - TB40 - 220	40	220
HSK 63A - TB40 - 310	40	310
HSK100A - TB50 - 310	50	310

CENTERING PLUG

CODE No.

NT50 | CP8(47.625)

Shank — Chucking Dia



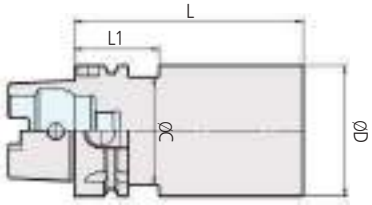
Code No.	ød	Cutter Dia	L	øC	G
NT50 - CP8(47.625)	47.625	200	164	69.56	UNC1"-8
CP8(60)	60				M24X3

BLANK TOOL

CODE No.

HSK63A | BLK63 | 150

Shank — Dia — Length



Code No.	øD	øC	L	L1
HSK40A - BLK42 - 180	42	34	180	35
HSK50A - BLK52 - 200	52	42	200	42
HSK63A - BLK63 - 150	63	52	150	42
- 250			250	
BLK82 - 200	82		200	
HSK100A - BLK 102 - 150	102	85	150	45
- 250			250	
BLK 126 - 200	126		200	
BT30 - BLK48 - 180	48	44	180	30
BT40 - BLK63 - 150	63	61	150	35
- 250			250	
BLK82 - 200	82		200	
BT50 - BLK102 - 150	102	98	150	48
- 250			250	
BLK126 - 200	126		200	

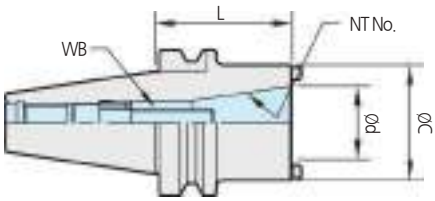
▶ 샹크부와 테이퍼부의 열처리 경도를 블랭크툴의 특성 및 용도에 맞게 제작되었습니다.
▶ 스페셜 Size 주문제작

▶ The blank tool has a compatible hardness for use and feature of blank tool.
▶ The special size is order-made.

TAPER SLEEVE ADAPTER

CODE No.

BT50	TSA40	M	75
Shank	NT40 Taper	Tap Style	Length



PRODUCT INFORMATION

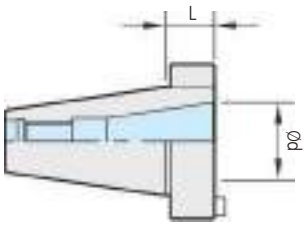
■NT Type 을 BT Type으로 변환 어댑터 ■NT Type Change BT Type Adapter.

Code No.	ød	NT No.	L	øC	WB
BT40 - TSA30U - 60	ø31.75	NT30	60	50	UNC1/2-13
TSA30M - 60					M12 x 1.75
BT50 - TSA40U - 75	ø44.45	NT40	75	70	UNC5/8-11
TSA40M - 75					M16 x 2.0

SLEEVE ADAPTER

CODE No.

BT50	BT30	30
Shank	Taper	Length



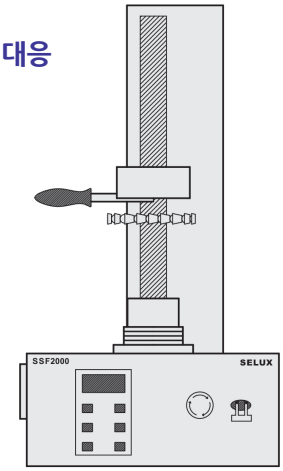
PRODUCT INFORMATION

■툴 프레셋터 전용 공구입니다. ■Tool presetter optional accessories.
■Special size도 제작합니다. ■Special size can be ordered.

Code No.	ød	L
BT40 - BT30 - 20	31.75	20
BT50 - BT30 - 30	31.75	30
BT40 - 30	44.45	30

SHRINK FIT MACHINE

BT, GBT, HSK, SK전제품 대응



PRODUCT INFORMATION

- 홀더 재질 스틸,SUS 소재 대응
- 100V~240V 대응.
- 공구는 초경재질만 대응(하이스 사용불가)
- 한,일 공동 개발제품.

- It is possible to use shrink fit made by steel and SUS.
- Main voltage is 100 ~ 220 voltage.
- Please use just only CARBIDE. (prohibit using HSS)
- It is the product of joint development with Korean and Japaneses.

Code No.	A	B	H
SSF3000	350	360	730

Chucking Time

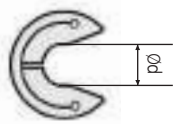
홀더내경	코일내경	초 경	
		삽 입	탈 착
4	30	6	6
6	30	6	6
8	30	6	6
10	30	8	6
12	30	12	6
16	40	20	10
20	55	20	12
32	55	20	30

- ▶ 퓨즈및 내열장갑은 부속되어 있습니다.
- ▶ 코일은 30mm 기본포함 사항입니다. 그외 사이즈는 별도 구매입니다.
- ▶ 자세한 사용법및 주의 사항은 설명서를 참고하여 주시기 바랍니다.
- ▶ 제품고장시 A/S는 당사에 문의하여 주시기 바랍니다.

- ▶ Fuse and gloves are included.
- ▶ 30mm Coil is including basic issue. Other size is a separate purchase.
- ▶ Details of use and precautions refer to instruction.
- ▶ Please contact us for after service.

Stopper

열박음시 공구길이 조정



Code No.	Ød
STP-ø	3, 3.175, 4, 6, 8, 10, 12, 16, 20, 25

TOOL SETTING STAND

CODE No.

BT50 | TSS

- BT50: Shank
- TSS: Tool setting stand

PRODUCT INFORMATION

- ■45。형으로 편리한 사용
- ■HSK용 수직형 타입
- ■Easy to use by 45。type.
- ■The vertical type for HSK.

Code No.	Taper	Angle type
BT 30 - TSS	BT30	45。
BT 40 - TSS	BT40	45。
BT 50 - TSS	BT50	45。
HSK 50 - TSS	HSK50	90。(VERTICAL)
HSK 63 - TSS	HSK63	90。(VERTICAL)
HSK100 - TSS	HSK100	90。(VERTICAL)

UNIVERSAL MAGNETIC BASE

CODE No.

UMB | 340

- UMB: Universal magnetic base
- 340: Length

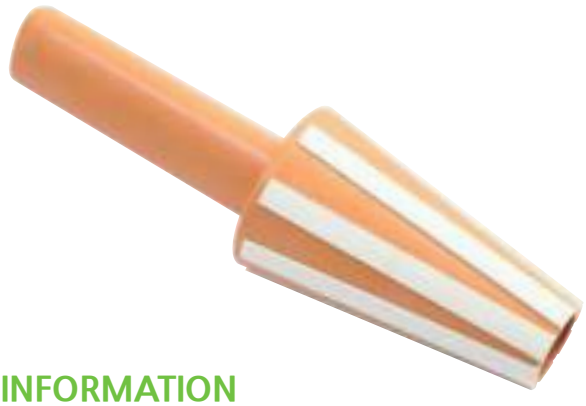
PRODUCT INFORMATION

- ■편리한 조작과 수평길이 340mm의 긴 측정범위
- ■강력한 마그네틱 베이스로 완전고정
- ■클램프 다이얼 하나로 관절부 완벽고정 흔들림 없음.
- ■다이얼 인디게이터는 별도구매

- ■Easy to use and have a long masesuring range that is 340mm.
- ■Complete fix by powerful magnetic base.
- ■It is possible to fix axial joint just only fastening the clamp dail.
- ■The dial indigeiter is not included.

Code No.	Holding Power	BASE SIZE			Arm Length	Weight (kg)
		L	W	H		
UMB-34	80KG	60	50	5	340m	1.5
				5	m	

SPINDLE CLEANER



CODE No.

SP | BT30

Spindle cleaner — Taper

PRODUCT INFORMATION

- 고급 양모지로 제작
- 장비 스핀들내의 정전기 발생을 방지하며 스핀들과 공구의 수명을 연장가능

- The cleaner is made of lambskin.
- It is for antistatic feature on the machine spindle and improve the tool life and the spindle

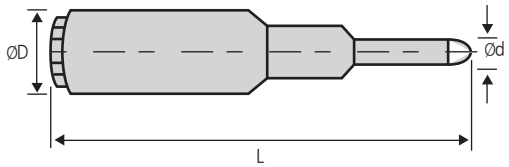
Code No.	Taper
SP - BT30	BT30
SP - BT40	BT40
SP - BT50	BT50
SP - HSK50	HSK50
SP - HSK63	HSK63
SP - HSK100	HSK100

TOUCH POINT SENSOR

CODE No.

TSP | 20

Touch point senser — Shank



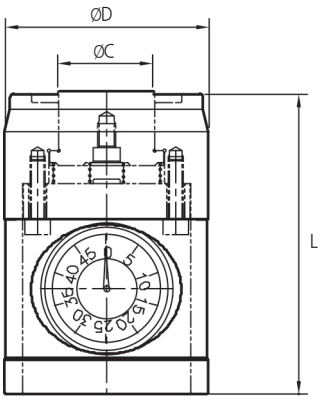
PRODUCT INFORMATION

- 주의: 터치 포인트 센서는 회전시 사용을 금지합니다.

- Notice to optical edge fider that is not suitable used for rotatry.

Code No.	øD	L	ød
TPS - 20	20	158	10
TPS - 32	32	158	10

HEIGHT PRESETER



CODE No.

HP	100
Height preseter	Length

PRODUCT INFORMATION

- MCT/선삭의 커터 길이 설정용
- 설계고도:100±0.003
- 연마된 평행판을 사용하면 간단히 설정 가능.

- For setting length on machining centers.
- Setting height : 100±0.003
- Easy to be calibrated by a ground parallel or gauge block.

Code No.	Hight	øD	øC	L
HP - 100	100±0.003	68	36	100

ZOP-50

CODE No.

ZOP	50
Zop	Length

PRODUCT INFORMATION

- MCT/선삭의 커터 길이 설정용
- 설계고도 : 50±0.005
- 연마된 평행판을 사용하면 간단히 설정 가능.
- 터치시 발광효과

- For setting length on machining centers.
- Setting height : 50±0.005
- Easy to be calibrated by a ground parallel or gauge block.
- Touch grow effects.

Code No.	Hight
ZOP - 50	50±0.005

SPANNER

CODE No.

MC20 | SP

Milling chuck Size — Spanner

MC SPANNER		ER, SSK SPANNER			
Code no.	Size	Code no.	ER	호환성	SSK
MC20 - SP	50-55	**SP**	ER11-SP		SC 6-SP
MC25 - SP	56-61		ER16-SP	←--------→	SC10-SP
MC32 - SP	68-73		ER20-SP		SC13-SP
MC42 - SP	88-96		ER25-SP	←--------→	SC16-SP
			ER32-SP	←--------→	SC20-SP
			ER40-SP	←--------→	SC25-SP

GH SPANNER

CODE No.

GH20 | SP

Size — Spanner

- GH핸들은 사용이 간편하며 고속회전용 너트에 대응합니다.
- 일반스페너의 50%힘만으로 체결이 가능 합니다.

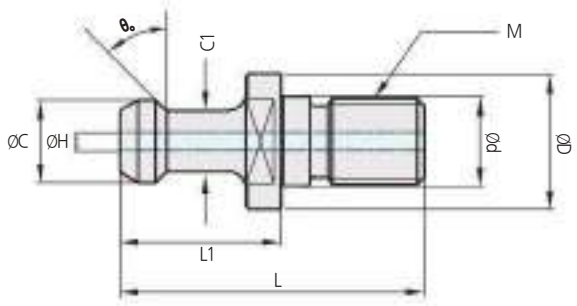
- GH spanner is for high speed nut and easy to use.
- It just need 50% power comparing to genenral spaner.

GH SPANNER			
Code no.	HIGH SPEED MILLING CHUCK	호 환 성	HIGH SPEED GSK COLLET CHUCK
GH6 - SP			SC 6-PH
GH10 - SP			SC10-PH
GH16 - SP			SC16-PH
GH20 - SP	MC20-GH	←--------→	SC20-PH
GH25 - SP	MC25-GH	←-----→	SC25-PH
GH32 - SP	MC32-GH		

PULL STUD BOLT

CODE No.

P40T	1



PRODUCT INFORMATION

- ■인장강도가 높은 소재사용
- ■침탄열처리
- ■완전 연마 처리

- ■Raw material that has excellent tensile strength.
- ■Cementation heat treatment.
- ■Complete grinding face.

Code No.		ød	øD	L	øC	C1	θ°	L1	M	øH
PS - 16	P30T - 1	12.5	16.5	43	11	7	45°	23	M12	
PS - 17	P30T - 2						30°			
	P30T - 1(ø2.5)						45°			2.5
PS - 1	P40T - 1	17	23	60	15	10	45°	35	M16	
PS - 2	P40T - 2						30°			
PS - 73	P40T - 1(ø3)						45°			3
PS - H28	P40T - 1HS									3(O-RING)
PS - 75	P40T - 2(ø3)						30°			3
PS - 08	PS40 - 3F						0°			
PS - G5	PS40 - 1F			54.6				29.6		
PS - G58	PS - G58		22	44.11	18.80	12.45	45°	19.11		
PS - G51	PS - G51									7
PS - 805	PS - 805		23	54	19	14	15°	29		
PS - 806	PS - 806									6
PS - P5	MP - 40			50	15	10	0°	25		
PS - 309	DIN69872 - A40			54	19	14	15°	26		7
PS - 302	DIN69872 - B40									
PS - A1	ISO7388/2 - A40									7
PS - A4	ISO7388/2 - B40		22.5	44.5	18.95	12.95	45°	16.4		7.35
PS - 5	P50T - 1	25	38	85	23	17	45°	45	M24	
PS - 6	P50T - 2						30°			
PS - 5E	P50T - 1(ø7)						45°			7
	P50T - 1HS									7(O-RING)
PS - 6E	P50T - 2(ø7)						30°			7
PS - 0	PS50 - 1F						0°			
PS - H33	PS50 - 1FH									7(O-RING)
	PS50 - 1F(ø7)									7
PS - G45	PS - G45		37	65.2	28.97	20.83	45°	25.2		
PS - G41	PS - G41									10
PS - 809	PS - 809		38	74	28	21	15°	34		
PS - 810	PS - 810									10
PS - P	MP - 50		36	71	24	18	0°	31		
PS - B1	PS50 - 1L		38	110	22	16	30°	72		
PS - 512	DIN69872 - A50		36	74	28	21	15°	34		11.5
PS - 581	DIN69872 - B50									
PS - A3	ISO7388/2 - A50									11.5
PS - A6	ISO7388/2 - B50		37	65.5	29.1	19.6	45°	25.55		11.5

- ▶ 사용할 기계의 풀스터드볼트 사양을 꼭 확인후 주문해 주십시오.
- ▶ Center Through 기계에 오일홀이 없는 풀스터드 볼트사용시에는 단면이 연마되어 있는 제품을 사용하셔야 합니다.

- ▶ Please order after checking specifications of pull stud bolt for Machining center.
- ▶ When you use pull stud bolt without oil hole at the center through machine you must use the pull stud bolt grinded face.

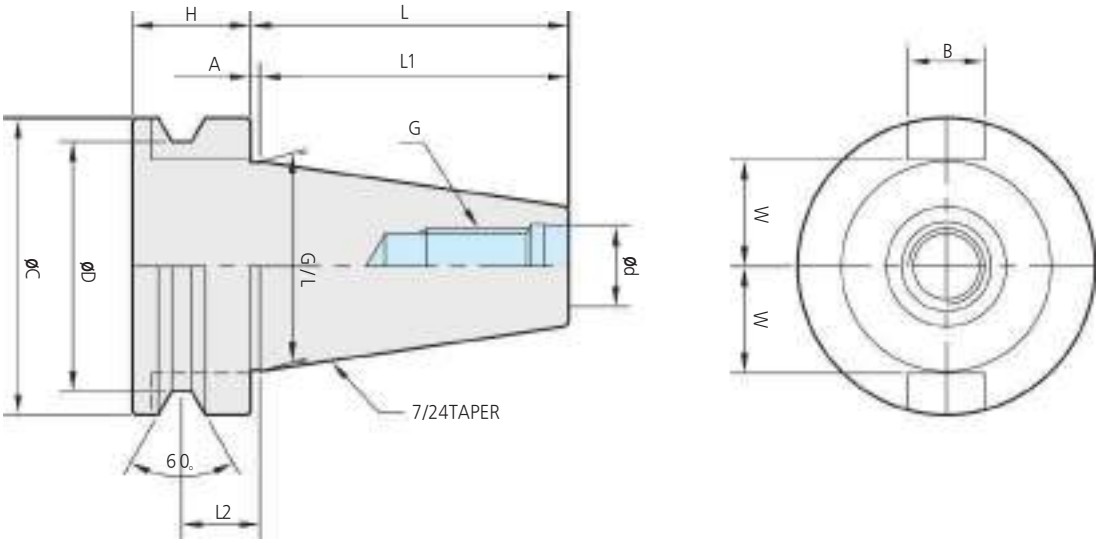
PULL STUD BOLT SPEC

장비 회사명	모델명	공구 형식	PSB	Oil Hole Type
DOOSAN	ACE-TC3200D	BT30	P30T-1	P40T-1(3)
	ACE-TC400			
	ACE-HC400/500	BT40	JISB6339 B40 (PS-805)	P40T-1(3)
	ACE-HP4000/5100			
	ACE-V430			
	ACE-VC500			
	ACE-VM5410/510			
	ACE-VM600			
	ACE-VMD450			
	Mynx 410			
	Mynx NM410			
	ACE-H100	BT50	P50T-1	P50T-1(7)
	ACE-HM500/630/800			
	ACE-HP500/630			
	ACE-VM710			
	ACE-VM900/950			
	Mynx 500			
	Mynx 650			
	Mynx 750			
	NR 510M			
	NR 700			
	NR 5000			
	VM 70(H)			
	VM 84			
	VM 925L			
	VM 560/50			
WA	MX 380/420	BT30	P30T-1	
	VX 380T/420T			
	KV 45/45P	BT40	P40T-1	P40T-1(3)
	VX 400/460			
	VX 500			
	VX 510M/660M			
	VX 700/40			
	VX 700/50	BT50	P50T-1	P50T-1(7)
	KV 60N/90			
	VX 750			
	WA500/50			

장비 회사명	모델명	공구 형식	PSB	Oil Hole Type
SMEC	Any Mill LCV30A/B	BT30	P30T-2	
	Any Mill LCV55S	BT50	P50T-2	P50T-2(7)
	Any Mill LCV650S		P50T-1	P50T-1(7)
	Any Mill LCV66			
	Any Mill LCV80			
	DMC-3000		P50T-1F	PS50-1FH
	PCH40	BT40	P40T-1	P40T-1(3)
	PCH50	BT50	P50T-1	P50T-1(7)
HWACHEON	SIRIUS-1	BT30	P30T-1	
	SIRIUS-550	BT40	P40T-1	P40T-1(3)
	SIRIUS-UL/ULG			
	SIRIUS-12580	BT50	PS50-1F	PS50-1FH
	SIRIUS-650/650N			
	SIRIUS-700			
	SIRIUS-7040			
	SIRIUS-850/850N			
HASS	TM-1/2	BT40	P40T-1	P40T-1(3)
	VF-4SS/3SS/2SS			
	VF-2TR			
	VF-5/50TR	BT50	P50T-1	P50T-1(7)
	VF-9/50			
	VF-8/50			
MAZZAK		BT40		PS-G51
		BT50		PS-G41
MORI SEKI		BT40	PS40-3F	
		BT50	PS50-1F	PS50-1FH
S&T (구 통일)	FX-500H	BT40	P40T-2	P40T-2(3)
	TCH-45		P40T-1	P40T-1(3)
	TNV-40A			
	TNV-80A			
	TCH-50	BT50	P50T-2	P50T-2(7)
	TCH-80			
	TCH80TS			
	TNV-650V			

NATIONAL TAPER SHANK

MAS 403(BT) JIS B6339

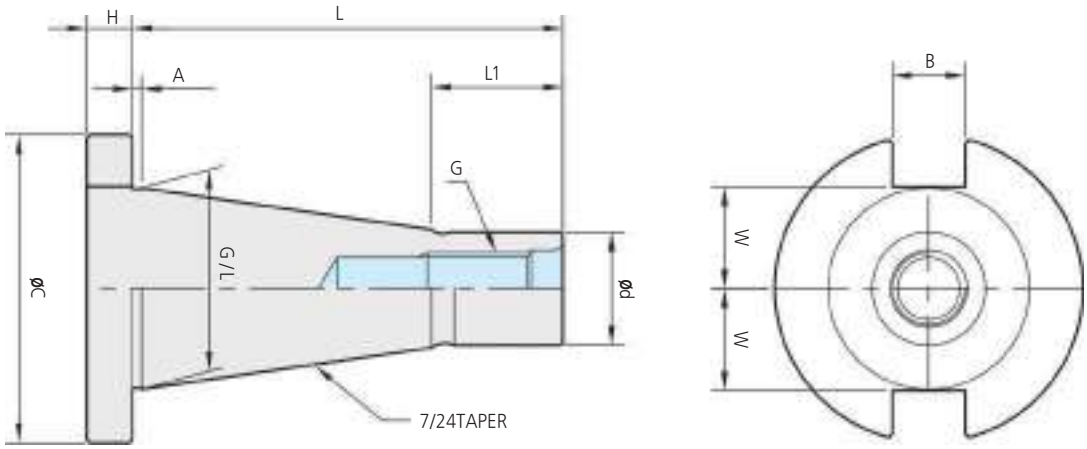


(mm)

Taper	ød	G/L	øD	L	øC	L1	L2	H	A	B	W	G
BT30	12.5	31.75	38	50.4	46	48.4	13.6	20	2	16.1	16.3	M12 x 1.75
BT40	17	44.45	53	67.4	63	65.4	16.6	25	2	16.1	22.6	M16 x 2.0
BT50	25	69.85	85	104.8	100	101.8	13.2	35	3	25.7	35.4	M24 x 3.0
BT60	31	1.7.95	135	164.8	155	161.8	28.2	45	3	25.7	60.1	M30 x 3.5

NATIONAL TAPER SHANK

DIN 2080(NT)
JIS B6101

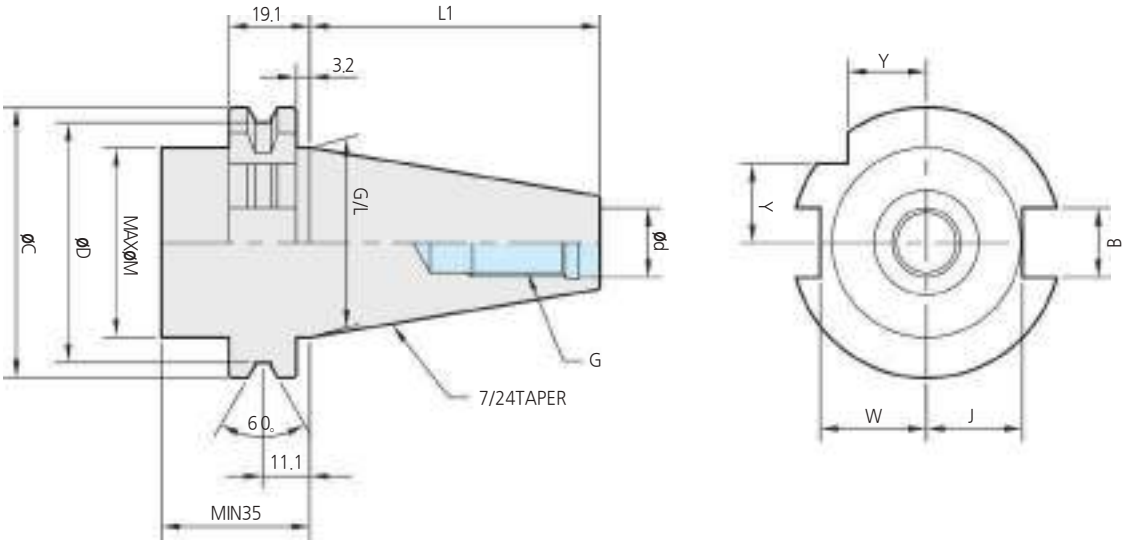


Taper	ød	G/L	L	øC	L1	H	A	B	W	G
NT30	17.4	31.75	70	46	20	10	1.6	16.1	16.2	U1/2”-13
NT40	25	44.45	95	68	29	10	1.6	16.1	22.5	U5/8”-11
NT50	39	69.85	130	98	26	15	3.2	25.7	35	U1/8
NT60	60.2	107.95	210	158	45	16	3.2	25.7	60.1	U1.1/4-7

NATIONAL TAPER SHANK

DIN69871-1A/ISO7388

SK/ISO

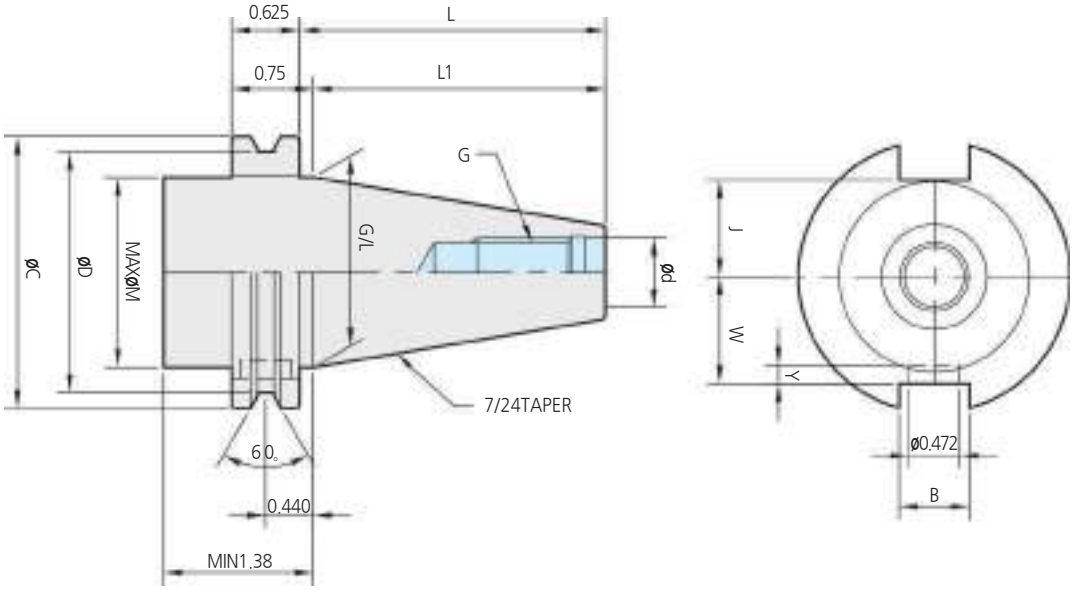


(mm)

Taper	ød	G/L	øD	øC	L1	øM	J	W	B	Y	G
SK30	13	31.75	44.3	50	47.8	75	16.4	19	16.1	15	M12∗1.75
SK40	17	44.45	56.25	63.55	68.4	50	22.8	25	16.1	18.5	M16∗2.0
SK50	25	69.85	91.25	97.5	101.75	80	35.5	37.7	25.7	30	M24∗3.0

NATIONAL TAPER SHANK

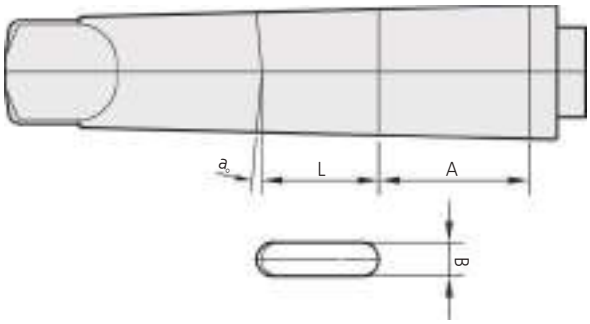
ANSI B5,50
CATERPILLAR



(inch)

Taper	ød	G/L	øD	L	øC	L1	øM	J	W	B	Y	G
CAT30	0.516	1.250	1.531	2.000	1.812	1.875	1.250	0.640	0.735	0.645	0.218	UNC1/2”-13
CAT40	0.641	1.750	2.219	2.812	2.5000	2.687	1.750	0.890	0.985	0.645	0.218	UNC5/8”-11
CAT50	1.031	2.750	3.594	4.125	3.874	4.000	2.750	1.390	1.485	1.020	0.343	UNC1”-8

COTTER PIN SPEC



PRODUCT INFORMATION

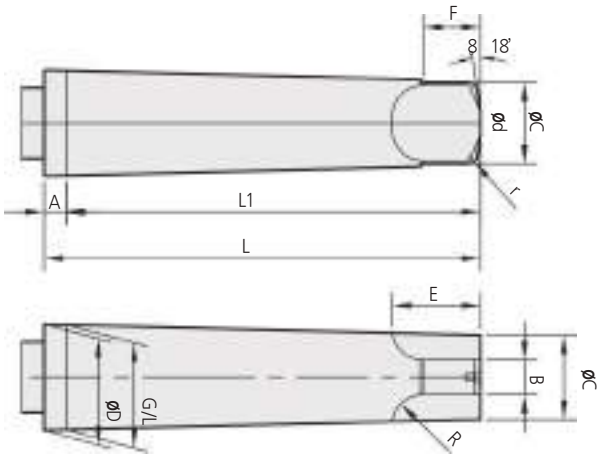
■대형 Endmill이나 Tapping등의 중절삭 가공시 추력의 발생으로 툴의 빠짐을 Cotter pin을 박음으로 방지가능.
■장비 업체에 따라 Cotter pin 구멍이 다르므로 기계 회사명 및 A, B, L 치수를 알려주십시오.

■Mounting cotter pin can protect the tools drap, such as big endmill or tap due to occurring thrust in heavy duty.
■Cotter pin types are different according to machine manufacturer, please point out machine manufacturer and the size of “A”, “B”, “L” when you order.

Taper	Maker	Cotter Pin Code	A	L	B	a。	Machine
MT4	Aoyama	A	44	25	12.2	-	
	Yoshida	Y	10	18	8.0	-	YR3
			14	15	8.0	-	YR2
			9	21	8.0	-	YD2, YD3
	Ooya	O	5	18	8.2	-	R2000
			9	10	8.2	-	RA2-1300
			10	10	8.2	-	RE-1250A
	Okuma	B	26	30	8.2	-	
	Ikegai	I	33	24	10.0	8。18’	
	Kurashiki	K	26.3	28.7	12.2	5。	
MT5	Aoyama	A	48	38	13.3	5。	
	Yoshida	Y	9	31.7	13.0	5。	
	Ooya	O	22	15	12.2	-	RE2-1300
			15	20	12.2	-	RE3-1600
	Okuma	B	27	38.8	12.2	3。30’	
	Ikegai	I	52	33	13.0	5。	
	Kurashiki	K	52	33	13.0	5。	
	Nomura	N	27	35	12.2	8。18’	
	Shinada	S	37	37	16.0	-	
	Toshiba	T	50	35	13.0	-	
	Daewoo	D	52	33	13.0	5。	
MT6	Ooya	O	25	28	19.3	-	
	Okuma	B	37	46.7	16.4	3。30’	
	Ikegai	I	52	42	16.2	5。	
	Kurashiki	K	54	37	16.3	8。18’	
	Nomura	N	27	37.6	16.2	8。18’	
	Shinada	S	56.5	46	19.0	-	
	Toshiba	T	54	40	16.0	-	
	Daewoo	D	52	45	16.2	5。	
	Wia	W	54	41.3	16.2	-	

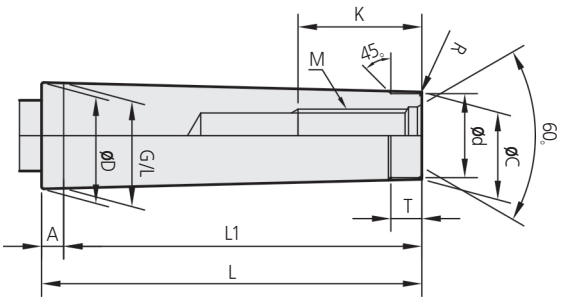
MORSE TAPER SHANK

JIS B4003



(mm)

MT No.	Taper	Angle(a/2)	G/L	øD	L	øC	L1	A	ød	B	E	F	R	r
MT0	1/19.212	1。29 26.91"	9.045	9.201	59.5	6.104	56.5	3.0	6.0	3.9	10.5	6.5	6.5	1.0
MT1	1/20.047	1。25 43.46"	12.065	12.240	65.5	8.972	62.0	3.5	8.7	5.2	13.5	8.5	8.5	1.2
MT2	1/20.020	1。25 50.04"	17.780	18.030	80.8	14.034	75.0	5.0	13.5	6.3	16	10	10	1.6
MT3	1/19.922	1。26 15.72"	23.825	24.076	99.0	19.107	94.0	5.0	18.5	7.9	20	13	13	2.0
MT4	1/19.254	1。29 15.21"	31.267	31.605	124.0	25.164	117.5	6.5	24.5	11.9	24	16	16	2.5
MT5	1/19.002	1。30 26.02"	44.399	44.741	156.0	36.531	149.5	6.5	35.7	15.9	29	19	19	3.0
MT6	1/19.180	1。29 35.86"	63.348	63.765	218.0	52.399	210.0	8.0	51.0	19.0	40	27	27	4.0
MT7	1/19.231	1。29 21.61"	83.058	83.578	296.0	68.186	286.0	10	66.8	28.6	54	35	35	5.0

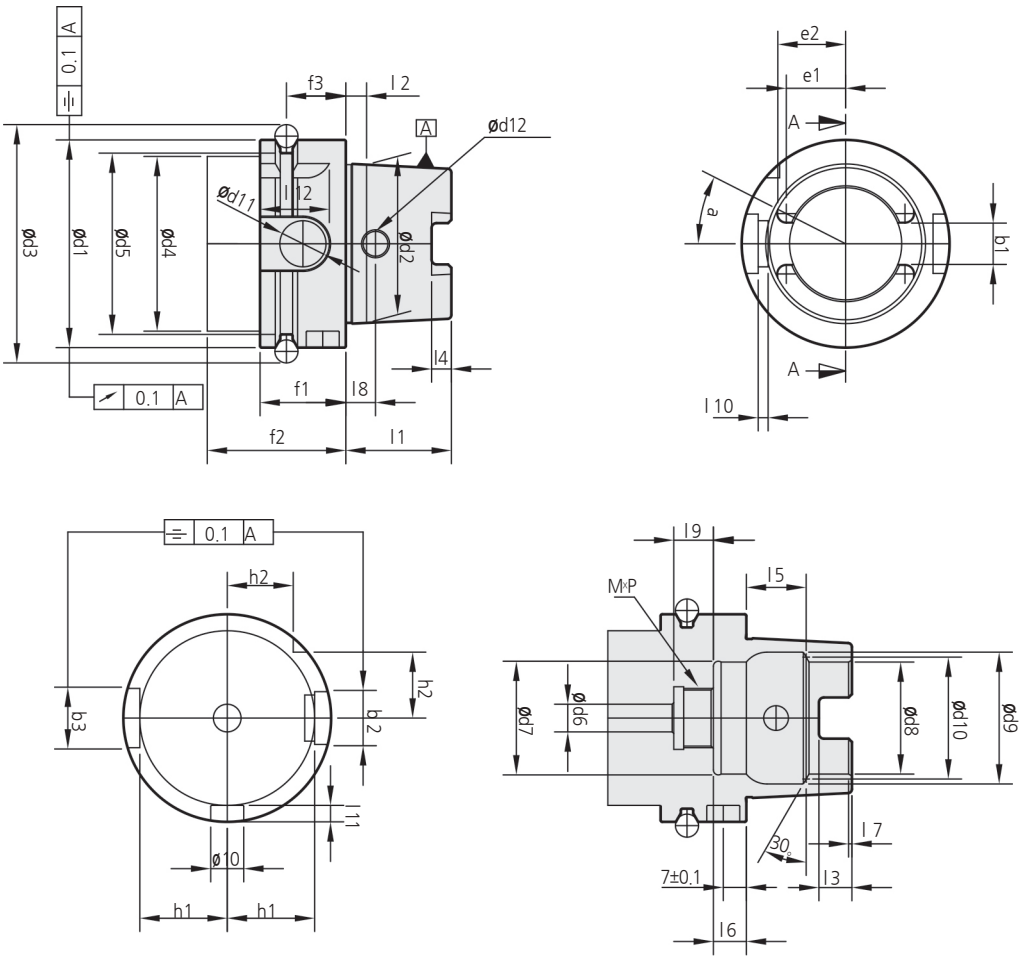


(mm)

MT No.	Taper	Angle(a/2)	G/L	øD	L	øC	L1	A	ød	M	K	T	R
MT0	1/19.212	1。29'26.91"	9.045	9.201	53	6.442	50	3.0	6.0	-	6.5	4	0.3
MT1	1/20.047	1。25'43.46"	12.065	12.240	57	9.396	53.5	3.5	9.0	M6	8.5	5	0.5
MT2	1/20.020	1。25'50.04"	17.780	18.030	69	14.583	64	5.0	14.0	M10	10	5	0.5
MT3	1/19.922	1。26'15.72"	23.825	24.076	86	19.759	81	5.0	19.0	M12	13	7	0.6
MT4	1/19.254	1。29'15.21"	31.267	31.605	109	25.943	102.5	6.5	25.0	M16	16	9	1.0
MT5	1/19.002	1。30'26.02"	44.399	44.741	136	37.584	129.5	6.5	35.7	M20	19	9	2.5
MT6	1/19.180	1。29'35.86"	63.348	63.765	190	53.856	182	8.0	51.0	M24	27	12	4.0
MT7	1/19.231	1。29'21.61"	83.058	83.578	260	70.058	250	10	65.0	M33	35	18.5	5.0

HSK TAPER SHANK(A-TYPE)

DIN69893-1
ISO12164-1:2001



(mm)

Taper	ød1	ød2	ød3	ød4	ød5	ød6	ød7	ød8	ød9	ød10	b1	b2
HSK50	50	38.009	59.3	42	43	6.8	26.5	26	32	29	10.54	14
HSK63	63	48.010	72.3	53	55	8.4	34.5	34	40	37	12.54	18
HSK100	100	75.013	109.75	88	92	12	63.5	53	63	58	20.02	22

Taper	ød3	a	e1	e2	h1	h2	f1	f2	f3	l1	l2	l3
HSK50	12	27。±3	13.88	16.26	21	15.5	26	42	18	25	5	7.5
HSK63	16		17.99	20.37	26.5	20.0	26	42	18	32	6.3	10
HSK100	20		27.37	32.25	44	31.5	29	45	20	50	10	15

Taper	14	15	16	17	18	19	l10	l11	l12	ø11	ød12	M&P
HSK50	4.5	14.13	10	1	7.5	10	2.7	5.1	19	11	6	M16*1.0
HSK63	6	18.13	10	1	9	12	2.7	5.0	21	14	7.5	M18*1.0
HSK100	10	28.56	12.5	1.5	15	16	5.2	4.9	24	16	12	M24*1.5

安全上 의 注意 (Attention for Safety)

當社의 製品을 愛用해 주셔서 대단히 감사합니다.
항상 製品의 品質向上 및 安全한 製品을 만들기 위하여 努力하고 있습니다.
弊社製品의 取扱 및 使用時 下記 事項에 注意하여 주시기 바랍니다.
Thank you very much for being used habitually our product.
We're trying to produce safe products and quality improvement.
Please, pay attention the following items when handle and use of our company's products.

取扱 부주의의 경우 危險한 狀況이 發生되는 경우가 있습니다.
危險을 防止하기 위한 注意事項 이므로 取扱 說明書의 內容을 반드시 읽고 注意事項을 준수하여 作業 하여 주시기 바랍니다.
In the case of mishandling there is occasion that critical situation is occurred.
For preventing danger, read contents of the instructions certainly and observe and work caution.

安全上 의 注意 (Safety Notice)

★ 製品을 들고 운반 시 BOX에서 꺼낼 때 落下에 注意하여 주십시오.
★ BOX가 많을 경우나 무거운 것을 取扱시는 특히 주의해 주세요. 必要에 따라서는 運搬 機具를 사용해 주십시오.

★ When take out from the box in process of transport. pay attention in descent.
★ Pay attention specially, when handle a lot of or heavy ghing. if necessary, use conveyance instrument.

切削工具 取扱時 注意 (Attention at cutting tool treatment)

★ 切削工具는 항상 Presetter나 治具에 確實히 固定한 후 作業하여 주십시오.
★ 切削工具를 Holder에 끼울 때는 날부위를 손으로 直接 만지는 일이 없도록 注意하여 주십시오.
★ 切削工具 탈착용 工具는 지정된 工具를 사용하여 주십시오. 탈착구가 安全하게 장착 되었는지 확인 후 천천히 잠궈 주십시오.
Hammer나 Pipe를 사용하여 잠그지 말아 주십시오.

★ Cutting tool works after fixing certainly to presetter or fixture components.
★ Do not to touch the edge directly with hands and pay attention when insert cutting tool to holder.
★ Use designated tool for desorption of cutting tool. Please lock slowly after confirmation what desorption part is inserted safe.
Do not use hammer or pipe to lock.

加工時의 注意 (Attention at processing)

★ Holder의 回傳中에는 만지지 말아 주십시오. 다칠 수 있습니다.
★ 加工中에는 高熱의 切削 Chip이 튑니다. 切傷, 火傷의 염려가 있으니 安全 Cover, 保護안경을 着用해 주십시오.
★ 高壓 Coolant 加工의 절차시 切削工具 先端에 손이나 신체를 가까이 하지 마십시오. 誤操作의 경우 切削工具가 튀어 나갈 수 있습니다.
★ Holder등을 本來의 目的 이외에 使用시 改造, 分解하지 않도록 해 주십시오. 事故의 原因이 됩니다.

★ Please do not touch during holder's revolution. can be hurt.
★ Cutting chip of high temperature bounds during processing. As there is worry of incised wound and burn put safety cover and goggle.
★ In the case of malfunction, cutting tool can bound. Therefore, keep hands or body distance from vertical hem of cutting tool on process of high tension coolant.
★ Remodeling and disassembly cause and accidents.

加工時의 注意 (Attention at processing)

★ Chuck類을 長期間 保管하는 경우 切削工具를 分解해 保管해 주십시오. 保持力 低下의 原因이 됩니다. 만약 長期間 保管된 경우에는 Cap을 느슨하게 하고 다시 Chucking을 한 후 가공해 주십시오.
★ 切削 Chip은 Air로 깨끗이 불고 防淸油를 塗布하여 Taper 부분에 손상을 입지 않도록 保管해 주십시오.
★ 以上, 弊社製品을 使用하는데 있어 安全上의 基本的인 注意項目들이나 各製品별에 대한 注意項目은 取扱說明書에 記載되어 있습니다. 製品 使用前에 반드시 取扱說明書를 읽어 주십시오. 그 밖에 詳細한 내용은 弊社에 문의 바랍니다.

★ In case of keeping kinds of chuck for a long term. please classify and keep cutting tool. It cause decline of the maintenance power. If it is kept for a long term, let the cap out chuck again before processing.
★ Blows cutting clip cleanly by air and spreads rust preventing oil for keeping not to damage for taper segment.
★ The facts mentioned above are basic matters that require attention to use our company products safety. Notice of each products are in the instruction manual. before using products, read instructions certainly. for further information, please contact our compan

D'ANDREA®

TECHNOLOGY FOR HIGH PRECISION

Marino D'Andrea, the founder
Marino D'Andrea, il fondatore

The first boring and facing head
La prima testa per sfacciare e alesare

Golden Compass
award for industrial design

The first D'Andrea logo type (1961)
Il primo logo tipo di D'Andrea (1961)

• Quality, Experience, Technology, High precision, Innovation, Professional skills are the strongest points that made the firm and the whole D'Andrea production winning on the Italian and the worldwide market.

• Qualità, Esperienza, Tecnologia, Alta precisione, Innovazione, Competenza, sono i punti di forza che hanno reso vincente l'azienda e tutta la produzione D'Andrea sul mercato nazionale ed internazionale.

• A tradition going back over 50 years in the field and a big passion for mechanics have been allowing D'Andrea to go on strengthening its position on domestic and international markets over the years. D'Andrea now has a 30% share of the market for modular systems and a 10% share of the entire toolholders sector (including modular systems), at the top in its sector in Italy. D'Andrea is internationally prominent in the field of large diameters precision boring.

• Una tradizione con più di 50 anni di attività nel settore e una grande passione per la meccanica hanno fatto sì che, nel corso degli anni, D'Andrea consolidasse sempre di più la sua posizione sul mercato nazionale ed internazionale. Attualmente D'Andrea detiene il 30% della quota di mercato dei sistemi modulari e il 10% nell'intero settore dei portautensili (comprensivo anche dei modulari) posizionandosi come leader nazionale. A livello internazionale, D'Andrea detiene la posizione di leadership nell'alesatura di precisione dei grandi diametri.

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D'ANDREA

MODULHARD'ANDREA

- WHAT IS MHD'?
- WAS IST DAS MHD'?
- ¿QUÉ ES EL MHD'?
- QU'EST-CE QUE LE MHD'?
- COS'È L'MHD'?

KR MHD는 매우 견고하고 유연성이 필요한 보링, 밀링, 드릴링, 탭핑 작업을 하는 머신닝센터에서 적합한 초정밀 모듈러 시스템의 툴 홀더 입니다. 원통 모양과 원뿔 모양의 홀더의 연결은 11개 크기로 구성되어 있으며 basic arbor인 **HSK, BT, DIN**, 캡토 샹크, 익스텐션, 리덕션 그리고 아덥터를 포함한 모든 요소들을 호환하며 사용할 수 있습니다. 직경 2.5mm ~ 2800mm의 광범위한 보링작업은 **MHD** 라인을 가지고 황삭 작업과 2마이크론 미세 조정이 가능한 정삭 작업을 완벽하게 가공할 수 있습니다.

GB High precision modular toolholders for machine tools and machining centers that allow boring, milling, drilling, and tapping operations to be carried out with extreme flexibility and rigidity. The cylindrical-conical coupling comes in eleven, sizes, ensuring the interchangeability of all the elements of the system that includes the base arbors HSK, DIN, BT, CAT and Polygon-shank, toolholder extensions, reductions, and adapters. The broad boring program for machining diameters from 2.5 to 2800 mm completes the MHD' line with roughing double-bit heads and centesimal and micrometric Testarossa finishing heads with a 2µm sensitivity adjustment.

D Modulare Hochpräzisions-Werkzeughalter für Werkzeugmaschinen und Bearbeitungszentren, die mit extremer Flexibilität und Starre Ausbohr-, Fräs-, Bohr-, und Gewindebohrarbeiten ermöglichen. Die zylindrisch-konische Verbindung in elf Größen garantiert die Austauschbarkeit aller Elemente des Systems, das Basisanschlüsse HSK, DIN, BT und CAT und Polygon-shank Verlängerungen, Reduktionen und Adapter für Werkzeughalter mit einschließt. Das vielseitige Ausbohrprogramm zur Bearbeitung von Durchmessern von 2,5 bis 2800 mm, vervollständigt die Linie MHD' mit den zweischneidigen Grobbearbeitungsköpfen und den zentesimalen und mikrometrischen Feinbearbeitungsköpfen Testarossa mit einer Einstellfeinheit von 2µm.

E Portaherramientas modulares de alta precisión para máquinas herramientas y centros de mecanizado que permiten efectuar con extrema flexibilidad y rigidez, operaciones de mandrinado, fresado, taladrado y roscado. El acoplamiento cilíndrico-cónico disponible en once tamaños, garantiza la intercambiabilidad de todos los elementos del sistema, que incluye uniones base HSK, DIN, BT y CAT y Polygon-shank, prolongadores, reducciones y adaptadores portaherramientas. El amplio programa de mandrinado para la elaboración de diámetros de 2,5 a 2800 mm, completa la línea MHD' con los cabezales de desbaste de doble cuchilla y los cabezales de acabado centesimales y micrométricos Testarossa con sensibilidad de ajuste de 2µm.

I Portautensili modulari di alta precisione per macchine utensili e centri di lavoro che consentono di eseguire con estrema flessibilità e rigidità, operazioni di alesatura, fresatura, foratura e maschiatura. L'accoppiamento cilindrico-conico disponibile in undici grandezze, garantisce l'intercambiabilità di tutti gli elementi del sistema, che include attacchi base HSK, DIN, BT, CAT e Polygon-shank, prolunghe, riduzioni e adattatori portautensili. Il ricco programma di alesatura per la lavorazione di diametri da 2,5 a 2800 mm, completa la linea MHD' con le testine di sgrossatura bitaglienti e le testine di finitura centesimali e micrometriche Testarossa con sensibilità di regolazione di 2µm.

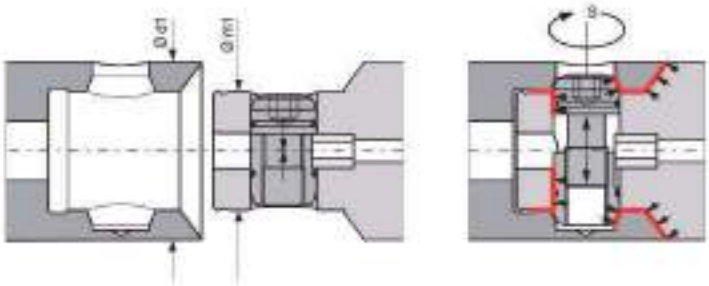
KR MHD의 연결은 밀링과 보링작업동안 최고의 견고함을 보증하기 때문에 MHD 툴링 시스템의 핵심입니다.
MHD 연결은 특허된 원기둥, 원뿔모양의 홀더의 연결 및 고정, 크램핑을 위한 원통 모양의 익스텐딩 볼트에 의해서 완성됩니다.

GB **The MHD' coupling** is the heart of the tool system as it ensures utmost rigidity and concentricity during milling and boring operations. This is achieved by the (patented) cylindrical-conical fit and by a radial expanding bolt for clamping and driving.

D **Die MHD' Kupplung** ist das Kernstück des MODULHARD'ANDREA, da sie maximale Starrheit und Konzentrizität beim Fräsen und Bohren sichert. Das wird durch die (patentierte) zylindrisch-konische Passfläche und den radialen Spreizbolzen für Axialspannung und Mitnahme erreicht.

E **El acoplamiento MHD'** es el punto de fuerza del MODULHARD'ANDREA, porque permite fresar y mandrinar con la máxima rigidez y concentricidad, gracias al acoplamiento (patentado) cilíndrico-cónico y al perno radial expansible para el blocaje axial y el arrastre.

I **L'attacco MHD'** è il punto di forza del Modulhard'andrea perché consente di fresare ed alesare con massima rigidità e concentricità grazie all'accoppiamento (brevettato) cilindrico-conico e al perno radiale espandibile per il bloccaggio assiale e il trascinamento.



MHD'	Ø d1	Ø m1	S	Nm
MHD' 14	14	10	2,5	2 - 2,5
MHD' 16	16			
MHD' 20	20	13	3	4 - 4,5
MHD' 25	25	16	3	6,5 - 7,5
MHD' 32	32	20	4	7 - 8
MHD' 40	40	25	5	16 - 18
MHD' 50	50	32	6	30 - 35
MHD' 63	63	42	8	70 - 80
MHD' 80	80			
MHD' 110	110	76	14	200 - 220
MHD' 140	140			

- GENERAL INFORMATIONS
- ALLGEMEINES
- INFORMACIONES GENERALES
- GENERALITES
- INFORMAZIONI GENERALI

KR 1 툴 클램프에 기본 아바를 위치 시킨다.
2 구성품의 익스텐딩 핀이 돌출되지 않는 것을 확인하고 필요한 구성품(어덥터, 익스텐션, 보링해드)을 아바에 넣는다.
3 제공된 렌치나 토크렌치로 익스텐딩 핀을 시계 방향으로 돌려서 완전히 고정시킨다.

GB **Assembly:** Secure the arbor to a rigid support. Fit the required component (adaptor, extension, boring head etc.) to the arbor ensuring that the radial expanding pin does not project from the cylindrical part. Clamp the component by turning the radial pin clockwise with the exagonal wrench provided or with a torque wrench. **Disassembly:** secure the arbor to a rigid support. Unlock the radial pin by turning it counterclockwise.

D **Montage:** Die Grundaufnahme in einer Halterung befestigen. Gewünschtes Komponente (Reduzierung, Verlängerun, Ausdrehkopf usw.) einsetzen. Darauf achten, dass der radiale Spreizbolzen nicht aus dem zylindrischen Teil heraus ragt. Element durch Rechtsdrehen des Spreizbolzens mit dem mitgelieferten Sechskantschlüssel oder einem Drehmomentschlüssel festklemmen. **Demontage:** Grundaufnahme in einer Halterung befestigen. Spreizbolzen durch Linksdrehen lösen.

E **Montaje:** Asegurar el acoplamiento base en un soporte. Montar el elemento deseado (reducción, prolongación, cabezal para mandrinar etc.) asegurándose que el perno radial no sobresalga del núcleo cilíndrico. Fijar girando en sentido horario el perno radial con la llave exagonal en dotación o con una llave torsiométrica. **Desmontaje:** Asegurar el acoplamiento base en un soporte. Desbloquear, girando a fondo en sentido antihorario, el perno radial.

I **Montaggio:** Assicurare l'attacco base in un supporto. Montare l'elemento desiderato (riduzione, prolunga, testina per alesare ecc.) assicurandosi che il perno radiale non sporga dal mozzo cilindrico. Bloccare ruotando in senso orario il perno radiale con la chiave esagonale in dotazione o con una chiave torsiometrica. **Smontaggio:** Assicurare l'attacco base in un supporto. Sbloccare, ruotando a fondo in senso anticorario, il perno radiale.

MODULHARD'ANDREA

- ARBORS EXTENSIONS REDUCTIONS
- GRUNDAUFNAHMEN VERLÄNGERUNGEN REDUZIERUNGEN
- ACOPLAMIENTOS BASE PROLONGACIONES REDUCCIONES
- MANDRINS RALLONGES RÉDUCTIONS
- ATTACCHI BASE PROLUNGHE RIDUZIONI

KR **아바** D'ANDREA는 DIN69871 A–B, MAS 403BT, DIN 2080, ANSI–CAT, ISO 26623–1등 모든 규격의 아바를 AT3 공차로 생산합니다.
D'ANDREA는 직경 125mm이상, 250mm 이상의 깊이의 홀가공시 MHD80,110,140 사용을 권장합니다.
익스텐션(EXTENSIONS) 다양한 길이의 익스텐션들은 가공 깊이에 따라 유연하게 적용할 수 있도록 각각의 MHD 규격에 연결하여 사용할 수 있습니다.
리덕션(REDUCTION) 작은 규격의 MHD 구성 요소들을 리덕션으로 연결하여 큰 규격의 구성요소들과 연결하여 사용할 수 있습니다.

GB **ARBORS.** Arbors are manufactured in accordance with DIN 69871 A-B, MAS 403 BT, DIN 2080, ANSI-CAT, DIN 69893-A, ISO 26623-1 and are made of carburized steel, hardened and ground to AT3 tolerance. Arbor sizes MHD' 80, 110 and 140 are recommended for heavy milling and for bores deeper than 250 mm and exceeding 125 mm diameter. Special arbors are available on request.
EXTENSIONS. Extensions of various lengths are available for each MHD' size, allowing greater flexibility in machining depth.
REDUCTIONS. MHD' components of a smaller size can be used by means of adaptor sleeves which allow greater interchangeability and ensure tool rigidity.

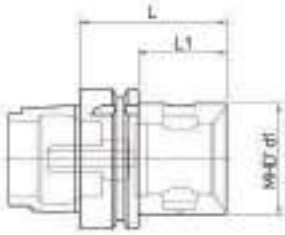
D **GRUNDAUFNAHMEN.** Die Grundaufnahmen entsprechen den Normen DIN 69871 A-B, MAS 403 BT, DIN 2080, ANSI-CAT, DIN 69893-A, ISO 26623-1. Sie werden aus Einsatzstahl gefertigt, gehärtet und auf Toleranz AT3 geschliffen. Für schwere Fräsarbeiten und Bohrungen mit Tiefen über 250 mm und Durchmessern über 125 mm ist der Einsatz von Grundaufnahmen Größe MHD' 80, 110 und 140 zweckmäßig. Grundaufnahmen in Sonderausführung sind auf Anfrage lieferbar.
VERLÄNGERUNGEN. Für jede MHD' Größe sind Verlängerungen verschiedener Länge vorhanden, die eine größere Anpassungsfähigkeit an die Bearbeitungstiefe ermöglichen.
REDUZIERUNGEN. Die Reduzierungen ermöglichen die Verwendung der Komponenten kleinerer MHD' Größen. Damit ist eine umfassende Austauschbarkeit und größere Steifigkeit gegeben.

E **ACOPLAMIENTOS BASE.** Los acoplamientos son realizados según las normas DIN 69871 A-B, MAS 403 BT, DIN 2080, ANSI-CAT, DIN 69893-A, ISO 26623-1 y son construidos en acero cementado, templado y rectificado según tabla AT3. El empleo de acoplamientos con tamaños MHD' 80, 110 y 140 son aconsejables para operaciones de fuerte fresado y para los mandrinados profundos, por encima de los 250 mm con diámetros superiores a 125 mm. A petición, se pueden construir acoplamientos especiales.
PROLONGACIONES. Para cada tamaño de MHD' existen prolongaciones de diferentes longitudes que permiten optimizar las profundidades de mecanización deseadas.
REDUCCIONES. Las reducciones permiten utilizar componentes de un tamaño MHD' más pequeño y, por lo tanto, tener mayor intercambiabilidad y estabilidad de la herramienta.

I **ATTACCHI BASE.** Gli attacchi sono realizzati secondo le norme DIN 69871 A-B, MAS 403 BT, DIN 2080, ANSI-CAT, DIN 69893-A, ISO 26623-1 e sono costruiti in acciaio cementato, temperato e rettificato secondo la tabella AT3. L'impiego di attacchi con grandezze MHD' 80, 110 e 140 sono consigliati per operazioni di fresatura pesante e per alesature profonde oltre i 250 mm con diametri superiori a 125 mm. A richiesta si possono costruire attacchi speciali.
PROLUNGHE. Per ogni grandezza di MHD' esistono prolunghe di differenti lunghezze che consentono di ottimizzare le profondità di lavorazione desiderate.
RIDUZIONI. Le riduzioni permettono di utilizzare componenti di una grandezza MHD' più piccola e quindi avere maggiore intercambiabilità e stabilità dell'utensile.

- ARBORS
- GRUNDAUFNAHMEN
- ACOPLAMIENTOS BASE
- MANDRINS
- ATTACCHI BASE

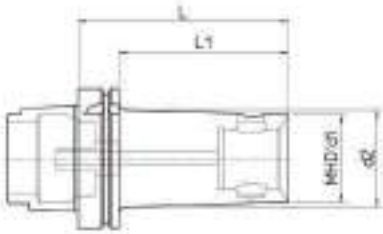
DIN 69893
HSK-A



- Supplied with coolant tube
- Lieferung inklusive Kühlmittelrohr
- Completo con racor para el refrigerante
- Pourvu de raccord pour liquide d'arrosage
- Completo di raccordo per il refrigerante

HSK-A	REF.	CODE	MHD' d_1	L	L_1	kg
40	HSK-A40 MHD'32.48	41 6 32 15 040 20	32	48	28	0.4
50	HSK-A50 MHD'50.66	41 6 50 15 050 20	50	66	–	0.6
63	HSK-A63 MHD'40.60	41 6 40 15 063 20	40	60	34	0.7
	HSK-A63 MHD'50.66	41 6 50 15 063 20	50	66	40	0.9
	HSK-A63 MHD'63.75	41 6 63 15 063 20	63	75	–	1.1
80	HSK-A80 MHD'50.70	41 6 50 15 080 20	50	70	44	1.5
	HSK-A80 MHD'63.80	41 6 63 15 080 20	63	80	54	1.8
	HSK-A80 MHD'80.86	41 6 80 15 080 20	80	86	–	2.1
100	HSK-A100 MHD'50.72	41 6 50 15 100 20	50	72	43	2.4
	HSK-A100 MHD'63.82	41 6 63 15 100 20	63	82	53	2.7
	HSK-A100 MHD'80.88	41 6 80 15 100 20	80	88	59	3

DIN 69893
HSK-A



- Supplied with coolant tube
- Lieferung inklusive Kühlmittelrohr
- Completo con racor para el refrigerante
- Pourvu de raccord pour liquide d'arrosage
- Completo di raccordo per il refrigerante

HSK-A	REF.	CODE	MHD' d_1	d_2	L	L_1	kg
63	HSK-A63 MHD'40.120	41 6 40 15 063 28	40	46	120	94	1.4
	HSK-A63 MHD'50.120	41 6 50 15 063 28	50	–			1.7
100	HSK-A100 MHD'50.120	41 6 50 15 100 28		60		91	3.2
	HSK-A100 MHD'63.150	41 6 63 15 100 28	63	70	150	121	4.5
	HSK-A100 MHD'80.180	41 6 80 15 100 28	80	–	180	151	6.5

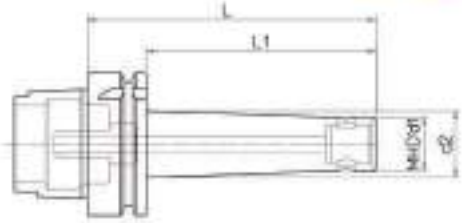
D'ANDREA

MODULHARD'ANDREA

- ARBORS
- GRUNDAUFNAHMEN
- ACOPLAMIENTOS BASE
- MANDRINS
- ATTACCHI BASE

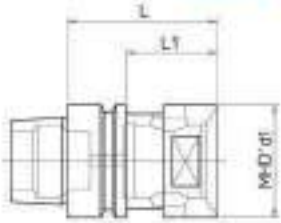
DIN 69893
HSK-A

- Supplied with coolant tube
- Lieferung inklusive Kühlmittelrohr
- Completo con racor para el refrigerante
- Pourvu de raccord pour liquide d'arrosage
- Completo di raccordo per il refrigerante



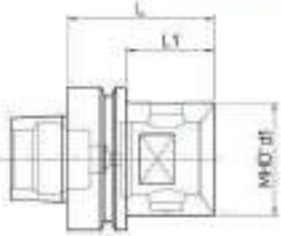
HSK-A	REF.	CODE	MHD' d_1	d_2	L	L_1	kg
63	HSK-A63 MHD'16.63	41 6 16 06 563 20	16	17	63	37	0.7
	HSK-A63 MHD'16.100	41 6 16 10 563 20		19.5	100	74	0.8
	HSK-A63 MHD'20.63	41 6 20 06 563 20	20	-	63	37	0.6
	HSK-A63 MHD'20.90	41 6 20 09 563 20		22.5	90	64	0.8
	HSK-A63 MHD'20.125	41 6 20 12 563 20		25	125	99	0.9
	HSK-A63 MHD'25.63	41 6 25 06 563 20	25	-	63	37	0.7
	HSK-A63 MHD'25.90	41 6 25 09 563 20		27	90	64	0.9
	HSK-A63 MHD'25.125	41 6 25 12 563 20		29.5	125	99	1
	HSK-A63 MHD'32.90	41 6 32 09 563 20	32	33.5	90	64	1
	HSK-A63 MHD'32.125	41 6 32 12 563 20		36	125	99	1.2

DIN 69893
HSK-E



HSK-E	REF.	CODE	MHD' d_1	L	L_1	kg
40	HSK-E40 MHD'32.42	41 6 32 15 040 25	32	42	22	0.5
50	HSK-E50 MHD'50.66	41 6 50 15 050 25	50	66	-	0.6
63	HSK-E63 MHD'50.66	41 6 50 15 063 25			40	0.9

DIN 69893
HSK-F



HSK-F	REF.	CODE	MHD' d_1	L	L_1	kg
63	HSK-F63 MHD'50.65	41 6 50 15 063 26	50	65	39	0.8

ISO 26623-1
PSC

fig.1

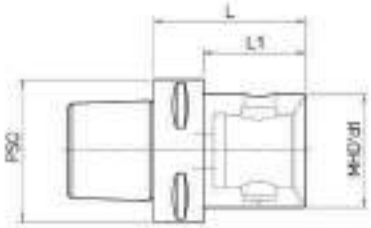
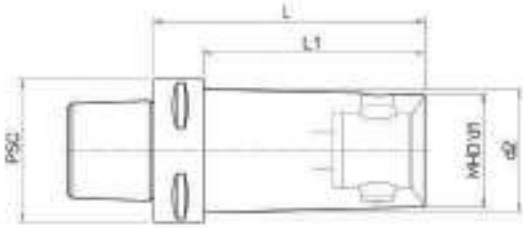
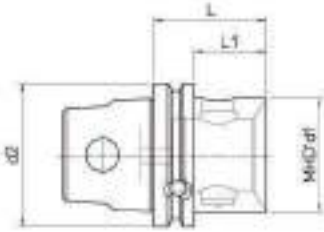


fig.2



PSC	REF.	CODE	MHD' d1	d2	L	L1	Kg.	fig.
40	PSC 40 - MHD' 32.42	41 6 32 26 040 04	32	–	42	22	0.3	1
	PSC 40 - MHD' 40.45	41 6 40 26 040 04	40		45	–	0.4	
50	PSC 50 - MHD' 50.55	41 6 50 26 050 05	50		55		0.8	
63	PSC 63 - MHD' 40.50	41 6 40 26 063 05	40		50	28	0.9	
	PSC 63 - MHD' 40.120	41 6 40 26 063 12		44	120	98	1.5	2
	PSC 63 - MHD' 50.55	41 6 50 26 063 05	50	–	55	33	0.8	1
	PSC 63 - MHD' 50.67	41 6 50 26 063 06			67	45	1.1	
	PSC 63 - MHD' 50.120	41 6 50 26 083 12		54	120	98	1.9	2
	PSC 63 - MHD' 63.77	41 6 63 26 063 07	63	–	77	–	1.8	1
80	PSC 80 - MHD' 50.60	41 6 50 26 080 06	50		60	30	2	
	PSC 80 - MHD' 50.120	41 6 50 26 080 12		54	120	90	2.8	2
	PSC 80 - MHD' 63.70	41 6 63 26 080 07	63	–	70	40	2.3	1
	PSC 80 - MHD' 63.150	41 6 63 26 080 15		87	150	120	4	2
	PSC 80 - MHD' 80.75	41 6 80 26 080 07	80	–	75	–	2.8	1
	PSC 80 - MHD' 80.120	41 6 80 26 080 12			120		4.3	
100	PSC 100 - MHD' 80.80	41 6 80 26 100 08			80	44	3.5	
	PSC 100 - MHD' 110.120	41 6 91 26 100 12	110		120	84	5	

ISO 26622-1
KM



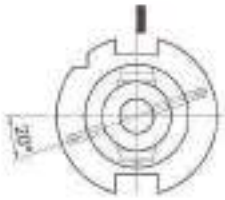
KM	REF.	CODE	MHD' d1	d2	L	L1	kg
63	RD KM - MHD' 50.50	65 70 950 0506 3	50	63	50	32	0.8
	RD KM - MHD' 63.70	65 70 963 0506 3	63		70	–	1.2

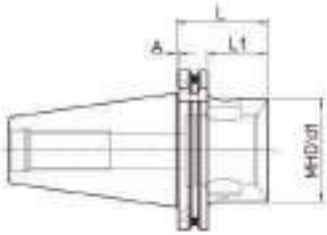
D'ANDREA

MODULHARD'ANDREA
FACE CONTACT

- ARBORS
- GRUNDAUFNAHMEN
- ACOPLAMIENTOS BASE
- MANDRINS
- ATTACCHI BASE

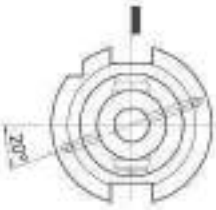
DIN 69871 FC
FACE CONTACT AD+B

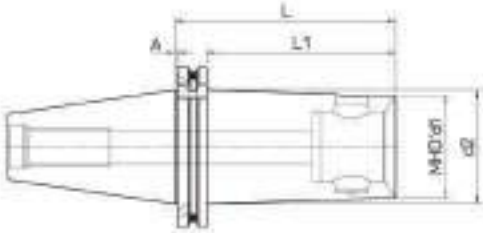




DIN	REF.	CODE	MHD' d1	A	L	L1	Kg.
40	DIN69871-AD+B40 FC MHD'50.48	41 6 50 01 040 21F	50	1	48	29	0.9
	DIN69871-AD+B40 FC MHD'63.80	41 6 63 01 040 21F	63		80	–	1.5
50	DIN69871-AD+B50 FC MHD'50.48	41 6 50 01 050 21F	50	1.5	48	29	2.5
	DIN69871-AD+B50 FC MHD'63.56	41 6 63 01 050 21F	63		56	37	2.8
	DIN69871-AD+B50 FC MHD'80.62	41 6 80 01 050 21F	80		62	43	3.4

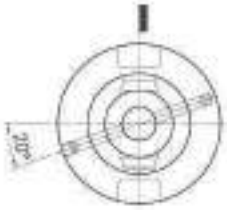
DIN 69871 FC
FACE CONTACT AD+B

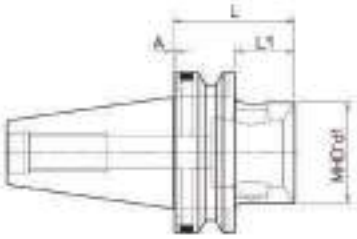




DIN	REF.	CODE	MHD' d1	d2	A	L	L1	Kg.
40	DIN69871-AD+B40 FC MHD'50.120	41 6 50 01 040 28F	50	–	1	120	101	1.7
50	DIN69871-AD+B50 FC MHD'50.120	41 6 50 01 050 28F		59	1.5			3.5
	DIN69871-AD+B50 FC MHD'50.200	41 6 50 01 050 27F		86		200	181	6.1
	DIN69871-AD+B50 FC MHD'63.150	41 6 63 01 050 28F	63	75.5		150	131	5.2
	DIN69871-AD+B50 FC MHD'63.250	41 6 63 01 050 27F		80		250	231	7.1
	DIN69871-AD+B50 FC MHD'80.180	41 6 80 01 050 28F	80	–		180	161	6.9
	DIN69871-AD+B50 FC MHD'80.300	41 6 80 01 050 27F				300	281	9.2
	DIN69871-AD+B50 FC MHD'110.150	41 6 91 01 050 21F	110			150	–	7.6
	DIN69871-AD+B50 FC MHD'110.250	41 6 91 01 050 28F				250		9.5

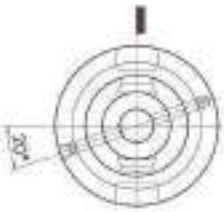
MAS 403 BT FC
FACE CONTACT AD+B

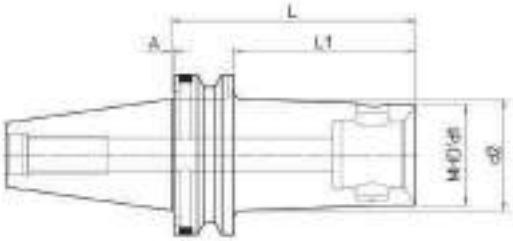




DIN	REF.	CODE	MHD' d1	A	L	L1	Kg.
40	MAS403 BT40 FC AD+B MHD'50.48	41 6 50 01 040 31F	50	1	48	21	0.9
	MAS403 BT40 FC AD+B MHD'63.66	41 6 63 01 040 31F	63		66	–	1.2
50	MAS403 BT50 FC AD+B MHD'50.66	41 6 50 01 050 31F	50	1.5		28	3.2
	MAS403 BT50 FC AD+B MHD'63.75	41 6 63 01 050 31F	63		75	37	3.7
	MAS403 BT50 FC AD+B MHD'80.75	41 6 80 01 050 31F	80				4

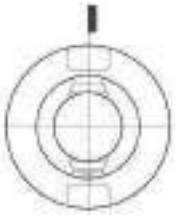
MAS 403 BT FC
FACE CONTACT AD+B

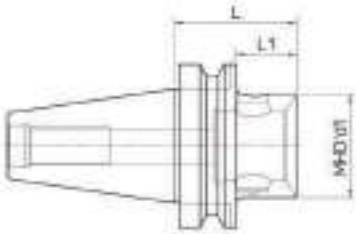




DIN	REF.	CODE	MHD' d1	d2	A	L	L1	Kg.
40	MAS403 BT40 FC AD+B MHD'50.120	41 6 50 01 040 38F	50	–	1	120	93	1.9
50	MAS403 BT50 FC AD+B MHD'50.120	41 6 50 01 050 38F		57.5	1.5		82	4.2
	MAS403 BT50 FC AD+B MHD'50.200	41 6 50 01 050 37F		66		200	162	4.5
	MAS403 BT50 FC AD+B MHD'63.150	41 6 63 01 050 38F	63	73.5		150	112	5.8
	MAS403 BT50 FC AD+B MHD'63.250	41 6 63 01 050 37F		84		250	212	6.1
	MAS403 BT50 FC AD+B MHD'80.180	41 6 80 01 050 38F	80	–		180	142	7.5
	MAS403 BT50 FC AD+B MHD'80.300	41 6 80 01 050 37F				300	262	9.2
	MAS403 BT50 FC AD+B MHD'110.150	41 6 91 01 050 31F	110			150	–	8.1
	MAS403 BT50 FC AD+B MHD'110.250	41 6 91 01 050 38F				250		9.5

MAS 403 BT

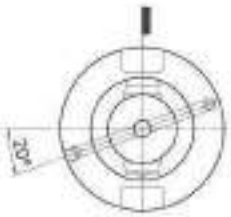


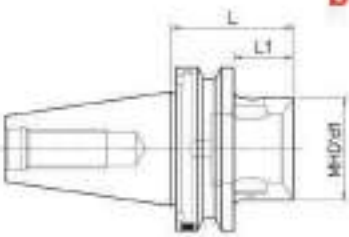


BT	REF.	CODE	MHD' d1	L	L1	kg
30	MAS403 BT30 MHD'32.32	41 6 32 01 030 30	32	32	10.5	0.5
	MAS403 BT30 MHD'40.35.5	41 6 40 01 030 30	40	35.5	14	0.6
	MAS403 BT30 MHD'50.60	41 6 50 01 030 30	50	60	–	0.7
35	MAS403 BT35 MHD'50.60	41 6 50 01 035 30			36	0.8
40	MAS403 BT40 MHD'40.45	41 6 40 01 040 30	40	45	18	0.6
	MAS403 BT40 MHD'50.38.5	41 6 50 01 040 39	50	38.5	11.5	0.8
	MAS403 BT40 MHD'50.48	41 6 50 01 040 30		48	21	0.9
	MAS403 BT40 MHD'50.56	41 6 50 01 040 80		56	29	1.1
	MAS403 BT40 MHD'63.66	41 6 63 01 040 30	63	66	–	1.2
45	MAS403 BT45 MHD'50.62	41 6 50 01 045 30	50	62	29	1.7
	MAS403 BT45 MHD'63.70	41 6 63 01 045 30	63	70	37	2.3
	MAS403 BT45 MHD'80.70	41 6 80 01 045 30	80			2.7
50	MAS403 BT50 MHD'50.66	41 6 50 01 050 30	50	66	28	3.3
	MAS403 BT50 MHD'63.50	41 6 63 01 050 39	63	50	12	3.4
	MAS403 BT50 MHD'63.75	41 6 63 01 050 30		75	37	3.7
	MAS403 BT50 MHD'80.50	41 6 80 01 050 39	80	50	12	3.8
	MAS403 BT50 MHD'80,75	41 6 80 01 050 30		75	37	4
	MAS403 BT50 MHD'110.140	41 6 91 01 050 30	110	140	–	6.8
	MAS403 BT50 MHD'140.150	41 6 94 01 050 30	140	150		9.2
60	MAS403 BT60 MHD'110.110	41 6 91 01 060 30	110	110	63	11.5
	MAS403 BT60 MHD'110.200	41 6 91 01 060 38		200	152	18.1
	MAS403 BT60 MHD'140.100	41 6 94 01 060 30	140	100	52	12.9
	MAS403 BT60 MHD'140.250	41 6 94 01 060 38		250	202	30.1

MAS 403 BT

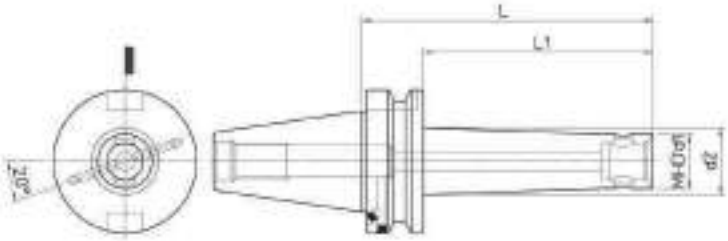
B





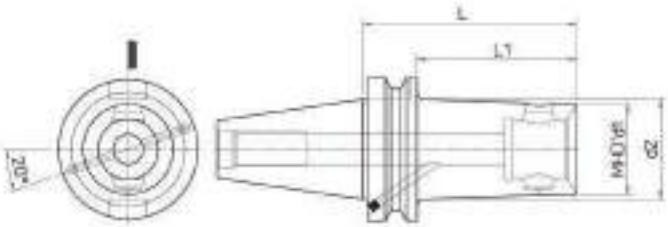
BT	REF.	CODE	MHD' d1	L	L1	kg
40	MAS403 BT40B MHD'50.48	41 6 50 01 040 31	50	48	21	0.9
	MAS403 BT40B MHD'63.66	41 6 63 01 040 31	63	66	–	1.2
50	MAS403 BT50B MHD'50.66	41 6 50 01 050 31	50	66	28	3.5
	MAS403 BT50B MHD'63.75	41 6 63 01 050 31	63	75	37	3.7
	MAS403 BT50B MHD'80.75	41 6 80 01 050 31	80			4

MAS 403 BT
AD+B



BT	REF.	CODE	MHD' d1	d2	L	L1	kg
40	MAS403 BT40-AD+B MHD'16.45	41 6 16 04 140 31	16	–	45	18	0.8
	MAS403 BT40-AD+B MHD'16.63	41 6 16 06 140 31		17	63	36	0.9
	MAS403 BT40-AD+B MHD'16.100	41 6 16 10 140 31		19.5	100	73	1
	MAS403 BT40-AD+B MHD'20.50	41 6 20 05 140 31	20	–	50	23	0.9
	MAS403 BT40-AD+B MHD'20.80	41 6 20 08 140 31		22	80	53	1
	MAS403 BT40-AD+B MHD'20.125	41 6 20 12 140 31		25	125	98	1.1
	MAS403 BT40-AD+B MHD'25.50	41 6 25 05 140 31	25	–	50	23	1
	MAS403 BT40-AD+B MHD'25.80	41 6 25 08 140 31		26.5	80	53	1.1
	MAS403 BT40-AD+B MHD'25.125	41 6 25 12 140 31		29.5	125	98	1.2
	MAS403 BT40-AD+B MHD'32.50	41 6 32 05 140 31	32	–	50	23	1.1
	MAS403 BT40-AD+B MHD'32.80	41 6 32 08 140 31		33	80	53	1.2
	MAS403 BT40-AD+B MHD'32.125	41 6 32 12 140 31		36	125	98	1.4

MAS 403 BT
AD+B

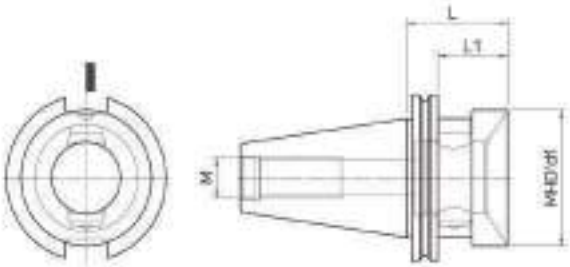


BT	REF.	CODE	MHD' d1	d2	L	L1	kg
40	MAS403 BT40-AD+B MHD'40.120	41 6 40 01 040 38	40	44.5	120	93	0.9
	MAS403 BT40-AD+B MHD'50.120	41 6 50 01 040 38	50	–			1.9
50	MAS403 BT50-AD+B MHD'50.120	41 6 50 01 050 38		60		82	4.2
	MAS403 BT50-AD+B MHD'63.150	41 6 63 01 050 38	63	70	150	112	5.8
	MAS403 BT50-AD+B MHD'80.180	41 6 80 01 050 38	80	–	180	142	7.5

MODULHARD'ANDREA

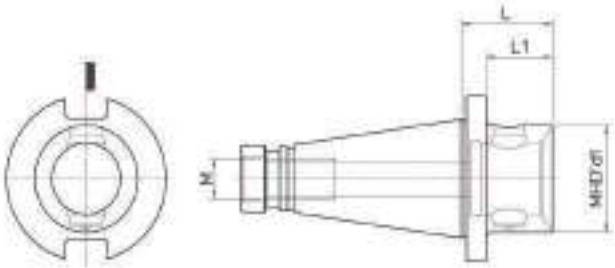
- ARBORS
- GRUNDAUFNAHMEN
- ACOPLAMIENTOS BASE
- MANDRINS
- ATTACCHI BASE

ANSI/CAT



ANSI/CAT	REF.	CODE	MHD' d_1	L	L_1	M	kg
40	ANSI/CAT40 MHD'50.66	41 6 50 01 040 40	50	66	47	M16	1.1
	ANSI/CAT40 MHD'63.100	41 6 63 01 040 40	63	100	–		1.9
45	ANSI/CAT45 MHD'50.48	41 6 50 01 045 40	50	48	29	M20	1.7
	ANSI/CAT45 MHD'63.75	41 6 63 01 045 40	63	75	56		2.1
	ANSI/CAT45 MHD'80.80	41 6 80 01 045 40	80	80	–		2.7
50	ANSI/CAT50 MHD'50.48	41 6 50 01 050 40	50	48	29	M24	2.4
	ANSI/CAT50 MHD'63.56	41 6 63 01 050 40	63	56	37		2.9
	ANSI/CAT50 MHD'80.62	41 6 80 01 050 40	80	62	43		3.2

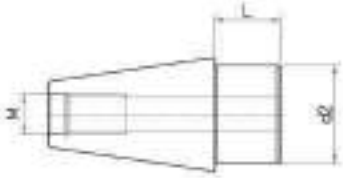
DIN 2080-A 'OTT'



ISO	REF.	CODE	MHD' d_1	L	L_1	M	kg
30	DIN2080-A30 MHD'50.58	41 6 50 01 030 00	50	58	–	M12	0.6
40	DIN2080-A40 MHD'50.48	41 6 50 01 040 00	50	48	38.5	M16	0.9
	DIN2080-A40 MHD'63.60	41 6 63 01 040 00	63	60	–		1.2
45	DIN2080-A45 MHD'50.48	41 6 50 01 045 00	50	48	33	M20	1.6
	DIN2080-A45 MHD'63.60	41 6 63 01 045 00	63	60	45		1.9
	DIN2080-A45 MHD'80.66	41 6 80 01 045 00	80	66	–		2.2
50	DIN2080-A50 MHD'50.48	41 6 50 01 050 00	50	48	33	M24	2.6
	DIN2080-A50 MHD'63.56	41 6 63 01 050 00	63	56	41		2.7
	DIN2080-A50 MHD'80.60	41 6 80 01 050 00	80	60	45		3.2

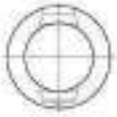
- ARBORS
- GRUNDAUFNAHMEN
- ACOPLAMIENTOS BASE
- MANDRINS
- ATTACCHI BASE

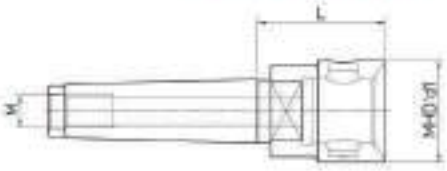
ISO 50 D.60
ISO 60 D.60



REF.	CODE	d2	L	M	Kg.
ISO 50 D.60	71ISO-50-DC6040	60	40	24	4.8
ISO 60 D.60	71ISO-60-DC6040			30	9.7

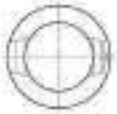
DIN 228/A 2207

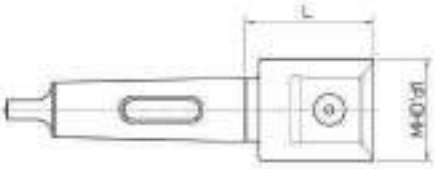




MORSE	REF.	CODE	MHD' d1	L	M	kg
4	MORSE4-A MHD'50.63	41 6 50 03 004 00	50	63	M16	0.9
4 SIP	MORSE4-A SIP MHD'50.63	41 6 50 03 004 01			M14	

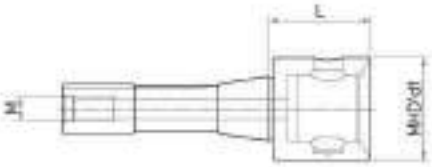
DIN 228/B 1806





MORSE	REF.	CODE	MHD' d1	L	kg
4	MORSE4-B MHD'50.56	41 6 50 02 004 00	50	56	0.9
5	MORSE5-B MHD'63.65	41 6 63 02 005 00	63	65	1.5

R8



REF.	CODE	MHD' d1	L	M	kg
R 8	41 6 50 05 008 00	50	50	M12x1.75	0.8

D'ANDREA

MODULHARD'ANDREA

- ARBORS
- GRUNDAUFNAHMEN
- ACOPLAMIENTOS BASE
- MANDRINS
- ATTACCHI BASE

BR

fig.1

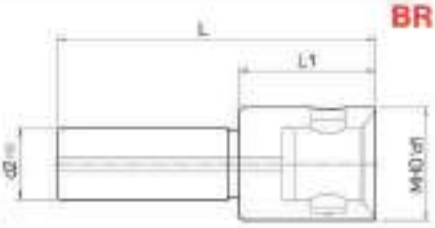
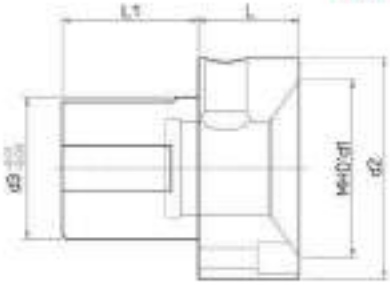


fig.2

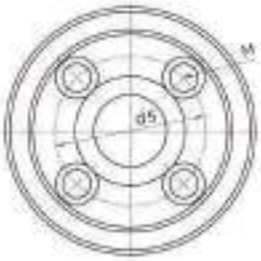
REF.	CODE	MHD' d_1	L	L_1	d_2	kg	fig.
BR 16/16.100	65 70 816 0100 1	16	100	–	16	0.15	1
BR 20/20.125	65 70 820 0125 1	20	125	–	20	0.3	
BR 25/32.35	41 6 32 08 025 00	32	100	35	25	0.7	2
BR 32/50.60	41 6 50 06 032 00	50	140	60	32	1	

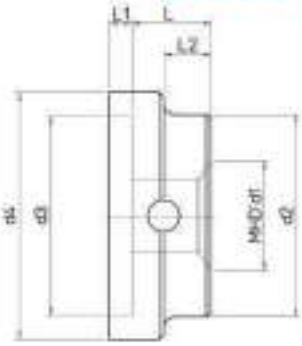
MR



REF.	CODE	MHD' d_1	d_2	d_3	d_4	L	L_1	M	kg
MR 50/80.80	45 02 080 0106 0	63 – 80	80	50	65	45	50	M6	1.5
MR 63/98.80	45 02 098 0106 0		98	63	80		60	M8	3.1
MR 80/130.80	45 02 130 0124 0		130	80	104.6		80	M10	6.1

DIN 2079



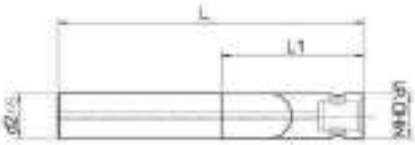


REF.	CODE	MHD' d_1	d_2	d_3	d_4	d_5	L	L_1	L_2	M	kg
DIN 2079-40.50	41 6 50 20 040 00	50	90	88.89	110	66.7	35	10	21	M12	1.8
DIN 2079-40.63	41 6 63 20 040 00	63					47		31		2
DIN 2079-50.63	41 6 63 20 050 00		135	128.57	150	101.6	45	12		M16	5.4
DIN 2079-50.80	41 6 80 20 050 00	80					50		38		5.3
DIN 2079-50.110	41 6 91 20 050 00	110					112		88		8.4
DIN 2079-50.140	41 6 94 20 050 00	140	140				122		108		9.5

- CARBIDE BARS FOR DEEP-HOLE MACHINING
- **HARTMETALL-BOHRSTANGENFÜR TIEFLOCH-BEARBEITUNGEN**
- BARRAS DE METAL DURO PARA MECANIZACIONES DE AGUJEROS PROFUNDOS
- **BARRES CARBURE POUR USINAGES DE TROUS PROFONDS**
- BARRE IN METALLO DURO PER LAVORAZIONI DI FORI PROFONDI

BMD PROGRAM

BMD



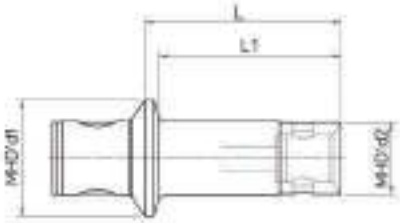
REF.	CODE	MHD' d1	d2	L	L1	kg
BMD 16/16.110	65 70 816 0110 5	16	16	110	50	0.3
BMD 16/16.140	65 70 816 0140 5			140	63	0.4
BMD 16/16.170	65 70 816 0170 5			170	80	0.5
BMD 20/20.135	65 70 820 0135 5	20	20	135	63	0.6
BMD 20/20.170	65 70 820 0170 5			170	80	0.75
BMD 20/20.210	65 70 820 0210 5			210	100	0.9
BMD 25/25.160	65 70 825 0160 5	25	25	160	80	1
BMD 25/25.205	65 70 825 0205 5			205	100	1.3
BMD 25/25.255	65 70 825 0255 5			255	125	1.6
BMD 32/32.195	65 70 832 0195 5	32	32	195	100	2.1
BMD 32/32.250	65 70 832 0250 5			250	125	2.8
BMD 32/32.315	65 70 832 0315 5			315	160	3.5

D'ANDREA

MODULHARD'ANDREA

- REDUCTIONS
- **REDUZIERUNGEN**
- REDUCCIONES
- **RÉDUCTIONS**
- RIDUZIONI

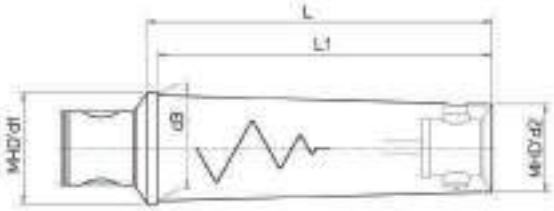
RD



REF.	CODE	MHD' d_1	MHD' d_2	L	L_1	kg
RD 50/16.40	65 70 050 0016 2	50	16	40	32	0.2
RD 50/16.74	65 70 050 0016 3			74	65	0.25
RD 50/20.70	65 70 050 0020 2		20	70	62	0.3
RD 50/20.93	65 70 050 0020 3			93	85	0.35
RD 50/25.87	65 70 050 0025 2		25	87	80	0.6
RD 50/25.117	65 70 050 0025 3			117	110	0.65
RD 50/32.87	65 70 050 0032 2		32	87	80	0.75
RD 50/32.144	65 70 050 0032 3			144	137	1
RD 50/40.87	65 70 050 0040 2		40	87	80	0.9
RD 50/40.176	65 70 050 0040 3			176	170	1.9

- VIBRATION-DAMPING REDUCTIONS
- **VIBRATIONSARME REDUZIERUNGEN**
- REDUCCIONES ANTI-VIBRACIÓN
- **RÉDUCTIONS ANTI-VIBRATOIRES**
- RIDUZIONI ANTIVIBRANTI

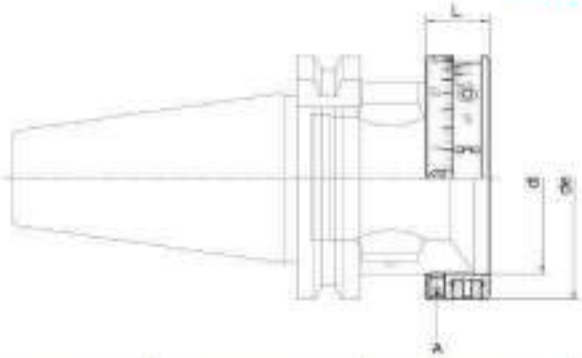
RAV



REF.	CODE	MHD' d_1	MHD' d_2	d_3	L	L_1	kg
RAV 50/16.74	65 70 050 0016 5	50	16	17.5	74	65	0.4
RAV 50/20.93	65 70 050 0020 5		20	21.5	93	85	0.5
RAV 50/25.117	65 70 050 0025 5		25	27	117	110	0.8
RAV 50/32.144	65 70 050 0032 5		32	35	144	138	1.4
RAV 50/40.176	65 70 050 0040 5		40	47	176	170	2.5
RAV 63/50.220	65 70 063 0050 5	63	50	60	220	214	5.6
RAV 80/63.280	65 70 080 0063 5	80	63	77	280	272	10.6

- BALANCING RINGS
- AUSWUCHTRINGE
- ANILLOS DE EQUILIBRADO
- BAGUES D'ÉQUILIBRAGE
- ANELLI DI BILANCIATURA

BLC



REF.	CODE	MHD'	de	di (G6)	L
BLC 42.32	38 17 25 032 001	32	42	31.5	14
BLC 50.40	38 17 25 040 001	40	50	39.5	15
BLC 63.50	38 17 25 050 001	50	63.5	49.8	16
BLC 80.63	38 17 25 063 001	63	80	62.8	18

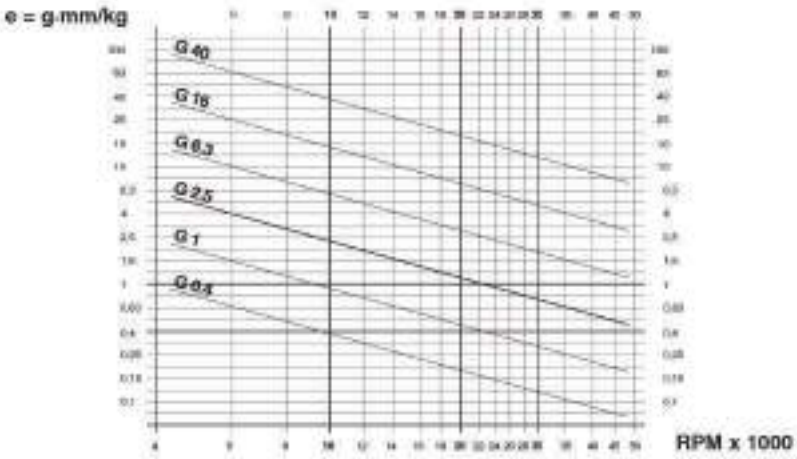
KR **BLC 바란스 링**은 눈금을 가진 두개의 평행추로 셋팅하여 사용 됩니다. 바란스 링 사용을 사용함으로서 동심도 및 정삭 조도 향상, 툴 라이프 향상의 장점을 가지며 가공시 공구 진동을 최소화 하여 머신닝 센터의 스핀들 베어링을 보호할 수 있습니다.
※ 조립 방법 : 아바의 플라스틱 링을 제거하고 BLC 바란스 링을 삽입후 나사로 조여주십시요.

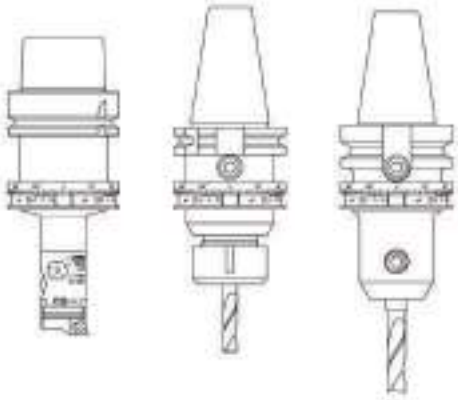
GB The BLC balancing ring, only by setting the two incorporated graduated counterweights, allows to balance, in an accurate and economical way, the toolholder on which it is mounted. The use of the BLC ring provides the following advantages: improved accuracy and surface finish; considerable extension of tool life; considerable extension of spindle bearings life; drastic reduction of vibrations and noise level in the machining centre.
ASSEMBLY: Remove the plastic guard ring; insert the BLC ring and lock the A screws.

D Der Auswuchtring BLC mit integrierten und beweglichen Gewichten ermöglicht es, den Werkzeughalter, an dem der Ring montiert ist, genau und wirtschaftlich auszuwuchten. Die Verwendung des BLC Auswuchtrings an Werkzeughaltern bietet folgende Vorteile: verbesserte Genauigkeit und Oberflächenfertigung (Qualität); merkbar höhere Lebensdauer der Werkzeuge und Schneidwerkzeuge; Schonung der Spindellager, dadurch deutlich höhere Lebensdauer; erhebliche Verminderung von Vibrationen und Geräuschen am Arbeitsplatz.
MONTAGE: Schutzring aus Kunststoff entfernen; Auswuchtring BLC einsetzen und Schrauben A spannen.

E El anillo de equilibrado BLC, con el simple posicionamiento de los dos contrapesos graduados incorporados, permite equilibrar, en forma precisa y económica, el portaherramientas en el cual va montado. La utilización del anillo BLC da las siguientes ventajas: mejora la precisión y la calidad de las superficies mecanizadas; aumenta la duración de la herramienta; prolonga la vida del husillo del centro de mecanizado; reduce las vibraciones y la rumorosidad del centro de mecanizado.
MONTAJE: Quitar el anillo de protección de plástico; insertar anillo BLC y fijar los tornillos A.

I L'anello di bilanciatura BLC, con il semplice posizionamento dei due tasselli graduati incorporati, permette di equilibrare, in modo preciso ed economico, il portautensile nel quale lo stesso viene montato. L'utilizzo dell'anello BLC dà i seguenti vantaggi: migliora la precisione e la qualità delle superfici lavorate; aumenta la durata dell'utensile; allunga la vita del mandrino del centro di lavoro; riduce le vibrazioni e la rumorosità del centro di lavoro.
MONTAGGIO: Togliere l'anello di protezione in plastica, inserire l'anello BLC e bloccare le viti A.





D'ANDREA

MODULHARD'ANDREA

testarossad'andrea

TS	TRD	TRC	TRC HS
		p. 94 • TRC 14 Ø 14.5 - 18	
p.82 • TS 16/16 Ø 18 - 22		p. 94 • TRC 16 Ø 18 - 24	p.116 • TRM 16 Ø 18 - 23
p.82 • TS 20/20 Ø 22 - 28		p. 94 • TRC 20 Ø 22 - 30	p.116 • TRM 20 Ø 22 - 29
p.82 • TS 25/25 Ø 28 - 38	p.90 • TRD 25 Ø 28 - 36	p.94 • TRC 25 Ø 28 - 40	p.116 • TRM 25 Ø 28 - 36
p.82 • TS 32/32 Ø 35.5 - 50	p.90 • TRD 32 Ø 36 - 46	p.94 • TRC 32 Ø 35 - 53	p.110 • TRC 32 HS Ø 2.5 - 18 / p.116 • TRM 32 Ø 35.5 - 50
p.82 • TS 40/40 Ø 50 - 68	p.90 • TRD 40 Ø 46 - 60	p.94 • TRC 40 Ø 48 - 66	p.116 • TRM 40 Ø 48 - 63
p.83 • TS 50/50 Ø 68 - 90 / p.83 • TS 50/63 Ø 90 - 120	p.90 • TRD 50 Ø 60 - 75	p.96 • TRC 50 Ø 2.5 - 110	p.112 • TRC 50 HS Ø 2.5 - 22 / p.118 • TRM 50 Ø 2.5 - 108
p.83 • TS 63/63 Ø 90 - 120	p.90 • TRD 63 Ø 75 - 95	p.100 • TRC 63 Ø 72 - 125	
p.83 • TS 80/80 Ø 120 - 200	p.90 • TRD 80 Ø 95 - 120	p.104 • TRC 80 Ø 88 - 200	

D'ANDREA

TRM

2µm

TRM HSB

2µm

BPS

INSERTS

p.154 • TR 200

2µm

p.150-151 • BPS 200 - 800

Ø 200 - 1200

p.110 • TRM 32 HSB

Ø 2.5 - 18

p.154 • TR 200

2µm

p.152-153 • BPS 1000 - 160

Ø 1000 - 2800

p.122 • TRM 50/63

Ø 6 - 125

p.126 • TRM 50/80

Ø 6 - 160

p.112 • TRM 50 HSB

Ø 2.5 - 22

p.122 • TRM 63/63

Ø 6 - 125

p.126 • TRM 80/80

Ø 6 - 160

p.130 • TRM 80/125

Ø 36 - 500

D'ANDREA

MODULHARD'ANDREA

TS Ø 18 ~ 200

- DOUBLE-BIT HEADS
- ZWEISCHNEIDERBOHRKÖPFE
- CABEZALES DE DOS CUCHILLAS
- TÊTES À DOUBLE TRANCHANT
- TESTINE BITAGLIENTI

1
- Body
- Körper
- Cuerpo
- Corps
- Corpo

2
- Setting screws
- Einstellschraube
- Tornillo de regulación
- Vis de réglage
- Vite di regolazione

3
- Expanding pin
- Spreizbolzen
- Perno radial expansible
- Tige radiale expansible
- Perno radiale espandibile

4
- Coolant outlets
- Kühlmittelaustritt
- Agujeros salida refrigerante
- Sortie du liquide d'arrosage
- Fori uscita refrigerante

5
- Bit holders
- Plattenhalter
- Portaplaquita
- Porte-plaquettes
- Seggio portainserti

6
- Tools clamp screws
- Werkzeugklemmschrauben
- Tornillos blocaje herramienta
- Vis blocage outil
- Viti bloccaggio utensile

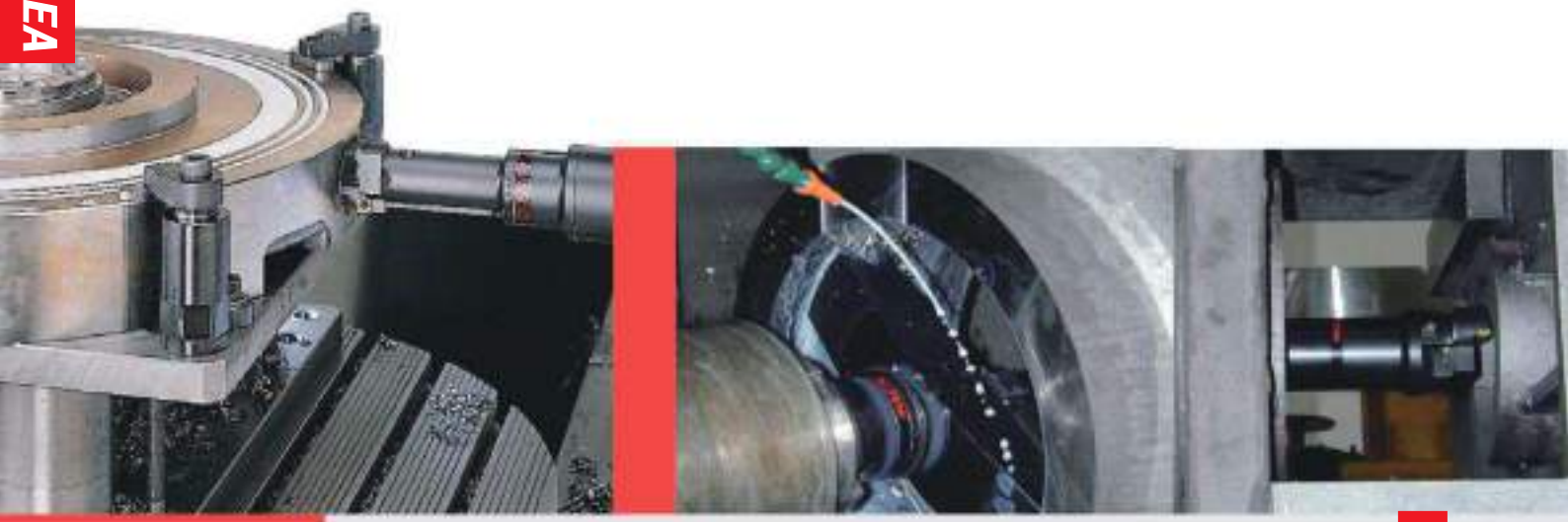
KR **DOUBLE-BIT** HEAD는 조립이 용이하고 클램핑 나사와 커터 사이의 일정한 간격을 두고 bit holder 와 insert 홀더 그리고 헤드와 일정한 간격으로 쎄레이션된 면끼리의 조립으로 인하여 매우 견고합니다.

GB The double-bit heads are easy and extremely rigid thanks to the extensive area serrated with contacts between the bit holder and upper insert holder and the heads, together with the constant distance between the seat of the clamping screws and the cutter.

D Die Zweischneiderköpfe sind aufgrund des einfachen Aufbaus und der großen, verzahnten Kontaktfläche zwischen Plattenhalter und Kopf zusammen mit dem gleichbleibenden Abstand zwischen Wendeplattensitz und Plattenhalterklemmung extrem stabil.

E Los cabezales de dos cuchillas son sencillos y extremamente rígidos gracias a las amplias superficies dentadas de contacto entre los asientos porta-plaquitas y los cabezales mismos, así como a la distancia constante entre los tornillos de sujeción del asiento y el filo de corte.

I Le testine bitaglienti sono semplici ed estremamente rigide grazie alle ampie superfici dentellate di contatto tra i seggi portainserto e le testine stesse, unitamente alla distanza costante tra la vite di serraggio del seggio ed il tagliente.



TS Ø 18 ~ 200

- DOUBLE-BIT HEADS
- ZWEISCHNEIDERBOHRKÖPFE
- CABEZALES DE DOS CUCHILLAS
- TÊTES À DOUBLE TRANCHANT
- TESTINE BITAGLIENTI

KR Cutting eage 들의 Radial setting은 툴 프리셋터에서 해야 합니다. TS 보링바에는 두꺼운 chip 제거에 관련된 황삭 작업을 위해 두개의 bit holder를 조립합니다.

GB **USE.** The radial setting of the cutting edges should be carried out with tool presetting equipment. The boring bars are fitted with two bit holders for roughing operations involving heavy chip removal. The double-bit boring bars may include:

D **EINSATZ.** Die Durchmessereinstellung der Wendeplatten ist auf einem Maschinenwerkzeug-voreinstellgerät vorzunehmen. Mit zwei Plattenhaltern werden die Köpfe für Schrupparbeiten mit starker Spanabnahme verwendet. Diese Köpfe können umfassen:

E **EMPLEO.** La regulación diametral de los cortes se efectúa sobre un banco presetting para herramientas. Se utilizan con dos asientos para operaciones de desbaste con fuerte arranque de viruta. Los cabezales de dos cuchillas puedan estar compuestos con:

I **IMPIEGO.** La regolazione diametrale dei taglienti va eseguita su un banco di presetting di utensili. Si utilizzano con due seggi per operazioni di sgrossatura con forti asportazioni. I barani bitaglienti possono essere composti con:

fig.1

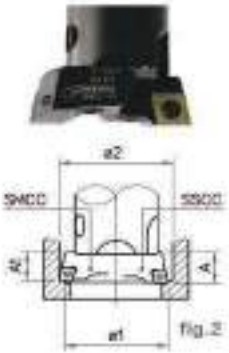


fig.2

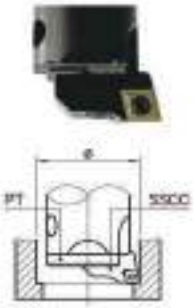


fig.3

fig. 1 KR 두개의 cutting eage가 동일한 높이 및 동일한 Radial 거리로 셋팅되는 두개의 SSCC bit holder 사용은 빠른 황삭 작업을 위해 사용합니다.

GB two SSCC bit holders on the same plane and with the two cutting edges set at identical radial distance for high feed rate roughing operations.

D zwei Plattenhalter SSCC auf gleicher Höhe mit der Schneidkante der Wendeplatten auf gleichem Durchmesser einstellen. Für Schrupparbeiten mit großem Vorschub.

E dos asientos SSCC alineados y con la punta de la plaquita sobre el mismo diámetro para operaciones de desbaste con fuertes avances.

I due seggi SSCC allineati e con la punta degli inserti sullo stesso diametro per operazioni di sgrossatura con forti avanzamenti.

fig. 2 KR 두개의 cutting eage가 서로 상이한 높이 및 Radial 거리로 셋팅 되는 한 개의 SSCC bit holder와 한 개의 SMCC bit holder 사용은 깊은 홀의 빠른 황삭 작업을 위해 사용합니다.

GB an SSCC bit holder and an SMCC bit holder not at the same plane and with the two cutting edges set at different radial distances for high cutting depth roughing operations.

D je einen Plattenhalter SSCC und SMCC auf verschiedener Höhe mit der Schneidkante der Wendeplatten auf verschiedenem Durchmesser einstellen für Schrupparbeiten mit großer Spantiefe.

E un asiento SSCC y un asiento más bajo SMCC desalineados y con la punta de las plaquitas sobre diámetros diversos para operaciones de desbaste con fuertes profundidades de pasada.

I un seggio SSCC ed un seggio più basso SMCC disallineati e con la punta degli inserti su diametri diversi per operazioni di sgrossatura con forti profondità di passata.

fig. 3 KR TS 보링바는 일반적인 chip 제거에 연관된 정삭 및 황삭 작업을 위해 한 개의 bit holder를 조립하여 사용합니다. 단 PT(보호 플레이트) 항상 조립되어야 합니다.

GB the boring bars are fitted with a single bit holder for roughing and finishing operations involving normal chip removal. The serrated surface protection plate PT should always be fitted.

D mit einem Plattenhalter werden die Bohrstangen für Schlicht- und Schrupparbeiten mit normaler Spanabnahme verwendet. PT Schutzplatte für die Kerbzahnfläche immer aufsetzen.

E se utilizan con un solo asiento para operaciones de acabado y desbaste con normal arranque de viruta. Recordar siempre montar la plaquita PT para la protección de la superficie dentada.

I si utilizzano con un solo seggio per operazioni di finitura e sgrossatura con normali asportazioni di truciolo. Ricordarsi sempre di montare la piastrina PT per la protezione della superficie dentellata.

TS 16/16
Ø 18 ~ 22

TS 20/20
Ø 22 ~ 28

TS 25/25
Ø 28 ~ 38

TS 32/32
Ø 35.5 ~ 50

TS 40/40
Ø 50 ~ 68

TS 50/50
Ø 68 ~ 80

TS 50/63
Ø 90 ~ 120

TS 63/63
Ø 90 ~ 120

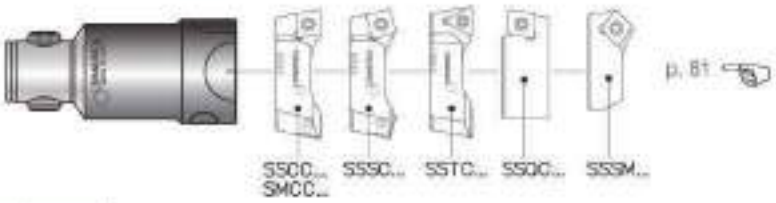
TS 80/80
Ø 120 ~ 200

D'ANDREA

MODULHARD'ANDREA

TS 16~40 Ø 18 – 68

- DOUBLE-BIT HEADS
- ZWEISCHNEIDERBOHRKÖPFE
- CABEZALES DE DOS CUCHILLAS
- TÊTES À DOUBLE TRANCHANT
- TESTINE BITAGLIENTI



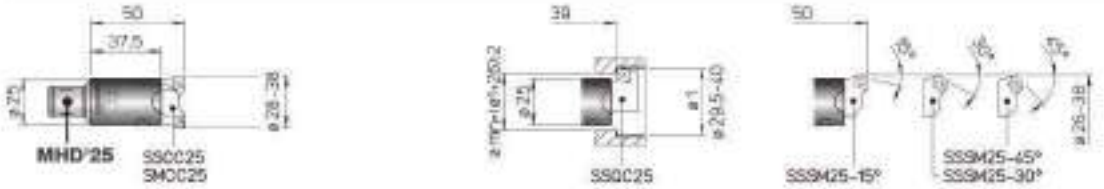
REF.	CODE	Kg.
TS 16/16	45 55 016 0034 0	0.05
TS 20/20	45 55 020 0040 0	0.09
TS 25/25	45 55 025 0050 0	0.2
TS 32/32	45 55 032 0063 0	0.35
TS 40/40	45 55 040 0080 0	0.7

REF.	CODE	Kg.
TS 50/50	45 53 050 0100 0	1.5
TS 50/63	45 53 063 0080 0	2
TS 63/63	45 54 063 0125 0	3
TS 80/80	45 54 080 0140 0	5.3

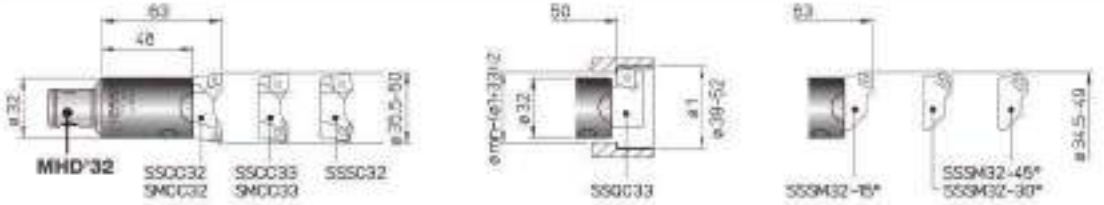
TS 16/16
Ø 18 – 22

TS 20/20
Ø 22 – 28

TS 25/25
Ø 28 – 38



TS 32/32
Ø 35.5 – 50



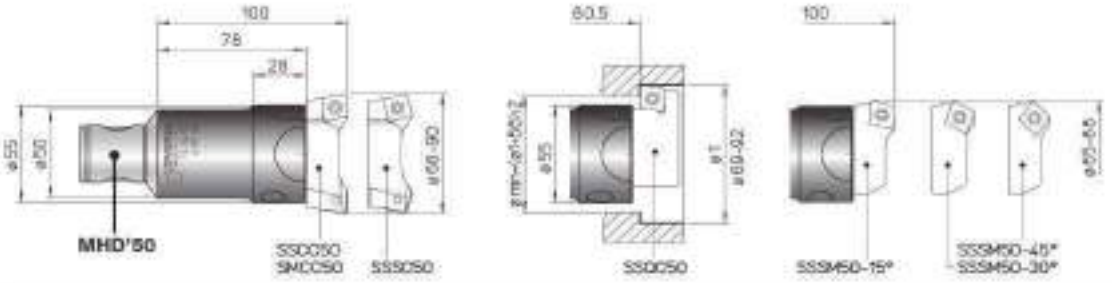
TS 40/40
Ø 50 – 68

D'ANDREA

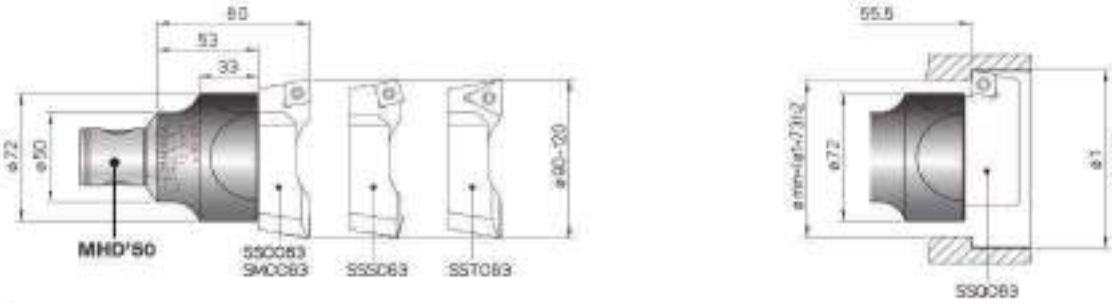
TS 50~80 Ø 68 – 200

- DOUBLE-BIT HEADS
- ZWEISCHNEIDERBOHRKÖPFE
- CABEZALES DE DOS CUCHILLAS
- TÊTES À DOUBLE TRANCHANT
- TESTINE BITAGLIENTI

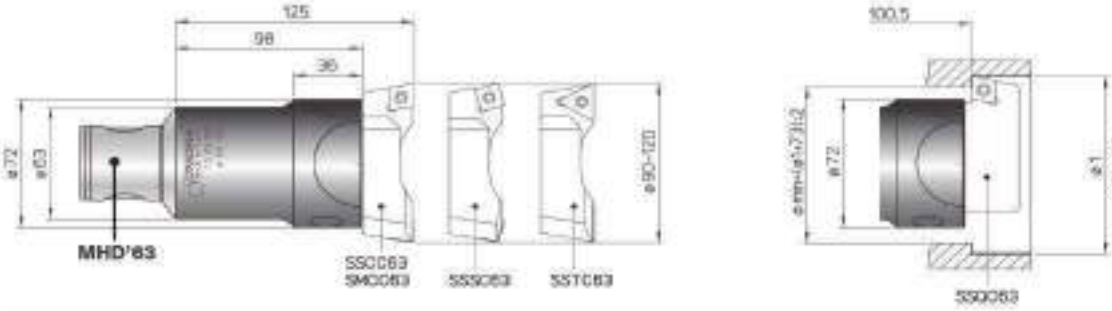
TS 50/50
Ø 68 ~ 90



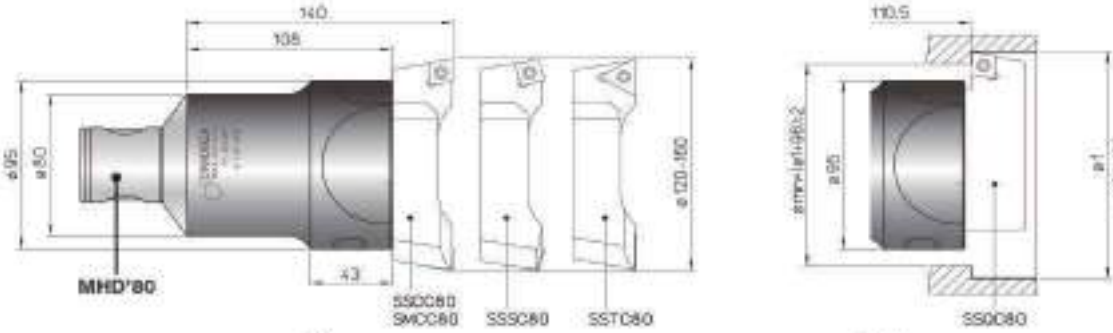
TS 50/63
Ø 90 – 120



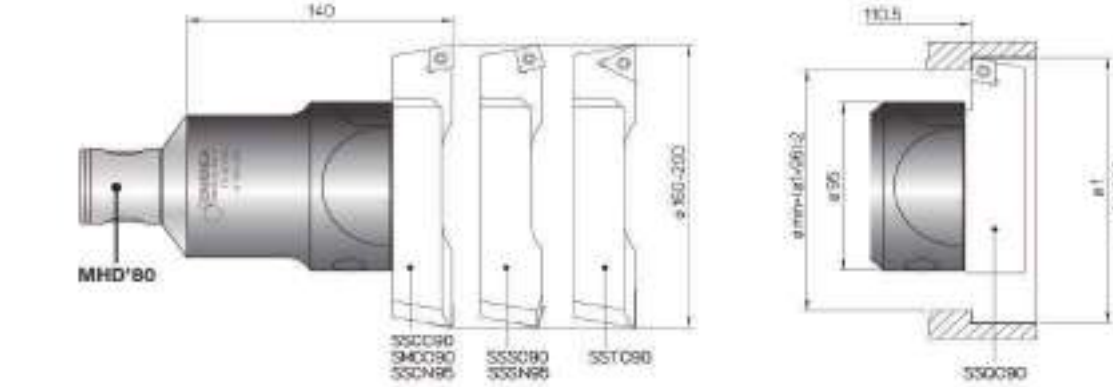
TS 63/63
Ø 90 – 120



TS 80/80
Ø 120 – 160



Ø 160 – 200



D'ANDREA

MODULHARD'ANDREA

SSCC - SMCC - SSSC

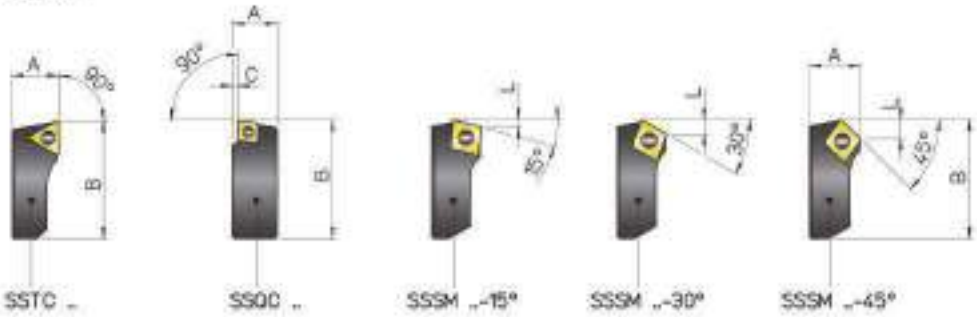
- BIT-HOLDERS FOR DOUBLE-BIT ITEMS
- **PLATTENHALTER FÜR ZWEISCHNEIDERWERKZEUGE**
- PORTAPLAQUITAS PARA ASIENTOS A DOS CUCHILLAS
- **PORTE-PLAQUETTES POUR PRODUITS À DEUX COUPANTS**
- SEGGI PER BITAGLIENTI

REF.	CODE	A	A1	B					Kg.
SSCC 16	47 050 05 16 201	8	–	15	CCMT 0602..	–	TS 25	TORX T08	0.003
SSCC 20	47 050 05 20 201	9.5		19					0.006
SSCC 25	47 050 05 25 201	12.5		23					0.01
SSCC 32	47 050 05 32 201	15		32					0.02
SSCC 33	47 050 05 32 204		–		CCMT 09T3..	–	TS 4	TORX T15	0.025
SSCC 40	47 050 05 40 201	19		40					0.06
SSCC 41	47 050 05 40 204		–		CCMT 1204..	–	TS5	TORX T25	0.06
SSCC 50	47 050 05 50 204	22		54					0.1
SSCC 63	47 050 05 63 201	27		70.5					0.2
SSCC 80	47 050 05 80 201	32		94.5					0.5
SSCC 90	47 050 05 90 201			130					0.7
SSCN 95	47 050 05 95 201	40			CNM. 1906..		p. 152		0.9
SMCC 25	47 050 05 25 203	–	12.3	23	CCMT 0602..	–	TS 25	TORX T08	0.01
SMCC 32	47 050 05 32 203		14.8	32					0.02
SMCC 33	47 050 05 32 205	–			CCMT 09T3..	–	TS 4	TORX T15	0.025
SMCC 40	47 050 05 40 203		18.7	40					0.06
SMCC 41	47 050 05 40 205	–			CCMT 1204..	–	TS 5	TORX T25	0.06
SMCC 50	47 050 05 50 205		21.7	54					0.1
SMCC 63	47 050 05 63 203		26.7	70.5					0.2
SMCC 80	47 050 05 80 203		31.7	94.5					0.5
SMCC 90	47 050 05 90 203			130					0.7
SSSC 32	47 050 05 32 202	15	–	32	–	SCMT 09T3..	TS 4	TORX T15	0.02
SSSC 40	47 050 05 40 202	19		40					0.06
SSSC 50	47 050 05 50 202	22	–	54	–	SCMT 1204..	TS 5	TORX T25	0.1
SSSC 63	47 050 05 63 202	27		70.5					0.2
SSSC 80	47 050 05 80 202	32		94.5					0.5
SSSC 90	47 050 05 90 202			130					0.7
SSSN 95	47 050 05 95 202	40				SNM. 1906..	p. 152		0.9

TS 16~80 Ø 18 ~ 200

SSTC - SSQC - SSSM

- BIT-HOLDERS FOR DOUBLE-BIT ITEMS
- **PLATTENHALTER FÜR ZWEISCHNEIDERWERKZEUGE**
- PORTAPLAQUITAS PARA ASIENTOS A DOS CUCHILLAS
- **PORTE-PLAQUETTES POUR PRODUITS À DEUX COUPANTS**
- SEGGI PER BITAGLIENTI



REF.	CODE	A	B	C	L					Kg.
SSTC 63	47 050 05 63 206	27	70.5	–	–	TCMT 2204..	–	TS 5	TORX T25	0.2
SSTC 80	47 050 05 80 206	32	94.5							0.5
SSTC 90	47 050 05 90 206		130							0.7
SSQC 16	47 050 05 16 261	10	16	2	–	–	CCMT 0602..	TS 25	TORX T08	0.005
SSQC 20	47 050 05 20 261	11	19.5	1.5						0.008
SSQC 25	47 050 05 25 261	14.5	24	2.5						0.02
SSQC 33	47 050 05 33 261	17	32	3	–	–	CCMT 09T3..	TS 4	TORX T15	0.03
SSQC 41	47 050 05 41 261	21	42	3.5	–	–	CCMT 1204..	TS 5	TORX T25	0.08
SSQC 50	47 050 05 50 261	24.5	57							0.15
SSQC 63	47 050 05 63 261	28.5	76							0.3
SSQC 80	47 050 05 80 261	31.5	101							0.6
SSQC 90	47 050 05 90 261		122							0.8
SSSM 25-15°	47 050 05 25 211	12.5	23	–	1.6	–	CCMT 0602..	TS 25	TORX T08	0.01
SSSM 25-30°	47 050 05 25 213				3					
SSSM 25-45°	47 050 05 25 215				4.3					
SSSM 32-15°	47 050 05 32 211	15	31	–	1.6					0.025
SSSM 32-30°	47 050 05 32 213				3					
SSSM 32-45°	47 050 05 32 215				4.3					
SSSM 40-15°	47 050 05 40 211	19	39	–	2.4	–	CCMT 09T3..	TS 4	TORX T15	0.06
SSSM 40-30°	47 050 05 40 213				4.6					
SSSM 40-45°	47 050 05 40 215				6.5					
SSSM 50-15°	47 050 05 50 211	22	53	–	3.2	–	CCMT 1204..	TS 5	TORX T25	0.1
SSSM 50-30°	47 050 05 50 213				6.2					
SSSM 50-45°	47 050 05 50 215				8.8					

PT

- COVER PLATES
- **ABDECKPLATTEN**
- PROTECCIONES
- **CACHES DE PROTECTION**
- PROTEZIONI MILLERIGHE

REF.	CODE	d	H	L	M
PT 16	38 47 65 000160	16	7	14	M 3x12
PT 20	38 47 65 000200	20	8.5	17	M 4x14
PT 25	38 47 65 000250	25	10.2	21	M 4x16
PT 32	38 47 65 000320	32	13.9	28	M 5x20
PT 40	38 47 65 000400	40	17.4	35	M 6x25
PT 50	38 47 65 000500	50	21.4	47.5	M 8x25
PT 63	38 47 65 000630	63	26.4	62	M 10x30
PT 80	38 47 65 000800	80	33.9	82.5	M 12x35

D'ANDREA

MODULHARD'ANDREA

TRD Ø 28 – 120

- DOUBLE-BIT TESTAROSSA
- TESTAROSSA ZWEISCHNEIDERKÖPFE
- TESTAROSSA DE DOS CUCHILLAS
- DOUBLE TRANCHANT TESTAROSSA
- TESTAROSSA BITAGLIENTE

Dom. Brev. Dep.
Patent Pending

1
- Body
- Körper
- Cuerpo
- Corps
- Corpo

2
- Slide tooholder
- Werkzeugschlitten
- Guía portaherramientas
- Coulisseau
- Slitta portautensili

3
- Expanding radial pin
- Spreizbolzen
- Perno radial expansible
- Tige radiale expansible
- Perno radiale espandibile

4
- Vernier scale
- Nonius
- Nonio
- Vernier
- Nonio

5
- Slide clamp screw
- Schlittenklemmschraube
- Tornillo blocaje guía
- Vis blocage coulisseau
- Vite bloccaggio slitta

6
- Coolant outlet
- Kühlmittelaustritt
- Agujero salida refrigerante
- Sortie du liquide d'arrosage
- Uscita refrigerante

7
- Tools clamp screws
- Werkzeugklemmschrauben
- Tornillos blocaje herramienta
- Vis blocage outil
- Viti bloccaggio utensile

8
- Oiler
- Schmiernippel
- Engrasador
- Graisseur
- Oliatore

9
- Bit holder
- Plattenhalter
- Portaplaquita
- Porte-plaquettes
- Seggio portainserti

10 µm
nonio vernier **2 µm**

D'ANDREA

KR TRD HEAD 는 황삭과 정교한 정삭 작업을 동시에 가공할수 있습니다.

GB The main advantage of the TRD head is that it can be pre-regulated independently of the bit holders found on the slide. This allows both roughing and high precision finish work at the same time.

D Der Hauptvorteil der TRD Köpfe liegt darin, dass die auf dem Schlitten montierten Sitze unabhängig voneinander voreingestellt werden können. Dies ermöglicht gleichzeitige Grob- und Feinbearbeitungen.

E El punto fuerte de los TRD es el pre-ajuste independiente de los asientos montados sobre la corredera que permiten realizar a la vez operaciones de desbaste y acabado.

I Il punto di forza delle TRD è la pre-regolazione indipendente dei seggi montati sulla slitta che consentono di eseguire contemporaneamente lavorazioni di sgrossatura e di finitura.

TRD Ø 28 ~ 120

testarossad'andrea

KR 더블 BIT TRD HEAD 는 5마이크론의 Radial 조절이 가능한 슬라이드 메커니즘으로 정교함과 견고함을 동시에 만족시켜 황삭과 정교한 정삭 작업을 동시에 가공이 가능하며 할 수 있다. 또한 눈금을 쉽게 읽을 수 있고 장비에서 즉시 효과를 확인할 수 있다.

GB **FEATURES.** The double-bit TRD heads allow both roughing and high precision finish thanks to their rigidity and the sensitivity of the sliding mechanism which can achieve radial correction of 5 microm. This can be effected directly on the machine and easily read on the vernier scale.

D **MERKMALE.** Die TRD Zweischneiderköpfe ermöglichen eine kombinierte und hochpräzise Vor- und Fertigbearbeitung. Dank der Steifigkeit und der auf radial 5 µm über Skala genauen Schlittenverstellung kann das Mass direkt an der Maschine korrigiert werden.

E **CARACTERÍSTICAS.** Los cabezales de dos cuchillas TRD permiten realizar operaciones combinadas de desbaste y acabado de alta precisión, gracias a su rigidez y a la sensibilidad del mecanismo de deslizamiento con ajuste de 5 micras en radio, que puede leerse en el nonio y realizarse directamente en la máquina.

I **CARATTERISTICHE.** Le testine bitaglienti TRD consentono lavorazioni combinate di sgrossatura e finitura di alta precisione, grazie alla loro rigidezza e alla sensibilità dello spostamento slitta con regolazione di 5 micron sul raggio, leggibile sul nonio ed eseguibile anche in macchina.

TRD 25
Ø 28 ~ 36

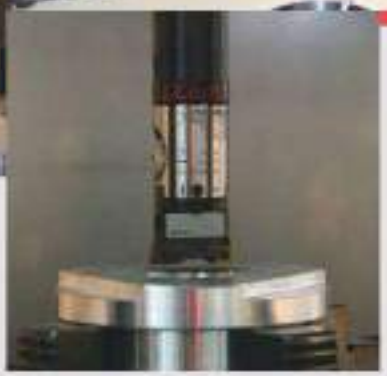
TRD 32
Ø 36 ~ 46

TRD 40
Ø 46 ~ 60

TRD 50
Ø 60 ~ 75

TRD 63
Ø 75 ~ 95

TRD 80
Ø 95 ~ 120

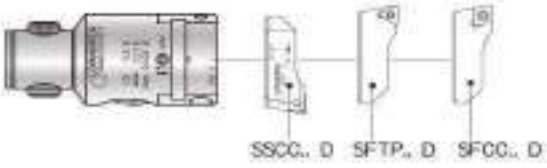


D'ANDREA

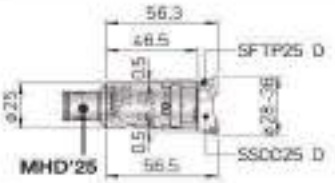
MODULHARD'ANDREA

TRD 25~80 Ø 28 ~ 120

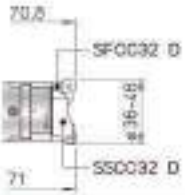
- DOUBLE-BIT TESTAROSSA
- TESTAROSSA ZWEISCHNEIDERKÖPFE
- TESTAROSSA DE DOS CUCHILLAS
- DOUBLE TRANCHANT TESTAROSSA
- TESTAROSSA BITAGLIENTE



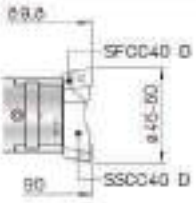
TRD 25
Ø 28 ~ 36



TRD 32
Ø 36 ~ 46

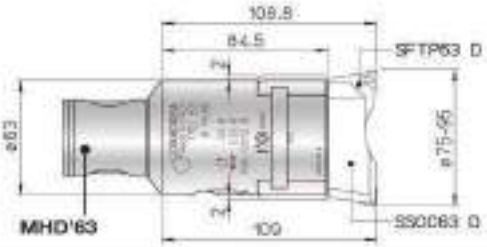


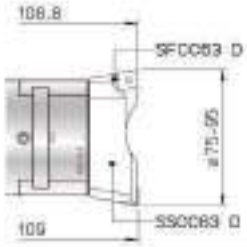
TRD 40
Ø 46 ~ 60



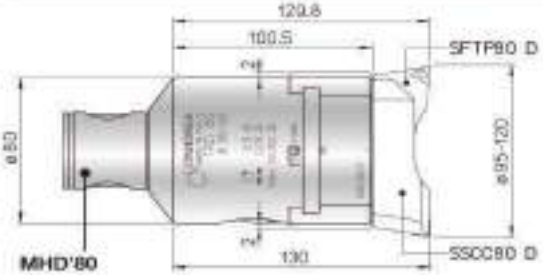
TRD 50
Ø 60 ~ 75

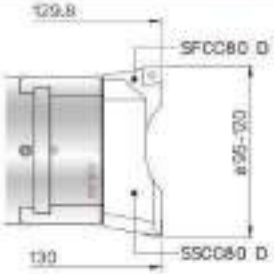
TRD 63
Ø 75 ~ 95





TRD 80
Ø 95 ~ 120





D'ANDREA

TRD 25~80 Ø 28 – 120

testarossad'andrea

TRD

- DOUBLE-BIT TESTAROSSA
- **TESTAROSSA ZWEISCHNEIDERKÖPFE**
- TESTAROSSA DE DOS CUCHILLAS
- **DOUBLE TRANCHANT TESTAROSSA**
- TESTAROSSA BITAGLIENTE

10 µm
nonio vernier **2 µm**

REF.	CODE	Kg.
TRD 25	45 50 225 0057 1	0.2
TRD 32	45 50 232 0071 1	0.35
TRD 40	45 50 240 0090 1	0.7
TRD 50	45 50 250 0086 1	1.5
TRD 63	45 50 263 0108 1	2.7
TRD 80	45 50 280 0129 1	4.8

SS-SF

- BIT-HOLDERS FOR DOUBLE-BIT TESTAROSSA
- **PLATTENHALTER FÜR TESTAROSSA ZWEISCHNEIDERBOHRKÖPFE**
- ASIENTOS PARA TESTAROSSA DE DOS CUCHILLAS
- **DOUBLE TRANCHANT TESTAROSSA**
- SEGGI PER TESTAROSSA BITAGLIENTE

REF.	CODE	A	A1	B					Kg.
SSCC 25 D	47 050 05 25 220	10	–	24	–	CCMT 0602..	TS 25	TORX T08	0.008
SSCC 32 D	47 050 05 32 220	11.5		30					0.015
SSCC 40 D	47 050 05 40 220	14	–	40	–	CCMT 09T3..	TS 4	TORX T15	0.03
SSCC 50 D	47 050 05 50 220	19		54					0.06
SSCC 63 D	47 050 05 63 220	24.5		68					0.15
SSCC 80 D	47 050 05 80 220	29.5		87					0.3
SFTP 25 D	47 050 05 25 030	–	9.8	24	TPGX 0902..	–	CS 250T	TORX T08	0.008
SFTP 32 D	47 050 05 32 030		11.3	30					0.015
SFTP 40 D	47 050 05 40 030	–	13.8	40	TPGX 1103..	–	CS 300880T		0.03
SFTP 50 D	47 050 05 50 030		18.8	54					0.06
SFTP 63 D	47 050 05 63 030		24.3	68					0.15
SFTP 80 D	47 050 05 80 030		29.3	87					0.3
SFCC 25 D	47 050 05 25 020	–	9.8	24	–	CCGT 0602..	TS 25	TORX T08	0.009
SFCC 32 D	47 050 05 32 020		11.3	30					0.015
SFCC 40 D	47 050 05 40 020	–	13.8	40	–	CCGT 09T3..	TS 4	TORX T15	0.03
SFCC 50 D	47 050 05 50 020		18.8	54					0.06
SFCC 63 D	47 050 05 63 020		24.3	68					0.15
SFCC 80 D	47 050 05 80 020		29.3	87					0.3

MODULHARD'ANDREA

1
- Body
- Körper
- Cuerpo
- Corps
- Corpo

2
- Slide toolholder
- Werkzeugschlitten
- Guia portaherramientas
- Coulisseau
- Slitta portautensili

3
- Expanding radial pin
- Spreizbolzen
- Perno radial expansible
- Tige radiale expansible
- Perno radiale espandibile

4
- Vernier scale
- Nonius
- Nonio
- Vernier
- Nonio

5
- Slide clamp screw
- Schlittenklemmschraube
- Tornillo blocaje guia
- Vis blocage coulisseau
- Vite bloccaggio slitta

6
- Coolant outlet
- Kühlmittelaustritt
- Agujero salida refrigerante
- Sortie du liquide d'arrosage
- Uscita refrigerante

7
- Tools clamp screws
- Werkzeugklemmschrauben
- Tornillo blocaje herramienta
- Vis blocage outil
- Viti bloccaggio utensile

8
- Oiler
- Schmiernippel
- Engrasador
- Graisseur
- Oliatore

9
- Bit holder
- Plattenhalter
- Portaplaquita
- Porte-plaquettes
- Seggio portainserti

10 µm
nonio vernier **2 µm**

D'ANDREA

KR IT6 공차의 매우 정교한 작업 또는 우수한 표면 조도가 요한 작업은 TRC HEAD 사용이 해결할 수 있다.
TRC HEAD 는 매우 정교하며 5 마이크론의 Radial 조정은 눈금으로 쉽게 읽을 수 있고 장비에서 즉시 효과를 확인 할 수 있습니다.

E **FEATURES.** High precision work to IT6 tolerance, with excellent surface finish, is achieved using TRC boring heads. These are very sensitive and radial correction of 5 micron can be effected directly on the machine and easily read on the vernier scale.

D **MERKMALE.** Die TRC Köpfe ermöglichen Bearbeitungen mit hoher Präzision und Toleranzen mit Grad IT6 bei hochwertiger Oberflächengüte. Sie besitzen eine Feinverstellung mit einer Genauigkeit von radial 5 µm, wobei das Maß auf der Skala abgelesen und auch direkt an der Maschine eingestellt werden kann.

E **CARACTERÍSTICAS.** Los cabezales TRC permiten realizar operaciones de alta precisión con tolerancias de grado IT6 con un extraordinario acabado de la superficie. Tienen una sensibilidad de ajuste de 5 micras en radio, de fácil lectura en el nonio y corregibles directamente sobre la máquina.

I **CARATTERISTICHE.** Le testine TRC consentono lavorazioni di alta precisione con tolleranze di grado IT6 con ottima finitura superficiale. Hanno una sensibilità di regolazione di 5 micron sul raggio, facilmente leggibile sul nonio ed eseguibile anche in macchina.

testarossad'andrea

TRC 14
Ø 14.5 ~ 18

TRC 16
Ø 18 ~ 24

TRC 20
Ø 22 ~ 30

TRC 25
Ø 28 ~ 40

TRC 32
Ø 35 ~ 53

TRC 40
Ø 48 ~ 66

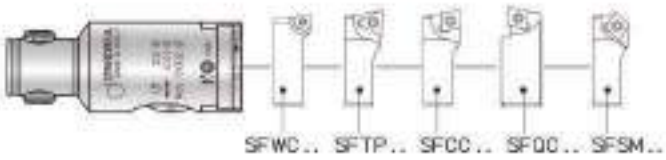
TRC 50
Ø 2.5 ~ 110

TRC 63
Ø 6 ~ 125

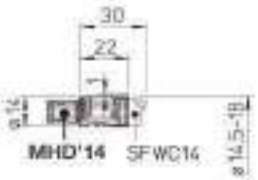
TRC 80
Ø 6 ~ 200

D'ANDREA

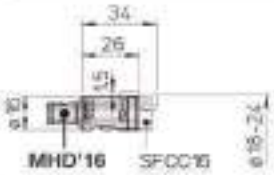
MODULHARD'ANDREA

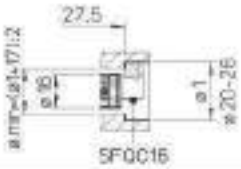


TRC 14
Ø 14.5 – 18

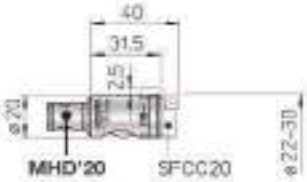


TRC 16
Ø 18 – 24

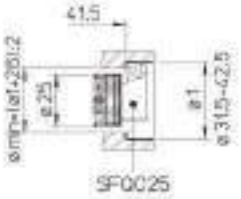


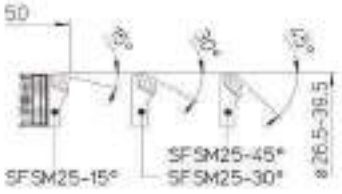


TRC 20
Ø 22 – 30

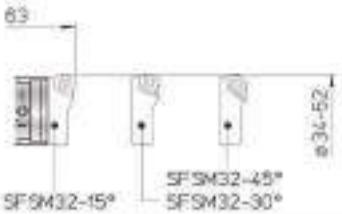


TRC 25
Ø 28 – 40

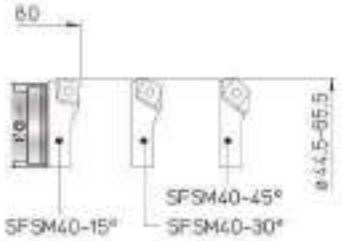




TRC 32
Ø 35 – 53



TRC 40
Ø 48 – 66



TRC 14~40 Ø 14.5 – 66

testarossad'andrea

• TESTAROSSA

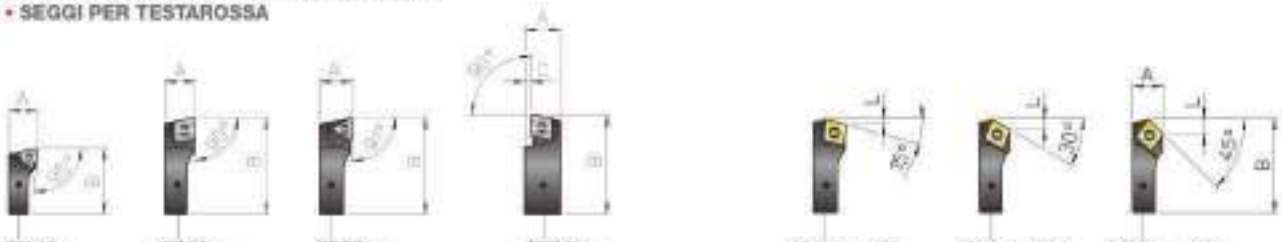
TRC

10 µm
nonio vernier **2 µm**

REF.	CODE	Kg.
TRC 14	45 50 114 0030 1	0.02
TRC 16	45 50 116 0034 1	0.05
TRC 20	45 50 120 0040 1	0.1
TRC 25	45 50 125 0050 1	0.2
TRC 32	45 50 132 0063 1	0.35
TRC 40	45 50 140 0080 1	0.7

• BIT-HOLDERS FOR TESTAROSSA
• PLATTENHALTER FÜR TESTAROSSA
• PORTA-PLAQUITAS PARA TESTAROSSA
• PORTE-PLAQUETTES POUR TESTAROSSA
• SEGGI PER TESTAROSSA

SF



REF.	CODE	A	B	C	L						Kg.
SFWC 14	47 050 05 14 002	8	14	–	–	WCGT 0201..	–	–	TS 211	TORX T08	0.003
SFCC 16	47 050 05 16 002	8	17	–	–	–	CCGT 0602..	–	TS 25	TORX T08	0.003
SFCC 20	47 050 05 20 002	8.5	21								0.005
SFCC 25	47 050 05 25 002	10	26.5								0.01
SFCC 32	47 050 05 32 002	11.5	34.5								0.02
SFCC 40	47 050 05 40 002	14	44	–	–	–	CCGT 09T3..	–	TS 4	TORX T15	0.04
SFTP 25	47 050 05 25 001	10	26.5	–	–	–	–	TPGX 0902..	CS 250T	TORX T08	0.01
SFTP 32	47 050 05 32 001	11.5	34.5								0.02
SFTP 40	47 050 05 40 001	14	44	–	–	–	–	TPGX 1103..	CS 300890T		0.04
SFQC 16	47 050 05 16 062	10	18	2	–	–	CCMT 0602..	–	TS 25	TORX T08	0.005
SFQC 20	47 050 05 20 062	10.5	22.5								0.008
SFQC 25	47 050 05 25 062	12	28.5	2.5							0.01
SFQC 32	47 050 05 32 062	13.5	35.5								0.03
SFQC 40	47 050 05 40 062	16.5	46	3	–	–	CCMT 09T3..	–	TS 4	TORXT15	0.06
SFSM 25-15°	47 050 05 25 011	10	25.5	–	1.6	–	CCMT 0602..	–	TS 25	TORX T08	0.01
SFSM 25-30°	47 050 05 25 013				3						
SFSM 25-45°	47 050 05 25 015				4.3						
SFSM 32-15°	47 050 05 32 011	11.5	33.5	–	1.6						0.02
SFSM 32-30°	47 050 05 32 013				3						
SFSM 32-45°	47 050 05 32 015				4.3						
SFSM 40-15°	47 050 05 40 011	14	42.5	–	2.4	–	CCMT 09T3..	–	TS 4	TORXT15	0.03
SFSM 40-30°	47 050 05 40 013				4.6						
SFSM 40-45°	47 050 05 40 015				6.5						

D'ANDREA

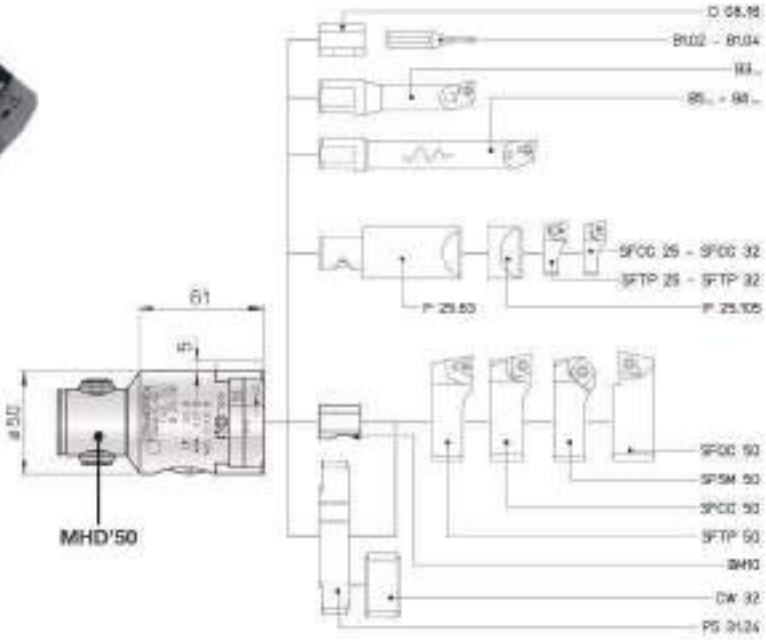
TRC 50 Ø 2.5 – 110

• TESTAROSSA

MODULHARD'ANDREA

10 µm

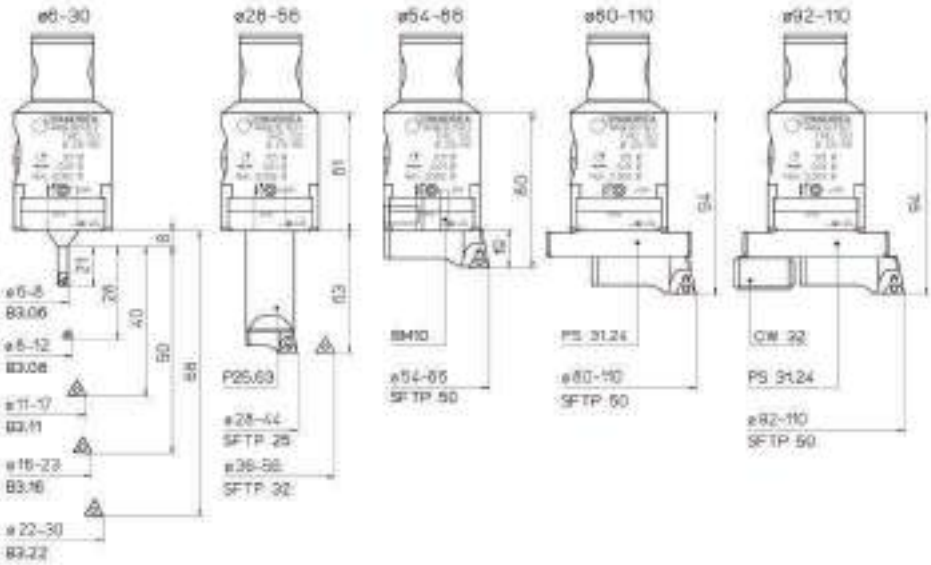
nonio vernier **2 µm**



REF.	CODE	Kg.
TRC 50	45 50 150 0080 1	1

KIT K01

Ø 6 – 110



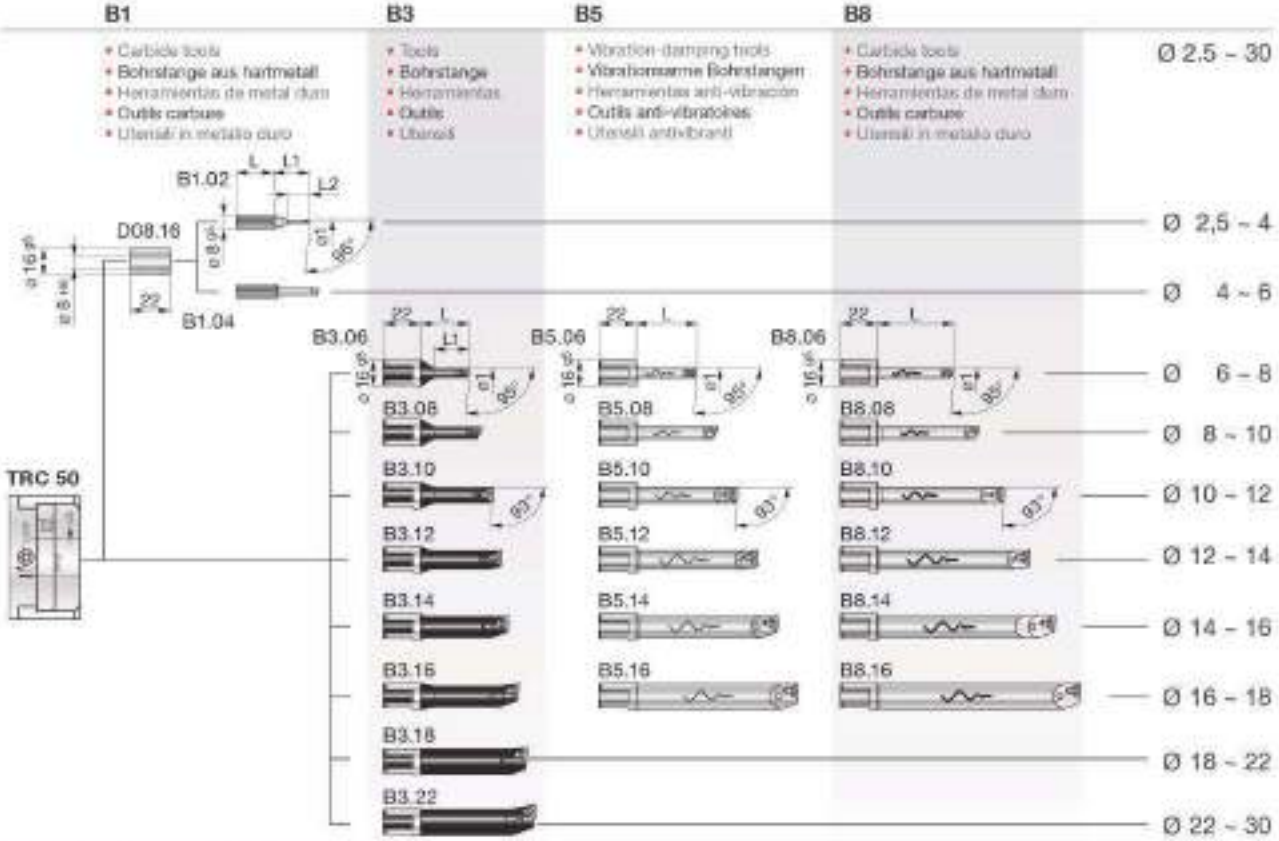
K01 TRC 50		
1 TRC 50	1 B3.06	1 SFTP25
1 P25.63	1 B3.08	1 SFTP32
1 BM10	1 B3.11	1 SFTP50
1 PS 31.24	1 B3.16	
1 CW 32	1 B3.22	
5 TPGX 090202L DC100		
1 TPGX 110302L DC100		
2 WCGT 020102L DC100		

REF.	CODE	Ø
K01 TRC 50	65 50 150 1050 2	6 – 110

D'ANDREA

TRC 50 Ø 2.5 – 30

testarossad'andrea



REF.	CODE	Kg.
D08.16	20 056 01 16 08 2	0.02

REF.	CODE	Ø1	L	L1	L2	Kg.
B1.02	57 201 05 02 001	2.5 – 4	22	21	12.5	0.02
B1.04	57 201 05 04 001	4 – 6	24	24	–	

REF.	CODE	Ø1	L	L1					Kg.
B3.06	57 201 05 06 001	6 – 8	29	21	WCGT 0201...	–	TS 21	TORX T06	0.035
B3.08	57 201 05 08 001	8 – 10	36	28			TS 211		0.04
B3.10	57 201 05 10 001	10 – 12	43	35	–	TPGX 0902...	CS 250 T	TORX T06	0.05
B3.11	57 201 05 11 001	11 – 13	48	40					0.055
B3.12	57 201 05 12 001	12 – 14		42					0.06
B3.14	57 201 05 14 001	14 – 16	52	50					0.07
B3.16	57 201 05 16 001	16 – 18	58						
B3.18	57 201 05 18 001	18 – 22	63	–					0.1
B3.22	57 201 05 22 001	22 – 30	68						
B5.06	57 201 05 06 105	6 – 8	38	–	WCGT 0201...	–	TS 21	TORX T06	0.075
B5.08	57 201 05 08 105	8 – 10	48				TS 211		0.09
B5.10	57 201 05 10 105	10 – 12	60		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B5.12	57 201 05 12 105	12 – 14	72						
B5.14	57 201 05 14 105	14 – 16	84						0.2
B5.16	57 201 05 16 105	16 – 18	96						0.3
B8.06	57 201 05 06 108	6 – 8	45	–	WCGT 0201...	–	TS 21	TORX T06	0.065
B8.08	57 201 05 08 108	8 – 10	60				TS 211		0.08
B8.10	57 201 05 10 108	10 – 12	75		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B8.12	57 201 05 12 108	12 – 14	90						0.2
B8.14	57 201 05 14 108	14 – 16	105						
B8.16	57 201 05 16 108	16 – 18	120						0.3

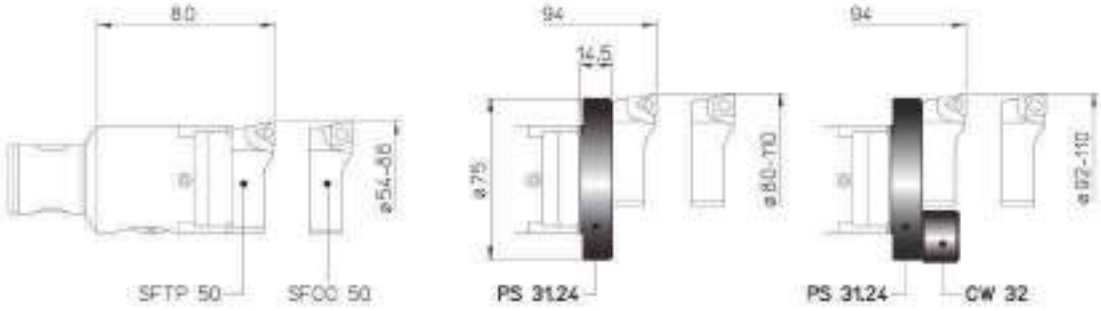
D'ANDREA

MODULHARD'ANDREA

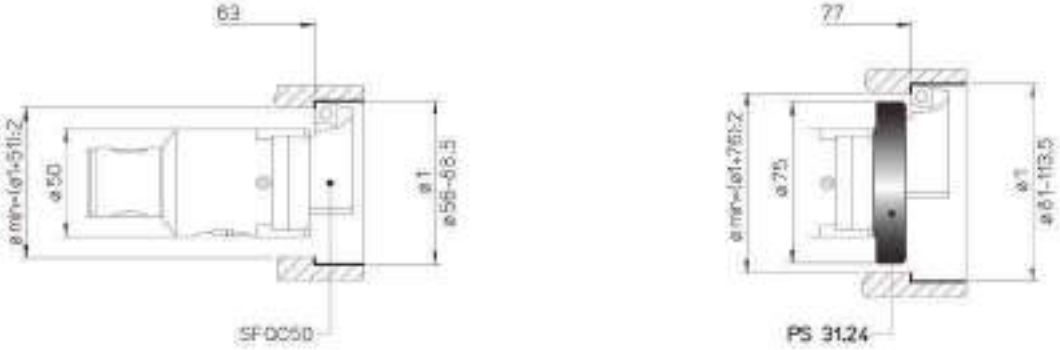
TRC 50 Ø 52 - 113.5

- TOOLHOLDERS FOR TESTAROSSA
- WERKZEUGE FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

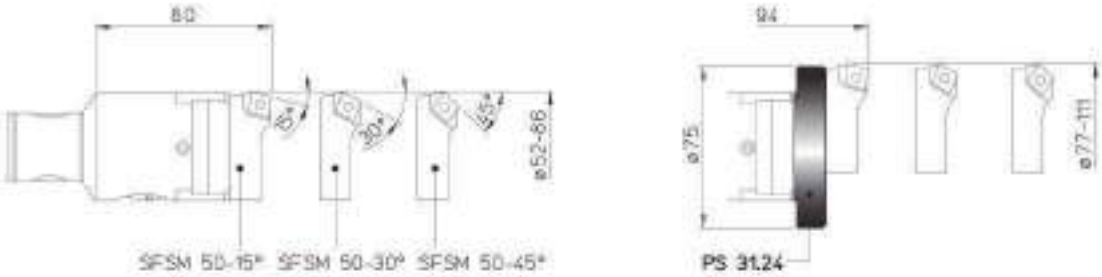
PS 31
CW 32
Ø 54 - 110



PS 31
Ø 56 - 113.5



PS 31
Ø 52 - 111



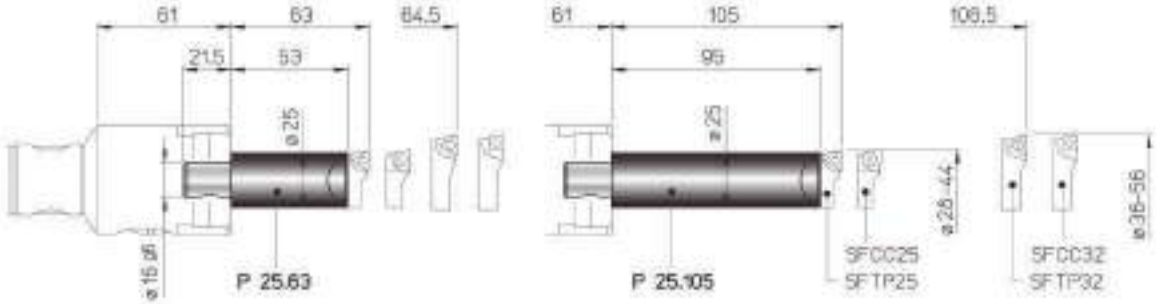
REF.	CODE	Kg.
PS 31.24	43 30 24 14 075 1	0.2
CW 32	39 20 110 032 01	0.5

D'ANDREA

testarossad'andrea

- TOOLHOLDERS FOR TESTAROSSA
- **WERKZEUGE FÜR TESTAROSSA**
- PORTAHERRAMIENTAS PARA TESTAROSSA
- **PORTE-OUTILS POUR TESTAROSSA**
- PORTAUTENSILI PER TESTAROSSA

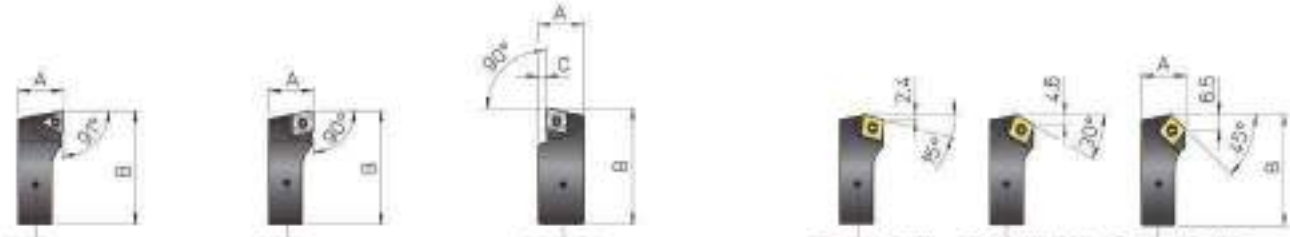
PS 25
Ø 28 – 56



REF.	CODE	Kg.
P25.63	43 51 16 25 063 0	0.5
P25.105	43 51 16 25 105 0	0.8

- BIT-HOLDERS FOR TESTAROSSA
- **PLATTENHALTER FÜR TESTAROSSA**
- PORTA-PLAQUITAS PARA TESTAROSSA
- **PORTE-PLAQUETTES POUR TESTAROSSA**
- SEGGI PER TESTAROSSA

SF



REF.	CODE	A	B	C					Kg.
SFTP 25	47 050 05 25 001	10	26.5	–	TPGX 0902..	–	CS 250T	TORX T08	0.01
SFTP 32	47 050 05 32 001	11.5	34.5						0.02
SFTP 50	47 050 05 50 001	19	52	–	TPGX 1103..	–	CS 300890T		0.08
SFCC 25	47 050 05 25 002	10	26.5	–	–	CCGT 0602..	TS 25	TORX T08	0.01
SFCC 32	47 050 05 32 002	11.5	34.5						0.02
SFCC 50	47 050 05 50 002	19	52	–	–	CCGT 09T3..	TS 4	TORX T15	0.08
SFQC 50	47 050 05 50 082	20.5	53	3	–	CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

D'ANDREA

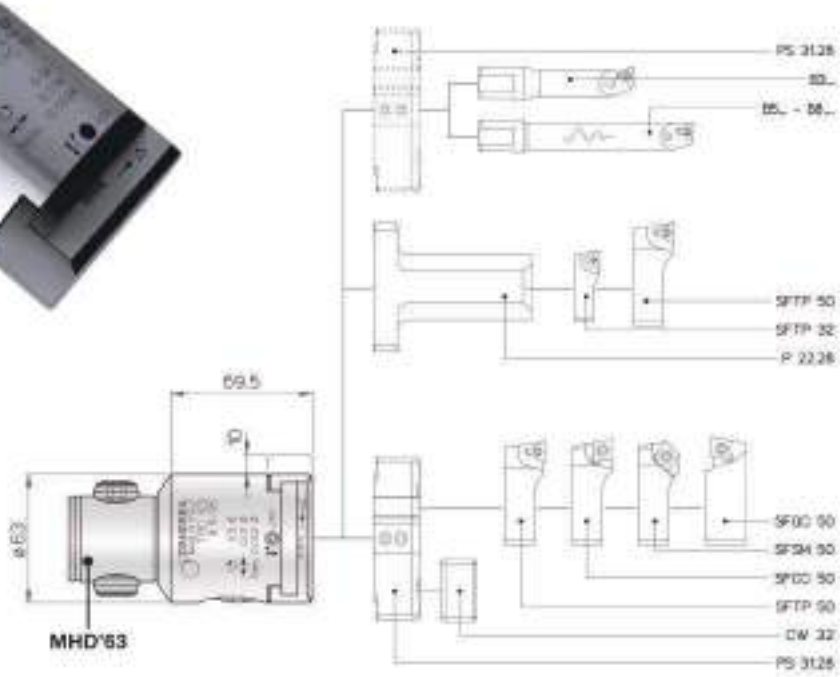
TRC 63 Ø 6 ~ 125

• TESTAROSSA

MODULHARD'ANDREA

10 µm

nano version **2 µm**



Ø 6 ~ 30

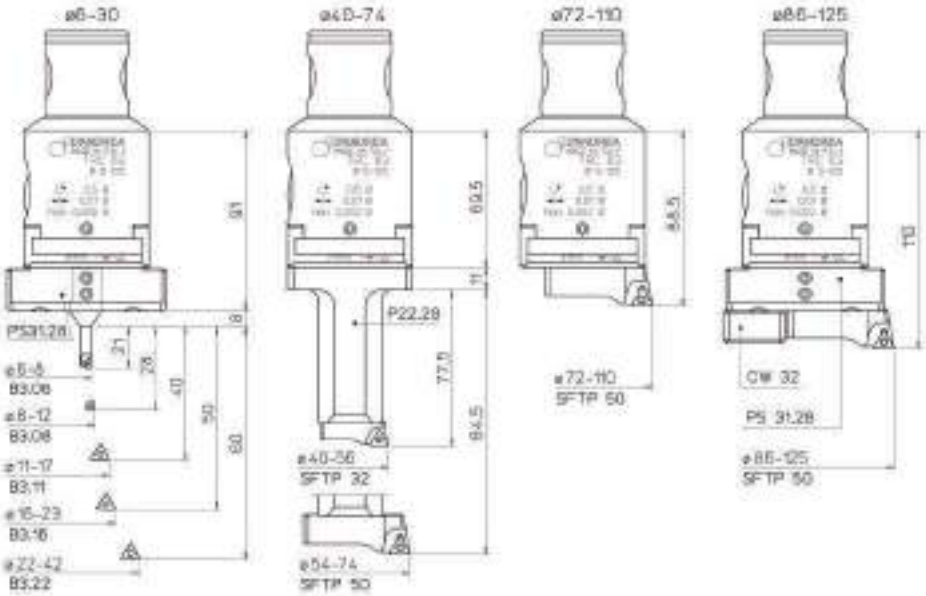
Ø 40 ~ 74

Ø 72 ~ 125

REF.	CODE	Kg.
TRC 63	45 50 163 0100 1	2

KIT K01

Ø 6 ~ 125

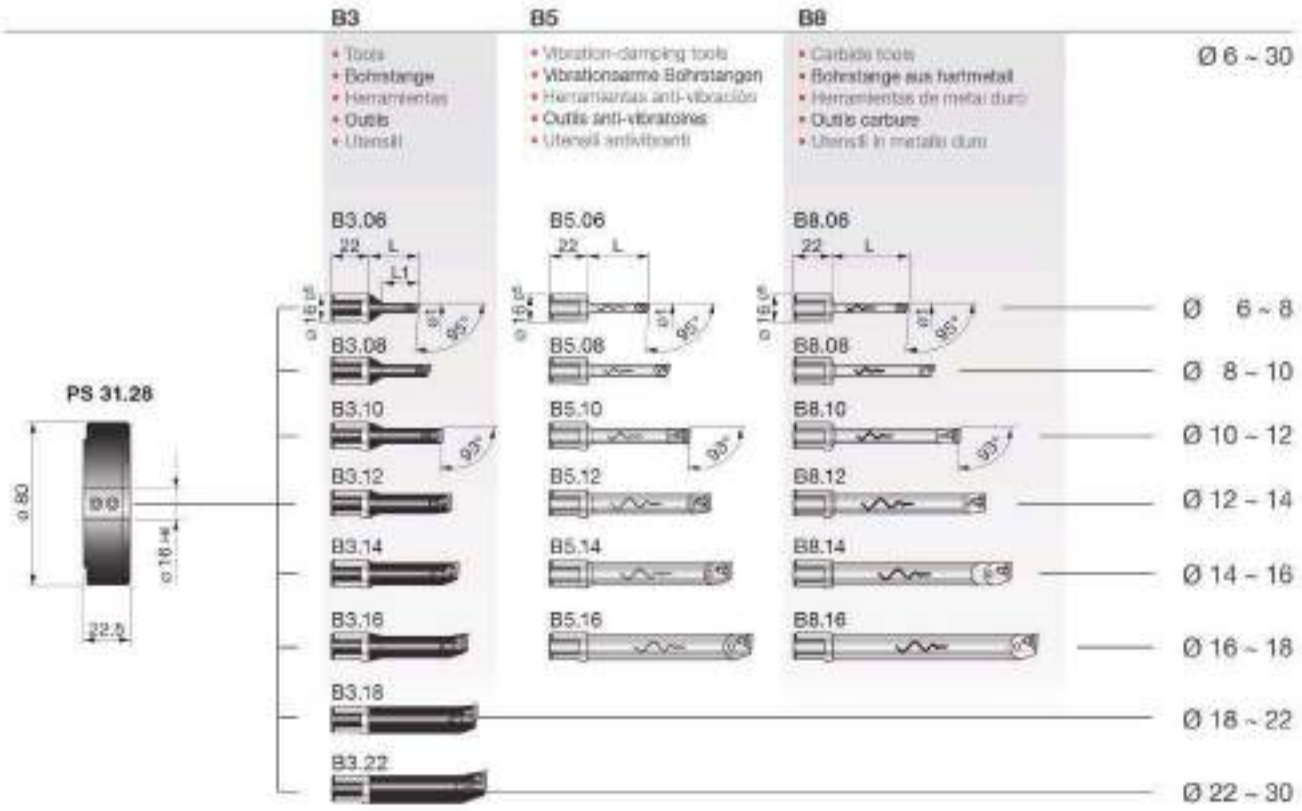


K01 TRC 63	
1 TRC 63	
1 PS31.28	1 B3.06
1 CW 32	1 B3.08
1 P22.28	1 B3.11
1 SFTP32	1 B3.16
1 SFTP50	1 B3.22
5 TPGX 090202L DC100	
1 TPGX 110302L DC100	
2 WCGT 020102L DC100	

REF.	CODE	Ø
K01 TRC 63	65 50 163 1063 2	6 ~ 125

TRC 63 Ø 6 - 30

testarossad'andrea



REF.	CODE	Kg.
PS 31.28	43 30 28 22 080 1	0.3

REF.	CODE	Ø1	L	L1					Kg.
B3.06	57 201 05 06 001	6 - 8	29	21	WCGT 0201...	-	TS 21	TORX T06	0.035
B3.08	57 201 05 08 001	8 - 10	36	28			TS 211		0.04
B3.10	57 201 05 10 001	10 - 12	43	35	-	TPGX 0902...	CS 250 T	TORX T08	0.05
B3.11	57 201 05 11 001	11 - 13	48	40					0.055
B3.12	57 201 05 12 001	12 - 14		42					0.06
B3.14	57 201 05 14 001	14 - 16	52	50					0.07
B3.16	57 201 05 16 001	16 - 18	58						
B3.18	57 201 05 18 001	18 - 22	63	-					0.1
B3.22	57 201 05 22 001	22 - 30	68						
B5.06	57 201 05 06 105	6 - 8	36	-	WCGT 0201...	-	TS 21	TORX T06	0.075
B5.08	57 201 05 08 105	8 - 10	48				TS 211		0.09
B5.10	57 201 05 10 105	10 - 12	60		-	TPGX 0902...	CS 250 T	TORX T08	0.1
B5.12	57 201 05 12 105	12 - 14	72						
B5.14	57 201 05 14 105	14 - 16	84						0.2
B5.16	57 201 05 16 105	16 - 18	96						0.3
B8.06	57 201 05 06 108	6 - 8	45	-	WCGT 0201...	-	TS 21	TORX T06	0.065
B8.08	57 201 05 08 108	8 - 10	60				TS 211		0.09
B8.10	57 201 05 10 108	10 - 12	75		-	TPGX 0902...	CS 250 T	TORX T08	0.1
B8.12	57 201 05 12 108	12 - 14	90						0.2
B8.14	57 201 05 14 108	14 - 16	105						
B8.16	57 201 05 16 108	16 - 18	120						0.3

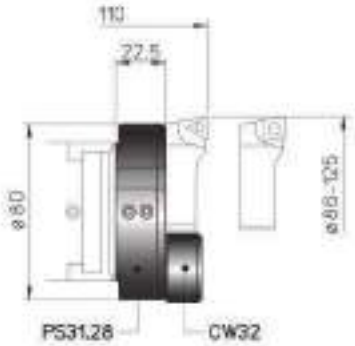
D'ANDREA

MODULHARD'ANDREA

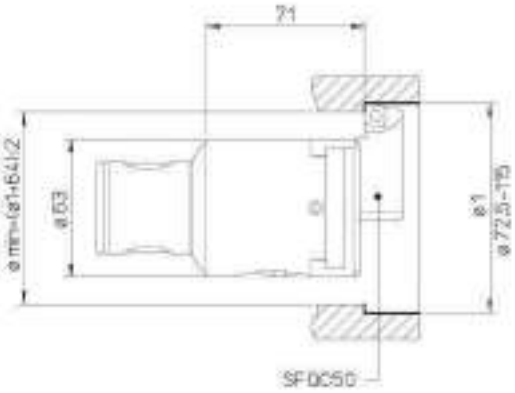
TRC 63 Ø 69 ~ 129.5

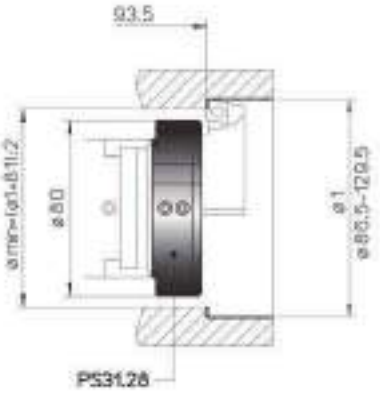
- TOOLHOLDERS FOR TESTAROSSA
- WERKZEUGE FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

PS 31
CW 32
Ø 72~ 125

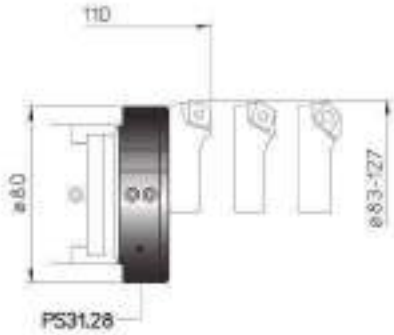


PS 31
Ø 72.5 ~ 129.5





PS 31
Ø 69 ~ 127



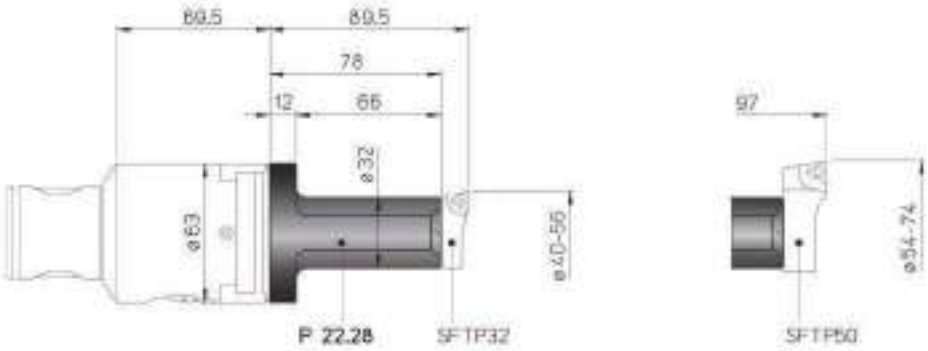
REF.	CODE	Kg.
PS 31.28	43 30 28 22 080 1	0.3
CW 32	39 20 110 032 01	0.5

D'ANDREA

testarossad'andrea

- TOOLHOLDERS FOR TESTAROSSA
- WERKZEUGE FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

P 22
Ø 40 ~ 74



REF.	CODE	Ø
P 22.28	43 30 28 22 063 1	0.45

- BIT-HOLDERS FOR TESTAROSSA
- PLATTENHALTER FÜR TESTAROSSA
- PORTA-PLAQUITAS PARA TESTAROSSA
- PORTE-PLAQUETTES POUR TESTAROSSA
- SEGGI PER TESTAROSSA

SF

REF.	CODE	A	B	C					Kg.
SFTP 32	47 050 05 32 001	11.5	34.5	–	TPGX 0902..	–	CS 250T	TORX T08	0.02
SFTP 50	47 050 05 50 001	19	52	–	TPGX 1103..	–	CS 300890T		0.08
SFCC 50	47 050 05 50 002	19	52	–	–	CCGT 09T3..	TS 4	TORX T15	0.08
SFQC 50	47 050 05 50 062	20.5	53	3	–	CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

D'ANDREA

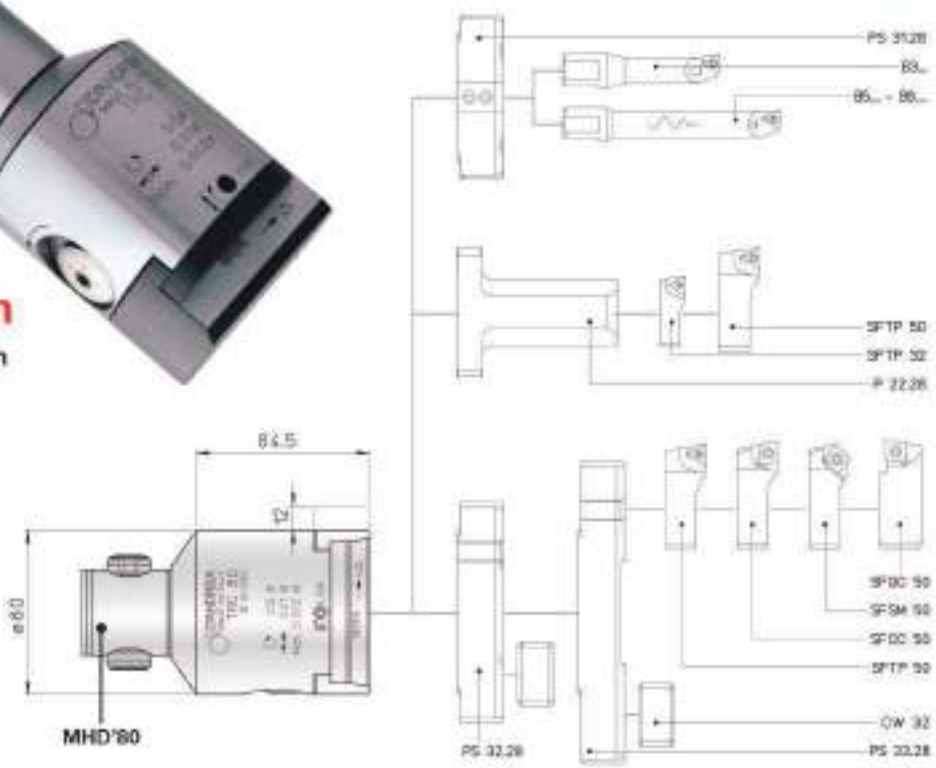
TRC 80 Ø 6 ~ 200

• TESTAROSSA

MODULHARD'ANDREA

10 µm

ripetibilità 2 µm



Ø 6 – 30

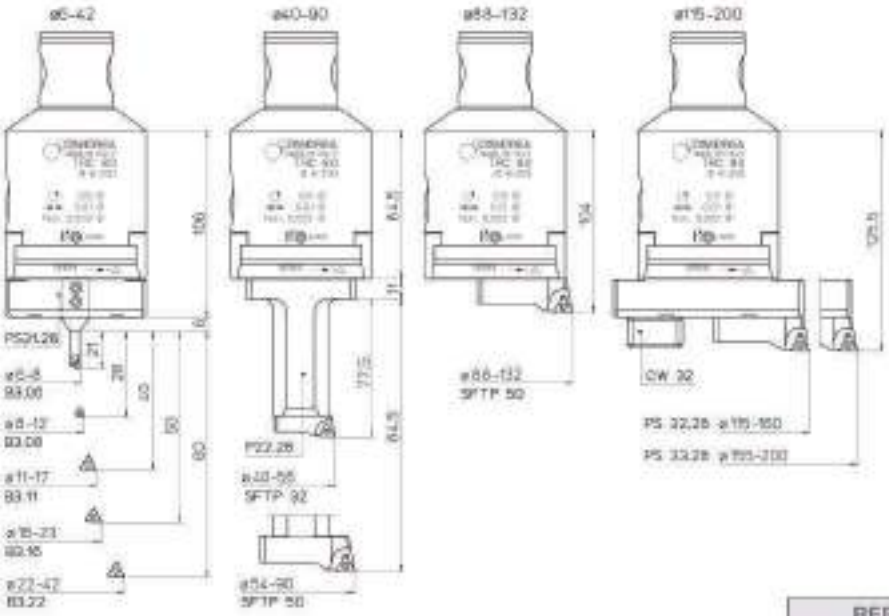
Ø 40 – 90

Ø 88 – 200

REF.	CODE	Kg.
TRC 80	45 50 180 0120 1	3.8

KIT K01

Ø 6 ~ 200



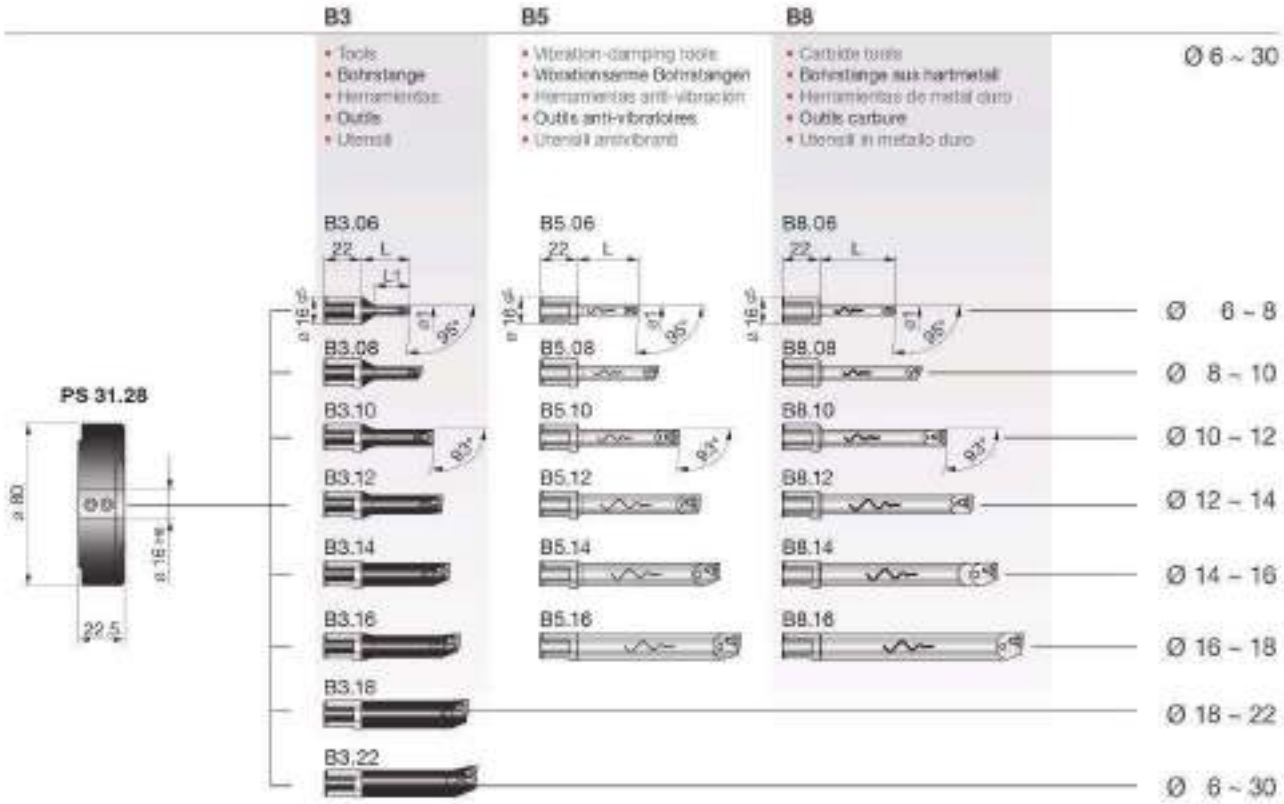
K01 TRC 80		
1 TRC 80	1 B3.06	1 SFTP32
1 PS31.28	1 B3.08	1 SFTP50
1 PS32.28	1 B3.11	
1 PS33.28	1 B3.16	
1 CW 32	1 B3.22	
1 P22.28		
5 TPGX 090202L DC100		
1 TPGX 110302L DC100		
2 WCGT 020102L DC100		

REF.	CODE	Ø
K01 TRC 80	65 50 180 1080 2	6 ~ 200

D'ANDREA

TRC 80 Ø 6 ~ 30

testarossad'andrea



REF.	CODE	Kg.
PS 31.28	43 30 28 22 080 1	0.3

REF.	CODE	Ø1	L	L1					Kg.
B3.06	57 201 05 06 001	6 ~ 8	29	21	WCGT 0201...	–	TS 21	TORX T06	0.035
B3.08	57 201 05 08 001	8 ~ 10	36	28			TS 211		0.04
B3.10	57 201 05 10 001	10 ~ 12	43	35	–	TPGX 0902...	CS 250 T	TORX T08	0.05
B3.11	57 201 05 11 001	11 ~ 13	48	40					0.055
B3.12	57 201 05 12 001	12 ~ 14		42					0.06
B3.14	57 201 05 14 001	14 ~ 16	52	50					0.07
B3.16	57 201 05 16 001	16 ~ 18	58						
B3.18	57 201 05 18 001	18 ~ 22	63	–					0.1
B3.22	57 201 05 22 001	22 ~ 30	68						
B5.06	57 201 05 06 105	6 ~ 8	36	–	WCGT 0201...	–	TS 21	TORX T06	0.075
B5.08	57 201 05 08 105	8 ~ 10	48				TS 211		0.09
B5.10	57 201 05 10 105	10 ~ 12	60		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B5.12	57 201 05 12 105	12 ~ 14	72						
B5.14	57 201 05 14 105	14 ~ 16	84						0.2
B5.16	57 201 05 16 105	16 ~ 18	96						0.3
B8.06	57 201 05 06 108	6 ~ 8	45	–	WCGT 0201...	–	TS 21	TORX T06	0.065
B8.08	57 201 05 08 108	8 ~ 10	60				TS 211		0.08
B8.10	57 201 05 10 108	10 ~ 12	75		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B8.12	57 201 05 12 108	12 ~ 14	90						0.2
B8.14	57 201 05 14 108	14 ~ 16	105						
B8.16	57 201 05 16 108	16 ~ 18	120						0.3

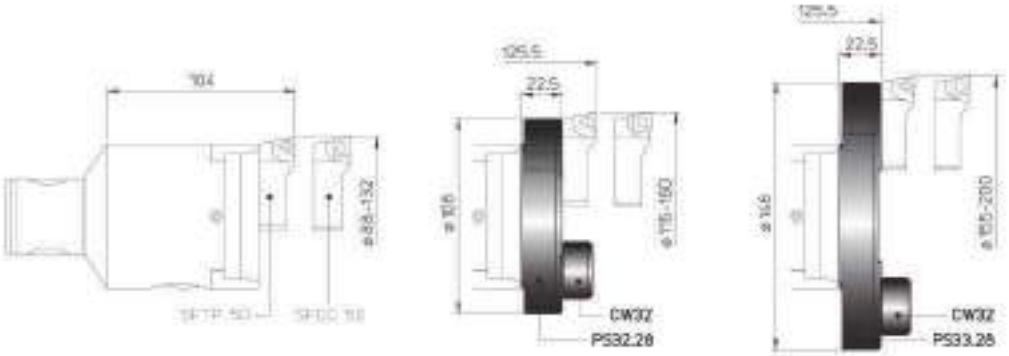
D'ANDREA

MODULHARD'ANDREA

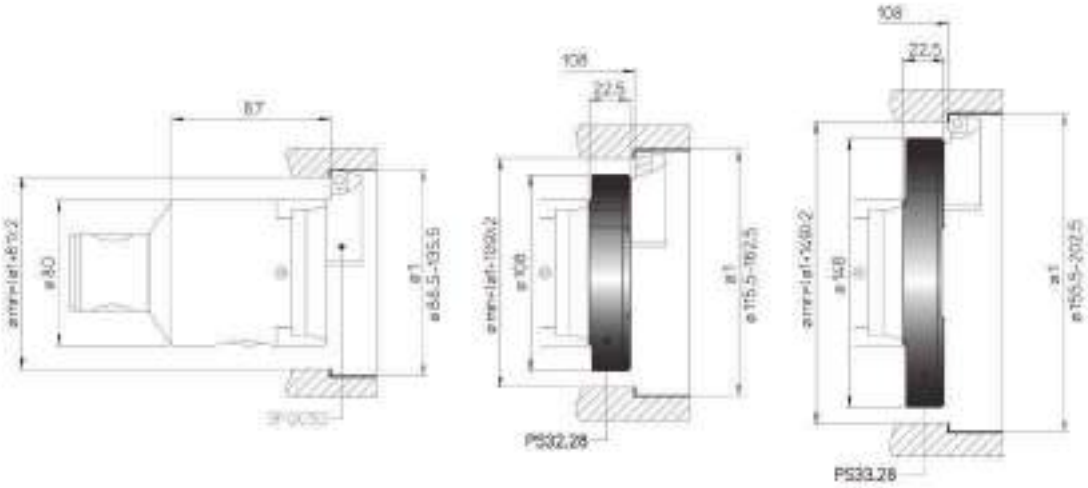
TRC 80 Ø 85 ~ 202.5

- TOOLHOLDERS FOR TESTAROSSA
- WERKZEUGE FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

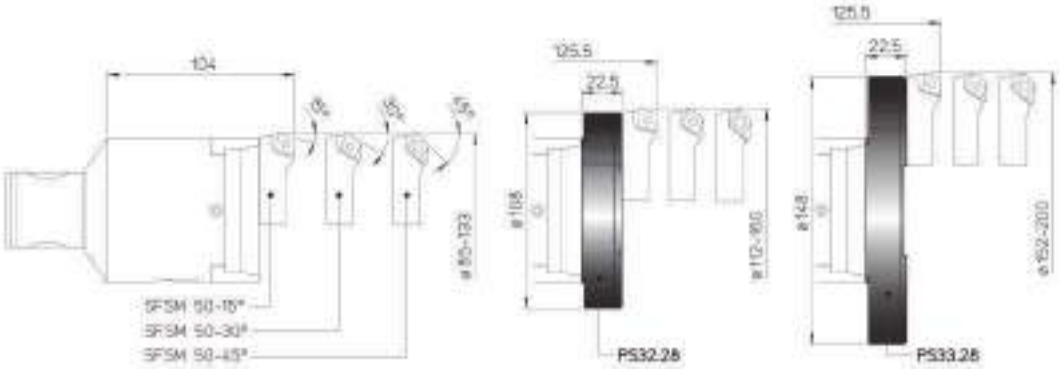
PS
CW 32
Ø 88~ 200



PS
Ø 88.5 ~ 202.5



PS
Ø 85 ~ 200

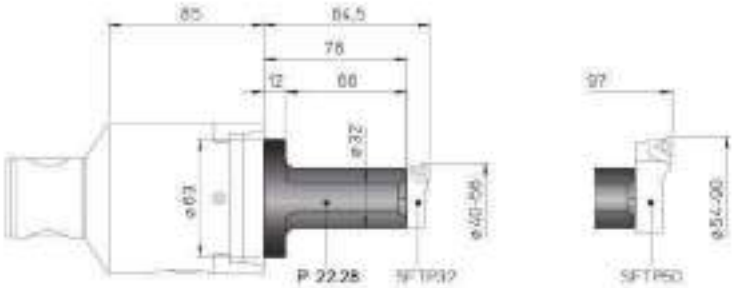


REF.	CODE	Kg.
PS 32.28	43 30 28 22 108 1	0.5
PS 33.28	43 30 28 22 148 1	0.6
CW 32	39 20 110 032 01	0.5

testarossad'andrea

- TOOLHOLDERS FOR TESTAROSSA
- **WERKZEUGE FÜR TESTAROSSA**
- PORTAHERRAMIENTAS PARA TESTAROSSA
- **PORTE-OUTILS POUR TESTAROSSA**
- PORTAUTENSILI PER TESTAROSSA

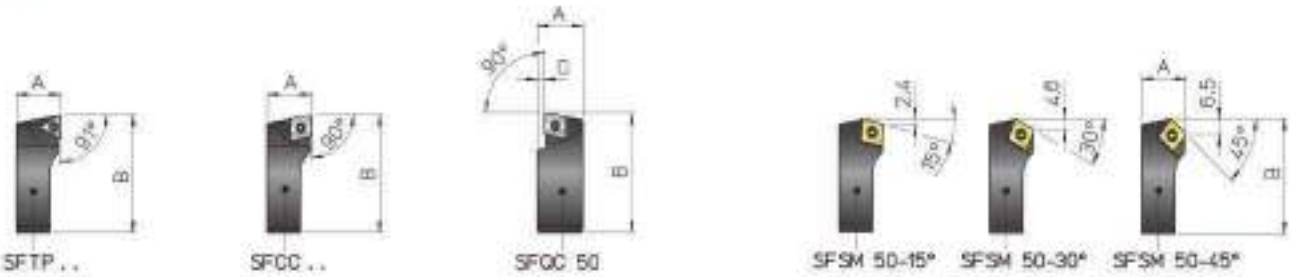
P 22
Ø 40 – 90



REF.	CODE	Kg.
P 22.28	43 30 28 22 063 1	0.45

- BIT-HOLDERS FOR TESTAROSSA
- **PLATTENHALTER FÜR TESTAROSSA**
- PORTA-PLAQUITAS PARA TESTAROSSA
- **PORTE-PLAQUETTES POUR TESTAROSSA**
- SEGGI PER TESTAROSSA

SF



REF.	CODE	A	B	C					Kg.
SFTP 32	47 050 05 32 001	11.5	34.5	–	TPGX 0902..	–	CS 250T	TORX T08	0.02
SFTP 50	47 050 05 50 001	19	52	–	TPGX 1103..	–	CS 300890T		0.08
SFCC 50	47 050 05 50 002	19	52	–	–	CCGT 09T3..	TS 4	TORX T15	0.08
SFQC 50	47 050 05 50 062	20.5	53	3	–	CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

D'ANDREA

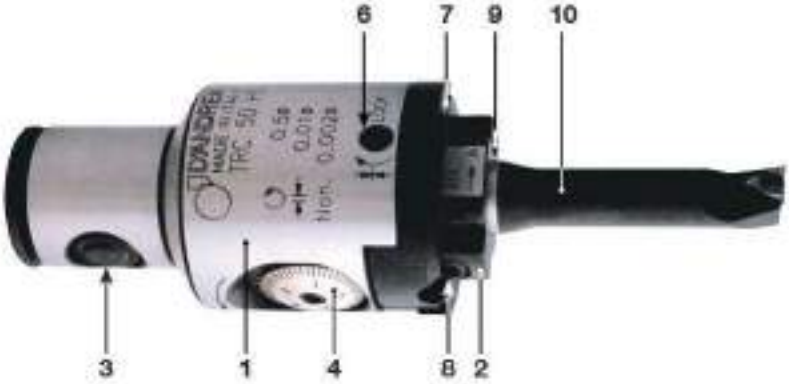
TRC HS Ø 2.5 – 22

• TESTAROSSA

TRC HS

RPM MAX 12.000

Ø 2.5 – 22



10 µm

nonio vernier 2 µm

1 • Body
• Körper
• Cuerpo
• Corps
• Corpo

2 • Slide toolholder
• Werkzeugschlitten
• Guia portaherramientas
• Coulisseau
• Slitta portautensili

3 • Expanding radial pin
• Spreizbolzen
• Perno radial expansible
• Tige radiale expansible
• Perno radiale espandibile

4 • Vernier scale
• Nonius
• Nonio
• Vernier
• Nonio

5 • Micrometric vernier scale
• Mikrometrischer Nonius
• Nonio micrométrico
• Vernier micrométrique
• Nonio micrometrico

TRC 32 HS
Ø 2.5 – 18

TRC 50 HS
Ø 2.5 – 22

D'ANDREA

KR IT6 공차의 매우 정교한 작업 또는 우수한 표면 조도가 요한 작업은 TRC HS HEAD 사용으로 해결할 수 있습니다. TRC HS HEAD 는 매우 정교하며 5 마이크론의 Radial 조정은 눈금으로 쉽게 읽을 수 있고 장비에서 즉시 효과를 확인 할 수 있습니다.

GB **FEATURES.** High precision work to IT6 tolerance, with excellent surface finish, is achieved using TRC HS boring heads. These are very sensitive and radial correction of 5 micron can be effected directly on the machine and easily read on the vernier scale.

D **MERKMALE.** Die TRC HS Köpfe ermöglichen Bearbeitungen mit hoher Präzision und Toleranzen mit Grad IT6 bei hochwertiger Oberflächengüte. Sie besitzen eine Feinverstellung mit einer Genauigkeit von radial 5 µm, wobei das Maß auf der Skala abgelesen und auch direkt an der Maschine eingestellt werden kann.

E **CARACTERÍSTICAS.** Los cabezales TRC HS permiten realizar operaciones de alta precisión con tolerancias de grado IT6 con un extraordinario acabado de la superficie. Tienen una sensibilidad de ajuste de 5 micras en radio, de fácil lectura en el nonio y corregibles directamente sobre la máquina.

I **CARATTERISTICHE.** Le testine TRC HS consentono lavorazioni di alta precisione con tolleranze di grado IT6 con ottima finitura superficiale. Hanno una sensibilità di regolazione di 5 micron sul raggio, facilmente leggibile sul nonio ed eseguibile anche in macchina.

TRM HSB Ø 2.5 ~ 22

testarossad'andrea

TRM HSB
RPM MAX 20.000
Ø 2.5 ~ 22

6 • Slide clamp screw
• Schlittenklemmschraube
• Tornillo blocaje guía
• Vis blocage coulisseau
• Vite bloccaggio slitta

7 • Coolant outlet
• Kühlmittelaustritt
• Agujero salida refrigerante
• Sortie du liquide d'arrosage
• Uscita refrigerante

8 • Tools clamp screws
• Werkzeugklemmschrauben
• Tornillo blocaje herramienta
• Vis blocage outil
• Viti bloccaggio utensile

9 • Oiler
• Schmiernippel
• Engrasador
• Graisseur
• Oliatore

10 • Tool
• Werkzeug
• Herramienta
• Outil
• Utensile

2 µm

TRM 32 HSB
Ø 2.5 ~ 18

TRM 50 HSB
Ø 2.5 ~ 22

D'ANDREA

KR IT6 공차의 매우 정교한 작업 또는 우수한 표면 조도가 요한 작업은 TRM HSB HEAD 사용으로 해결할 수 있습니다. TRM HSB HEAD 는 매우 정교하며 1 마이크론의 Radial 조정은 눈금으로 쉽게 읽을 수 있고 장비에서 즉시 효과를 확인 할 수 있습니다.

GB **FEATURES.** High precision work to IT6 tolerance, with excellent surface finish, is achieved using TRM HSB boring heads. These are very sensitive and radial correction of 1 micron can be effected directly on the machine and easily read on the vernier scale.

D **MERKMALE.** Die TRM HSB Köpfe ermöglichen Bearbeitungen mit hoher Präzision und Toleranzen mit Grad IT6 bei hochwertiger Oberflächengüte. Sie besitzen eine Feinverstellung mit einer Genauigkeit von radial 1 µm, wobei das Maß auf der Skala abgelesen und auch direkt an der Maschine eingestellt werden kann.

E **CARACTERÍSTICAS.** Los cabezales TRM HSB permiten realizar operaciones de alta precisión con tolerancias de grado IT6 con un extraordinario acabado de la superficie. Tienen una sensibilidad de ajuste de 1 micras en radio, de fácil lectura en el nonio y corregibles directamente sobre la máquina.

I **CARATTERISTICHE.** Le testine TRM HSB consentono lavorazioni di alta precisione con tolleranze di grado IT6 con ottima finitura superficiale. Hanno una sensibilità di regolazione di 1 micron sul raggio, facilmente leggibile sul nonio ed eseguibile anche in macchina.

TRC 32 HS
TRM 32 HSB Ø 2.5 ~ 18

• TESTAROSSA

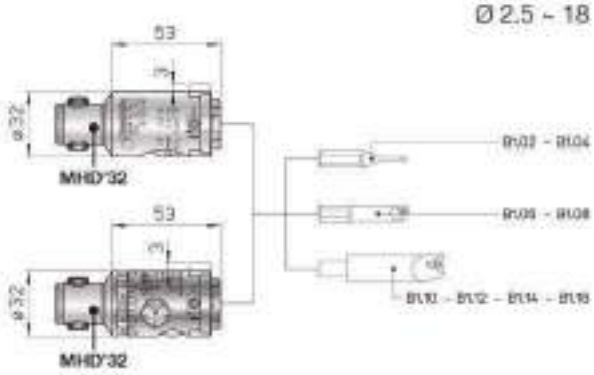
TRC 32 HS
TRM 32 HSB
Ø 2.5 ~ 18

10 µm
nonio vernier 2 µm

2 µm

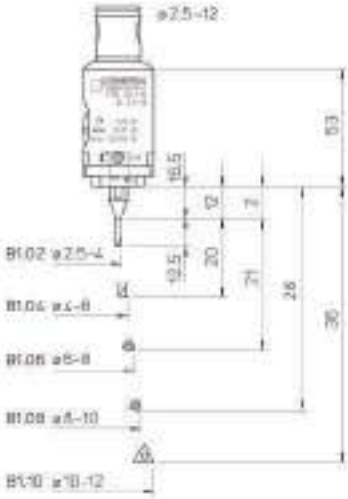
TRC 32 HS
Ø 2.5 ~ 18
RPM MAX 12.000

TRM 32 HSB
Ø 2.5 ~ 18
RPM MAX 20.000



REF.	CODE	Kg.
TRC 32 HS	45 50 332 0053 1	0.35
TRM 32 HSB	45 51 032 0053 1	

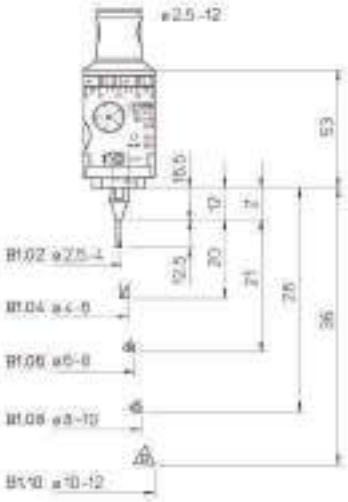
KIT K01
TRC 32 HS
Ø 2.5 ~ 12



REF.	CODE	Ø
K01 TRC 32 HS	65 50 332 3032 2	2.5 ~ 12

K01 TRC 32 HS		
1 TRC32HS	1 B1.04	1 B1.06
1 B1.02	1 B1.06	1 B1.10
5 TPGX 090202L DC100		
2 WCGT 020102L DC100		

KIT K01
TRM 32 HSB
Ø 2.5 ~ 12



REF.	CODE	Ø
K01 TRM 32 HSB	65 50 032 3032 1	2.5 ~ 12

K01 TRM 32 HSB		
1 TRM32HSB	1 B1.04	1 B1.08
1 B1.02	1 B1.06	1 B1.10
5 TPGX 090202L DC100		
2 WCGT 020102L DC100		

TRC 32 HS
TRM 32 HSB Ø 2.5 ~ 18

testarossad'andrea

B1

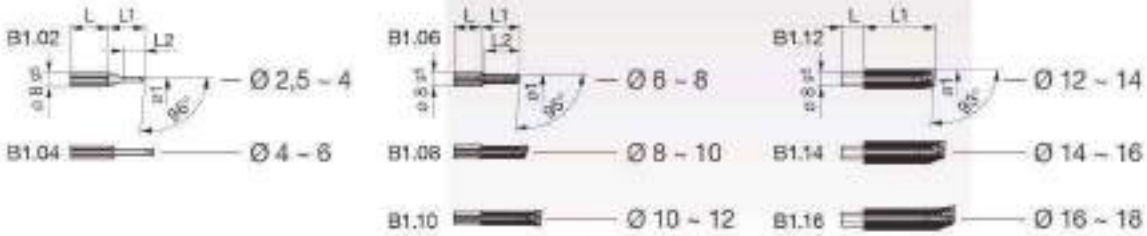
- Carbide tools
- Bohrstange aus hartmetall
- Herramientas de metal duro
- Outils carbure
- Utensili in metallo duro

B1

- Tools
- Bohrstange
- Herramientas
- Outils
- Utensili

Ø 2.5 ~ 22

TRC32HS
TRM32HSB



REF.	CODE	Ø1	L	L1	L2	Kg.
B1.02	57 201 05 02 001	2.5 ~ 4	22	21	12.5	0.02
B1.04	57 201 05 04 001	4 ~ 6	24	24	–	

REF.	CODE	Ø1	L	L1	L2					Kg.
B1.06	57 201 05 06 000	6 ~ 8	16	23	21	WCGT 0201..	–	TS 21	TORX T06	0.01
B1.08	57 201 05 08 000	8 ~ 10		28	–			TS 211		0.015
B1.10	57 201 05 10 000	10 ~ 12		36		–	TPGX 0902..	CS 250 T	TORX T08	0.02
B1.12	57 201 05 12 000	12 ~ 14	14	42						0.03
B1.14	57 201 05 14 000	14 ~ 16		48						0.04
B1.16	57 201 05 16 000	16 ~ 18		54						0.05

D'ANDREA

MODULHARD'ANDREA

TRC 50 HS
TRM 50 HSB Ø 2.5 ~ 22

• TESTAROSSA

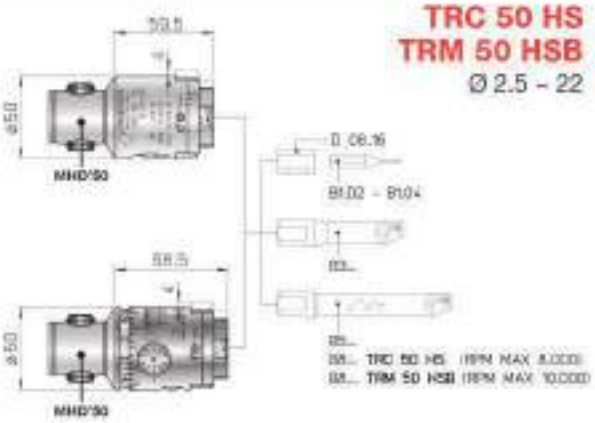
10 µm
nono vernier **2 µm**

TRC 50 HS
Ø 2.5 ~ 22
RPM MAX 12,000

2 µm

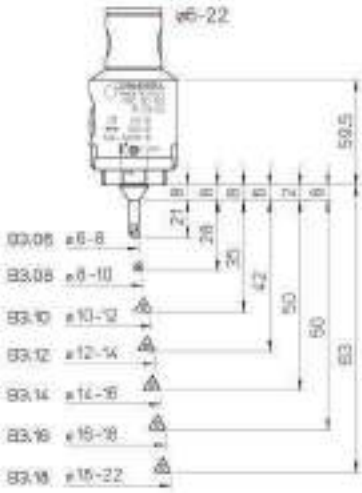
TRM 50 HSB
Ø 2.5 ~ 22
RPM MAX 20,000

TRC 50 HS
TRM 50 HSB
Ø 2.5 ~ 22



REF.	CODE	Kg.
TRC 50 HS	45 50 350 0060 1	1
TRM 50 HSB	45 51 050 0070 1	1.4

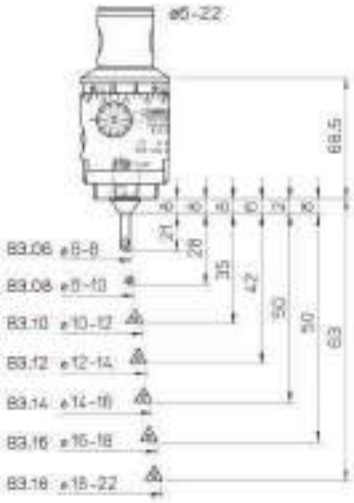
KIT K01
TRC 50 HS
Ø 6 ~ 22



REF.	CODE	Ø
K01 TRC 50 HS	65 50 350 3050 2	6 ~ 22

K01 TRC 50 HS		
1 TRC50HS	1 B3.10	1 B3.16
1 B3.16	1 B3.12	1 B3.18
1 B3.08	1 B3.14	
5 TPGX 090202L DC100		
2 WCGT 020102L DC100		

KIT K01
TRM 50 HSB
Ø 6 ~ 22

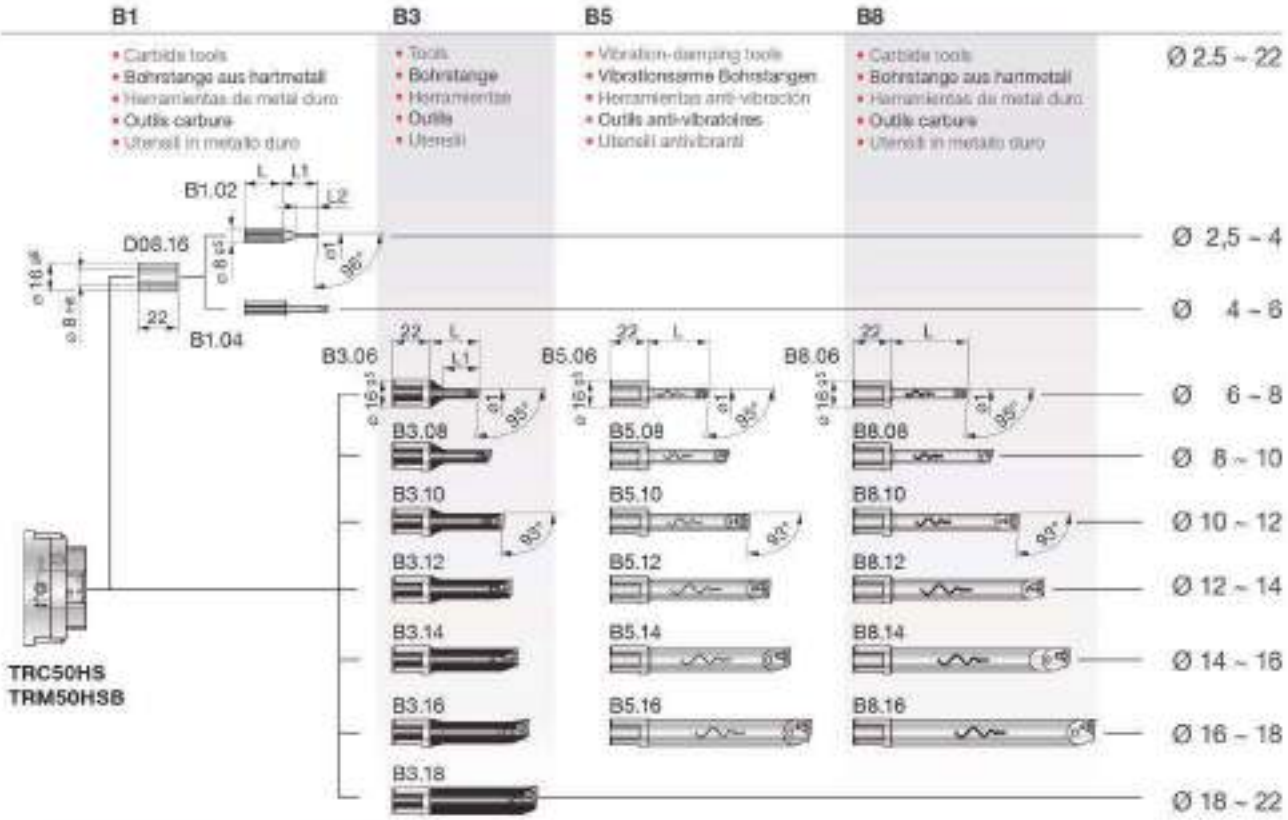


REF.	CODE	Ø
K01 TRM 50 HSB	65 50 050 3050 1	6 ~ 22

K01 TRM 50 HSB		
1 TRM50HSB	1 B3.10	1 B3.16
1 B3.06	1 B3.12	1 B3.18
1 B3.08	1 B3.14	
5 TPGX 090202L DC100		
2 WCGT 020102L DC100		

TRC 32 HS
TRM 32 HSB Ø 2.5 ~ 22

testarossad'andrea



REF.	CODE	Kg.
D08.16	20 056 01 16 08 2	0.02

REF.	CODE	Ø1	L	L1	L2	Kg.
B1.02	57 201 05 02 001	2.5 ~ 4	22	21	12.5	0.02
B1.04	57 201 05 04 001	4 ~ 6	24	24	–	

REF.	CODE	Ø1	L	L1					Kg.
B3.06	57 201 05 06 001	6 ~ 8	29	21	WCGT 0201..	–	TS 21	TORX T06	0.035
B3.08	57 201 05 08 001	8 ~ 10	36	28			TS 211		0.04
B3.10	57 201 05 10 001	10 ~ 12	43	35	–	TPGX 0902..	CS 250 T	TORX T06	0.05
B3.11	57 201 05 11 001	11 ~ 13	48	40					0.055
B3.12	57 201 05 12 001	12 ~ 14		42					0.06
B3.14	57 201 05 14 001	14 ~ 16	52	50					0.07
B3.16	57 201 05 16 001	16 ~ 18	58						
B3.18	57 201 05 18 001	18 ~ 22	63	–					0.1
B5.06	57 201 05 06 105	6 ~ 8	36	–	WCGT 0201..	–	TS 21	TORX T06	0.075
B5.08	57 201 05 08 105	8 ~ 10	48				TS 211		0.09
B5.10	57 201 05 10 105	10 ~ 12	60		–	TPGX 0902..	CS 250 T	TORX T06	0.1
B5.12	57 201 05 12 105	12 ~ 14	72						
B5.14	57 201 05 14 105	14 ~ 16	84						0.2
B5.16	57 201 05 16 105	16 ~ 18	96						0.3
B8.06	57 201 05 06 108	6 ~ 8	45	–	WCGT 0201..	–	TS 21	TORX T06	0.065
B8.08	57 201 05 08 108	8 ~ 10	60				TS 211		0.08
B8.10	57 201 05 10 108	10 ~ 12	75		–	TPGX 0902..	CS 250 T	TORX T06	0.1
B8.12	57 201 05 12 108	12 ~ 14	90						0.2
B8.14	57 201 05 14 108	14 ~ 16	105						
B8.16	57 201 05 16 108	16 ~ 18	120						0.3

D'ANDREA

MODULHARD'ANDREA

1 • Body
• Körper
• Cuerpo
• Corps
• Corpo

2 • Slide toolholder
• Werkzeugschlitten
• Guia portaherramientas
• Coulisseau
• Slitta portautensili

3 • Expanding radial pin
• Spreizbolzen
• Perno radial expansible
• Tige radiale expansible
• Perno radiale espandibile

4 • Micrometric vernier scale
• Mikrometrischer Nonius
• Nonio micrométrico
• Vernier micrométrique
• Nonio micrometrico

5 • Slide clamp screw
• Schlittenklemmschraube
• Tornillo blocaje guia
• Vis blocage coulisseau
• Vite bloccaggio slitta

6 • Coolant outlet
• Kühlmittelaustritt
• Agujero salida refrigerante
• Sortie du liquide d'arrosage
• Uscita refrigerante

7 • Tools clamp screws
• Werkzeugklemmschraube
• Tornillo blocaje herramientas
• Vis blocage outil
• Viti bloccaggio utensili

8 • Oiler
• Schmiernippel
• Engrasador
• Graisseur
• Oliatore

9 • Bit holder
• Plattenhalter
• Portaplaquita
• Porte-plaquettes
• Seggio portainserti

10 • Tool holder
• Werkzeughalter
• Portaherramienta
• Porte-outil
• Porta utensile

D'ANDREA

KR TRM HEAD 는 녹방지를 위해 특수 코팅으로 제작되었습니다. IT6 공차의 매우 정교한 작업 또는 우수한 표면 조도가 요한 작업은 TRM HEAD 사용으로 해결할 수 있습니다. TRM HEAD 는 매우 정교하며 1 마이크론의 Radial 조정은 눈금으로 쉽게 읽을 수 있고 장비에서 즉시 효과를 확인 할 수 있습니다.

GB **FEATURES.** The TRM heads in the D'Andrea Testarossa line have protective rustproof coating. High precision work to IT6 tolerance, with excellent surface finish, is achieved using TRM boring heads. These are very sensitive and radial correction of 1 micron can be effected directly on the machine and easily read on the vernier scale.

D **MERKMALE.** Die TRM Köpfe der Testarossa-Serie besitzen eine rostbeständige Oberfläche. Die TRM-Köpfe ermöglichen ermöglichen Bearbeitungen mit hoher Präzision und Toleranzen mit Grad IT6 bei hochwertiger Oberflächengüte. Sie besitzen eine Feinverstellung mit einer Genauigkeit von radial 1 µm, wobei das Maß auf der Skala abgelesen und auch direkt an der Maschine eingestellt werden kann.

E **CARACTERÍSTICAS.** Los cabezales TRM de la linea Testarossa D'Andrea cuentan con una protección superficial anticorrosión. Los cabezales TRM permiten realizar operaciones de alta precisión con tolerancias de grado IT6 con un extraordinario acabado de la superficie. Tienen una sensibilidad de ajuste de 1 micra en radio, de fácil lectura en el nonio y corregibles directamente sobre la máquina.

I **CARATTERISTICHE.** Le testine TRM della linea Testarossa D'Andrea hanno una protezione superficiale anticorrosiva. Le testine TRM consentono lavorazioni di alta precisione con tolleranze di grado IT6 con ottima finitura superficiale. Hanno una sensibilità di regolazione di 1 micron sul raggio, facilmente leggibile sul nonio ed eseguibile anche in macchina.

TRM Ø 2.5 ~ 500

testarossad'andrea

TRM 16
Ø 18 ~ 23

TRM 20
Ø 22 ~ 29

TRM 25
Ø 28 ~ 38

TRM 32
Ø 36.5 ~ 50

TRM 40
Ø 48 ~ 63

TRM 50
Ø 2.5 ~ 108

TRM 50/63
Ø 6 ~ 125

TRM 63/63
Ø 6 ~ 125

TRM 50/80
Ø 6 ~ 160

TRM 80/80
Ø 6 ~ 160

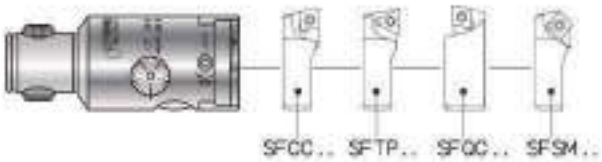
TRM 80/125
Ø 36 ~ 500

D'ANDREA

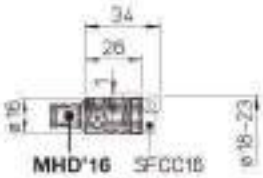
MODULHARD'ANDREA

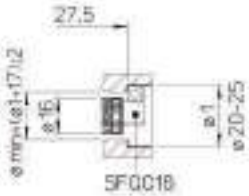
TRM 16~40 Ø 18 ~ 63

• TESTAROSSA

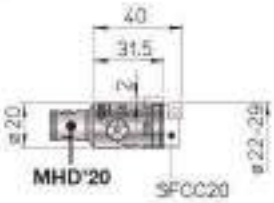


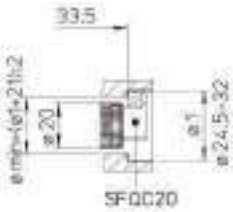
TRM 16
Ø 18 ~ 23



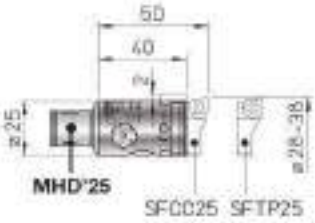


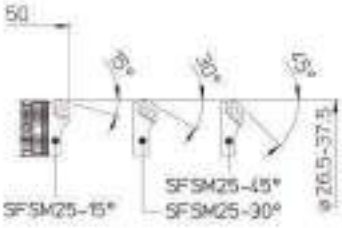
TRM 20
Ø 22 ~ 29



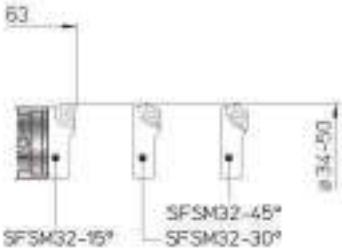


TRM 25
Ø 28 ~ 38

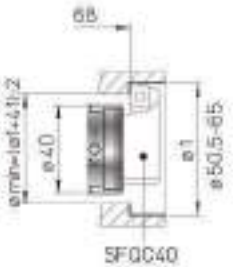


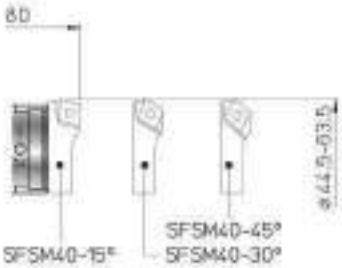


TRM 32
Ø 35.5 ~ 50



TRM 40
Ø 48 ~ 63





TRM 16~40 Ø 18 ~ 63

testarossad'andrea

TRM

2 µm

REF.	CODE	Kg.
TRM 16	45 50 016 0034 1	0.05
TRM 20	45 50 020 0040 1	0.1
TRM 25	45 50 025 0050 0	0.2
TRM 32	45 50 032 0063 0	0.35
TRM 40	45 50 040 0080 0	0.7

SF

- BIT-HOLDERS FOR TESTAROSSA
- PLATTENHALTER FÜR TESTAROSSA
- PORTA-PLAQUITAS PARA TESTAROSSA
- PORTE-PLAQUETTES POUR TESTAROSSA
- SEGGI PER TESTAROSSA

REF.	CODE	A	B	C	L					Kg.
SFCC 16	47 050 05 16 002	8	17	–	–	CCGT 0602..	–	TS 25	TORX T08	0.003
SFCC 20	47 050 05 20 002	8.5	21							0.005
SFCC 25	47 050 05 25 002	10	26.5							0.01
SFCC 32	47 050 05 32 002	11.5	34.5							0.02
SFCC 40	47 050 05 40 002	14	44	–	–	CCGT 09T3..	–	TS 4	TORX T15	0.04
SFTP 25	47 050 05 25 001	10	26.5	–	–	–	TPGX 0902..	CS 250T	TORX T08	0.01
SFTP 32	47 050 05 32 001	11.5	34.5							0.02
SFTP 40	47 050 05 40 001	14	44	–	–	–	TPGX 1103..	CS 300690T		0.04
SFQC 16	47 050 05 16 062	10	18	2	–	–	CCMT 0602..	TS 25	TORX T08	0.005
SFQC 20	47 050 05 20 062	10.5	22.5							0.008
SFQC 25	47 050 05 25 062	12	28.5	2.5						0.01
SFQC 32	47 050 05 32 062	13.5	35.5							0.03
SFQC 40	47 050 05 40 062	16.5	46	3	–	–	CCMT 09T3..	TS 4	TORXT15	0.06
SFSM 25-15°	47 050 05 25 011	10	25.5	–	1.6	–	CCMT 0602..	TS 25	TORX T08	0.01
SFSM 25-30°	47 050 05 25 013				3					
SFSM 25-45°	47 050 05 25 015				4.3					
SFSM 32-15°	47 050 05 32 011	11.5	33.5	–	1.6					0.02
SFSM 32-30°	47 050 05 32 013				3					
SFSM 32-45°	47 050 05 32 015				4.3					
SFSM 40-15°	47 050 05 40 011	14	42.5	–	2.4	–	CCMT 09T3..	TS 4	TORXT15	0.03
SFSM 40-30°	47 050 05 40 013				4.6					
SFSM 40-45°	47 050 05 40 015				6.6					

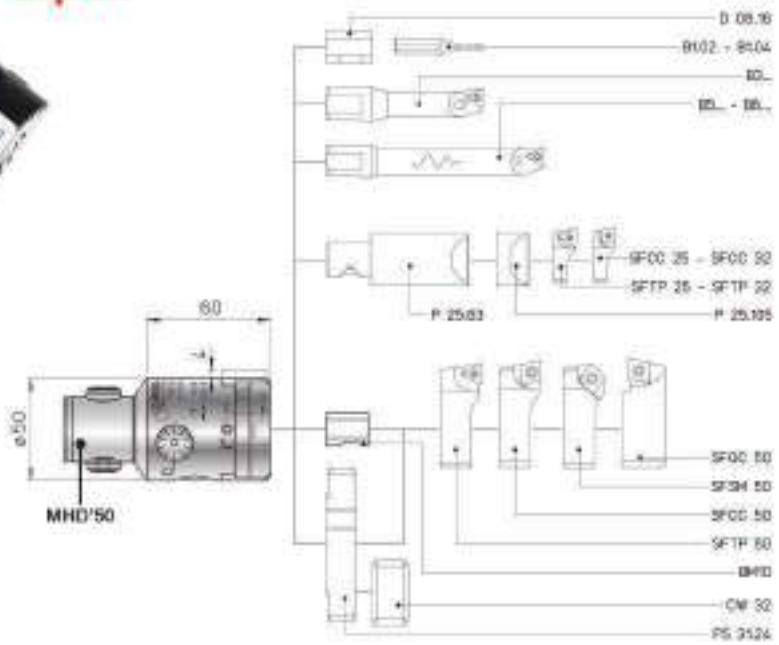
D'ANDREA

TRM 50 Ø 2.5 – 108

• TESTAROSSA

MODULHARD'ANDREA

2 µm



Ø 2.5 – 30

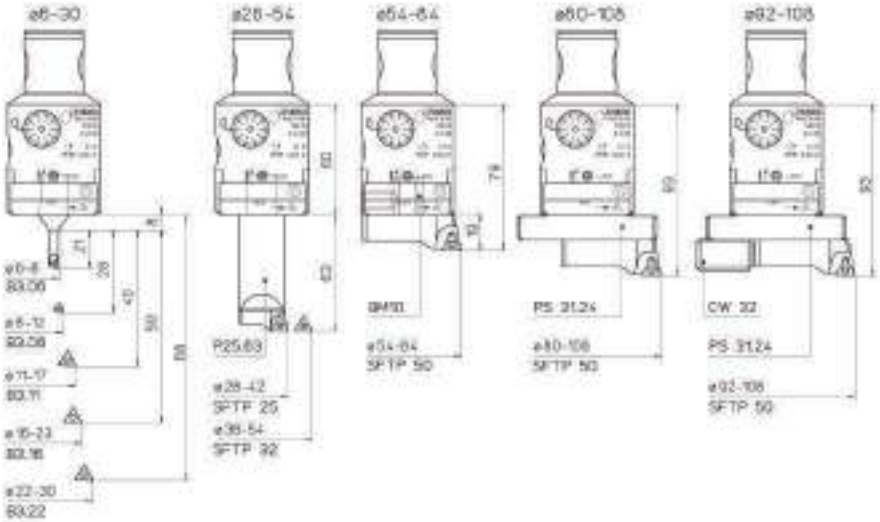
Ø 28 – 54

Ø 54 – 108

REF.	CODE	Kg.
TRM 50	45 50 050 0050 0	1

KIT K01

Ø 6 – 108

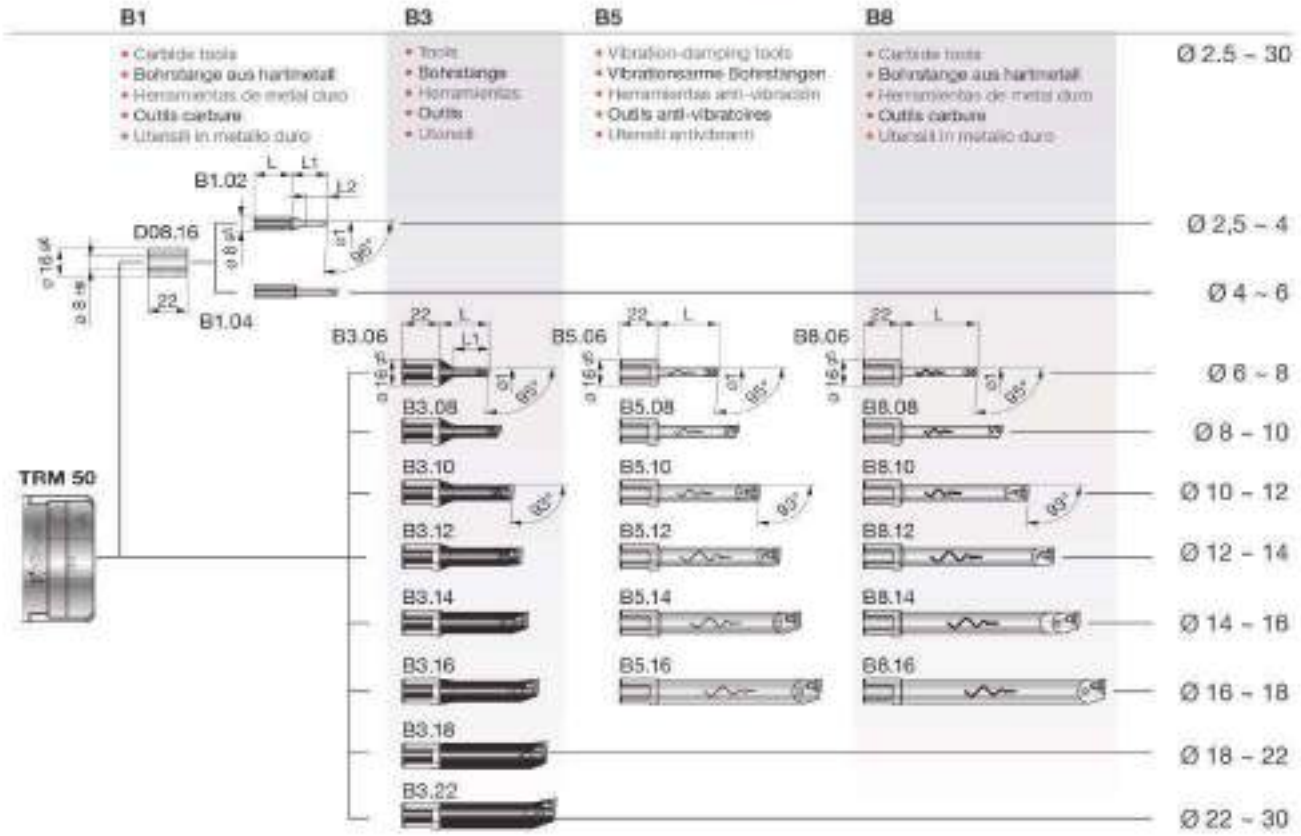


K01 TRM 50		
1 TRM 50	1 B3.06	1 SFTP25
1 P25.63	1 B3.08	1 SFTP32
1 BM10	1 B3.11	1 SFTP50
1 PS 31.24	1 B3.16	
1 CW 32	1 B3.22	
1 TPGX 110302L DC100		
5 TPGX 090302L DC100		
2 WCGT 020102L DC100		

REF.	CODE	Ø
K01 TRM 50	65 50 050 1050 1	6 – 108

TRM 50 Ø 2.5 – 30

testarossad'andrea



REF.	CODE	Kg.
D08.16	20 056 01 16 08 2	0.02

REF.	CODE	Ø1	L	L1	L2	Kg.
B1.02	57 201 05 02 001	2.5 – 4	22	21	12.5	0.02
B1.04	57 201 05 04 001	4 – 6	24	24	–	

REF.	CODE	Ø1	L	L1					Kg.
B3.06	57 201 05 06 001	6 – 8	29	21	WCGT 0201...	–	TS 21	TORX T06	0.035
B3.08	57 201 05 08 001	8 – 10	36	28			TS 211		0.04
B3.10	57 201 05 10 001	10 – 12	43	35	–	TPGX 0902...	CS 250 T	TORX T08	0.05
B3.11	57 201 05 11 001	11 – 13	48	40					0.055
B3.12	57 201 05 12 001	12 – 14		42					0.06
B3.14	57 201 05 14 001	14 – 16	52	50					0.07
B3.16	57 201 05 16 001	16 – 18	58						
B3.18	57 201 05 18 001	18 – 22	63	–					0.1
B3.22	57 201 05 22 001	22 – 30	68						
B5.06	57 201 05 06 105	6 – 8	36	–	WCGT 0201...	–	TS 21	TORX T06	0.075
B5.08	57 201 05 08 105	8 – 10	48				TS 211		0.09
B5.10	57 201 05 10 105	10 – 12	60		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B5.12	57 201 05 12 105	12 – 14	72						
B5.14	57 201 05 14 105	14 – 16	84						0.2
B5.16	57 201 05 16 105	16 – 18	96						0.3
B8.06	57 201 05 06 108	6 – 8	45	–	WCGT 0201...	–	TS 21	TORX T06	0.065
B8.08	57 201 05 08 108	8 – 10	60				TS 211		0.08
B8.10	57 201 05 10 108	10 – 12	75		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B8.12	57 201 05 12 108	12 – 14	90						0.2
B8.14	57 201 05 14 108	14 – 16	105						
B8.16	57 201 05 16 108	16 – 18	120						0.3

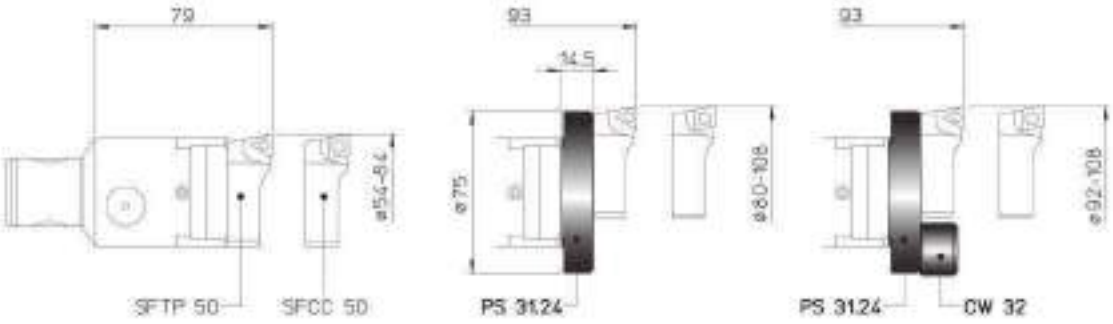
D'ANDREA

MODULHARD'ANDREA

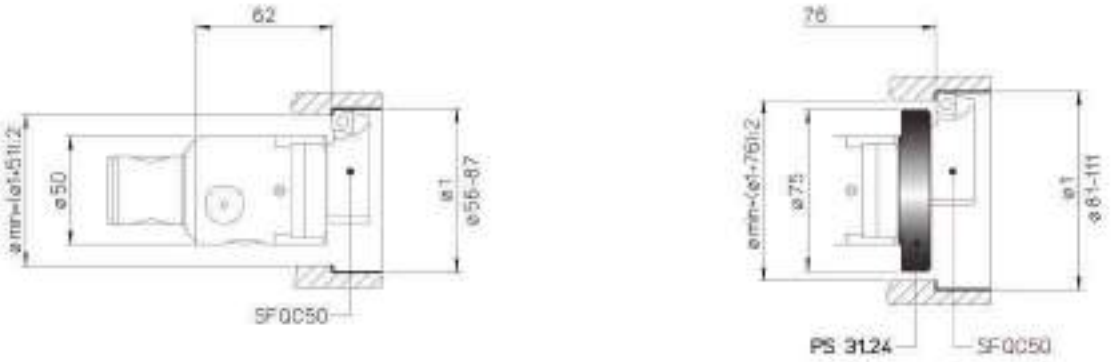
TRM 50 Ø 52 ~ 108

- TOOLHOLDERS FOR TESTAROSSA
- GRUNDHALTER FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

PS 31
CW 32
Ø 54 ~ 108



PS 31
Ø 56 ~ 111



PS 31
Ø 52 ~ 109

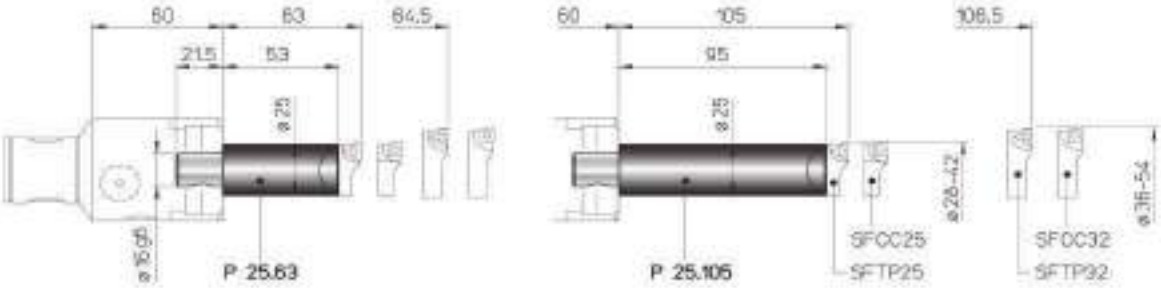
REF.	CODE	Kg.
PS 31.24	43 30 24 14 075 1	0.2
CW 32	39 20 110 032 01	0.5

D'ANDREA

testarossad'andrea

- TOOLHOLDERS FOR TESTAROSSA
- GRUNDHALTER FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

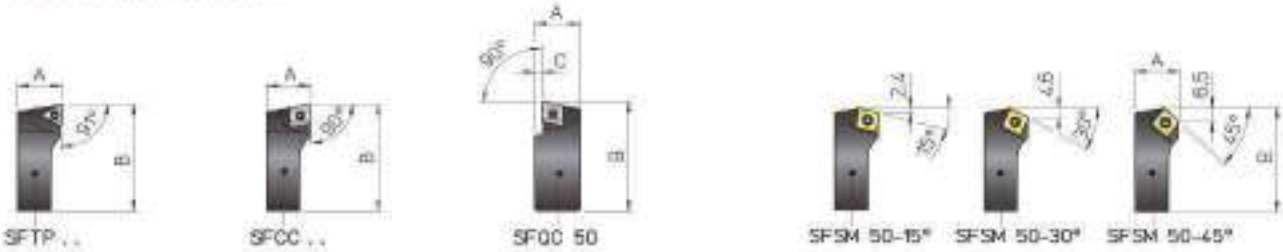
PS 25
Ø 28 – 54



REF.	CODE	Kg.
P25.63	43 51 16 25 063 0	0.5
P25.105	43 51 16 25 105 0	0.6

- BIT-HOLDERS FOR TESTAROSSA
- PLATTENHALTER FÜR TESTAROSSA
- PORTA-PLAQUITAS PARA TESTAROSSA
- PORTE-PLAQUETTES POUR TESTAROSSA
- SEGGI PER TESTAROSSA

SF



REF.	CODE	A	B	C					Kg.
SFTP 25	47 050 05 25 001	10	26.5	–	TPGX 0802..	–	CS 250T	TORX T08	0.01
SFTP 32	47 050 05 32 001	11.5	34.5						0.02
SFTP 50	47 050 05 50 001	19	52	–	TPGX 1103..	–	CS 300890T		0.09
SFCC 25	47 050 05 25 002	10	26.5	–	–	CCGT 0602..	TS 25	TORX T08	0.01
SFCC 32	47 050 05 32 002	11.5	34.5						0.02
SFCC 50	47 050 05 50 002	19	52	–	–	CCGT 09T3..	TS 4	TORX T15	0.09
SFQC 50	47 050 05 50 062	20.5	53	3	–	CCMT 09T3...	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3...	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

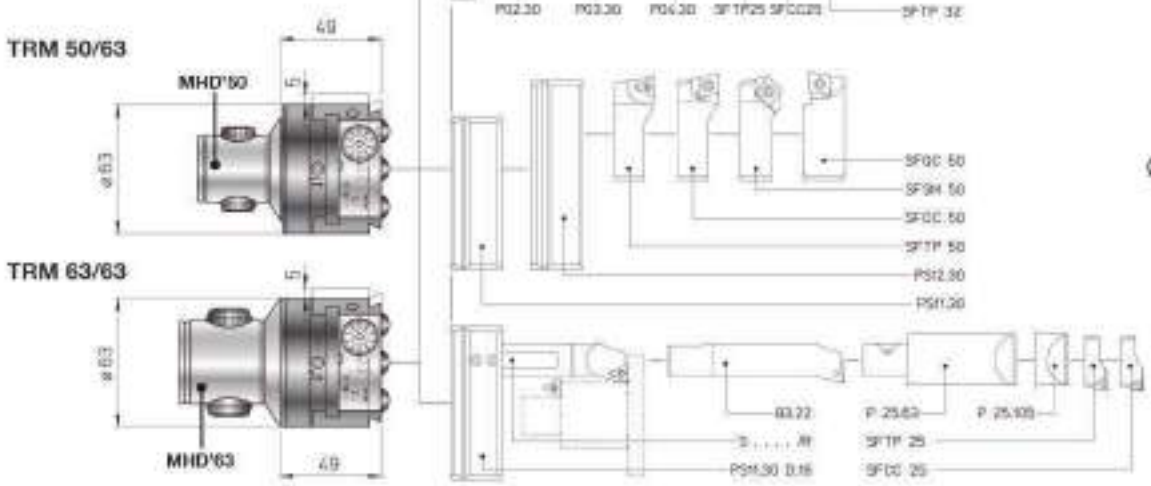
D'ANDREA

MODULHARD'ANDREA

TRM 50/63
TRM 63/63 Ø 2.5 ~ 125

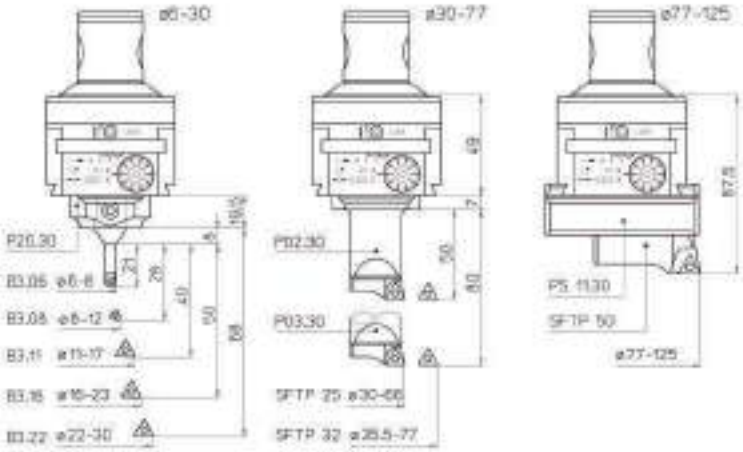
• TESTAROSSA

2 µm



REF.	CODE	Kg.
TRM 50/63	45 50 050 0063 0	1.1
TRM 63/63	45 50 063 0063 0	1.5

KIT K01
Ø 6 ~ 125

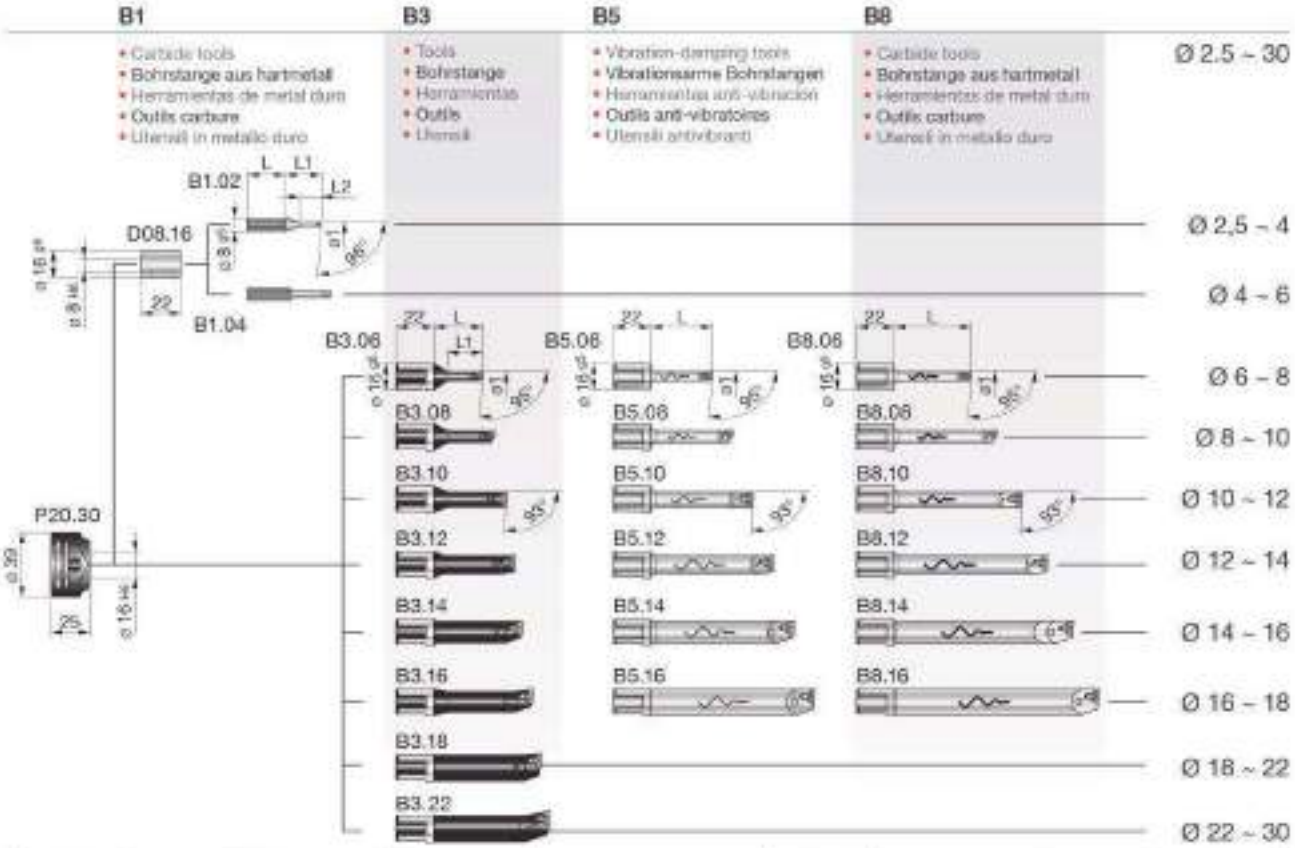


K01 TRM 50/63 - 63/63			
1 TRM../ 63			
1 P20.30	1 P02.30	1 SFTP25	1 B3.06
1 PS11.30	1 P03.30	1 SFTP32	1 B3.08
5 TPGX 090202L DC100		1 SFTP50	1 B3.11
1 TPGX 110302L DC100			1 B3.16
2 WCGT 020102L DC100			1 B3.22

REF.	CODE	Ø
K01 TRM 50/63	65 50 050 1063 1	6 ~ 125
K01 TRM 63/63	65 50 063 1063 1	

TRM 50/63
TRM 63/63 Ø 2.5 ~ 30

testarossad'andrea



REF.	CODE	Kg.
D08.16	20 056 01 16 08 2	0.02

REF.	CODE	Kg.
P20.30	43 10 30 16 030 0	0.2

REF.	CODE	Ø1	L	L1	L2	Kg.
B1.02	57 201 05 02 001	2.5 ~ 4	22	21	12.5	0.02
B1.04	57 201 05 04 001	4 ~ 6	24	24	–	

REF.	CODE	Ø1	L	L1					Kg.
B3.06	57 201 05 06 001	6 ~ 8	29	21	WCGT 0201...	–	TS 21	TORX T06	0.035
B3.08	57 201 05 08 001	8 ~ 10	36	28			TS 211		0.04
B3.10	57 201 05 10 001	10 ~ 12	43	35	–	TPGX 0902..	CS 250 T	TORX T08	0.05
B3.11	57 201 05 11 001	11 ~ 13	48	40					0.055
B3.12	57 201 05 12 001	12 ~ 14		42					0.06
B3.14	57 201 05 14 001	14 ~ 16	52	50					0.07
B3.16	57 201 05 16 001	16 ~ 18	58						
B3.18	57 201 05 18 001	18 ~ 22	63	–					0.1
B3.22	57 201 05 22 001	22 ~ 30	68						
B5.06	57 201 05 06 105	6 ~ 8	36	–	WCGT 0201...	–	TS 21	TORX T08	0.075
B5.08	57 201 05 08 105	8 ~ 10	48				TS 211		0.09
B5.10	57 201 05 10 105	10 ~ 12	60		–	TPGX 0902..	CS 250 T	TORX T08	0.1
B5.12	57 201 05 12 105	12 ~ 14	72						
B5.14	57 201 05 14 105	14 ~ 16	84						0.2
B5.16	57 201 05 16 105	16 ~ 18	96						0.3
B8.06	57 201 05 06 108	6 ~ 8	45	–	WCGT 0201...	–	TS 21	TORX T08	0.065
B8.08	57 201 05 08 108	8 ~ 10	60				TS 211		0.08
B8.10	57 201 05 10 108	10 ~ 12	75		–	TPGX 0902..	CS 250 T	TORX T08	0.1
B8.12	57 201 05 12 108	12 ~ 14	90						0.2
B8.14	57 201 05 14 108	14 ~ 16	105						
B8.16	57 201 05 16 108	16 ~ 18	120						0.3

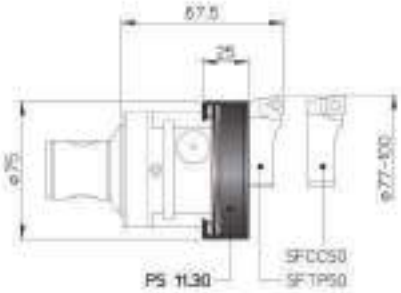
D'ANDREA

MODULHARD'ANDREA

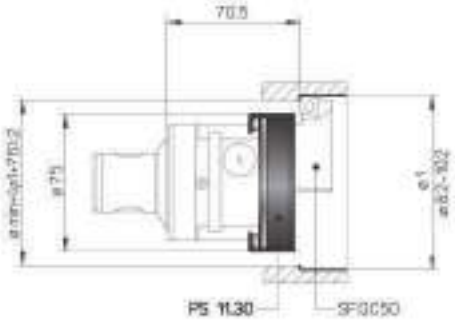
TRM 50/63
TRM 63/63 Ø 77 ~ 127

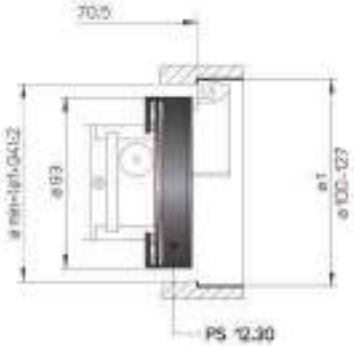
- TOOLHOLDERS FOR TESTAROSSA
- GRUNDHALTER FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

PS
Ø 77 ~ 125

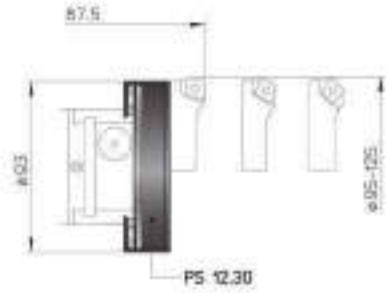


PS
Ø 82 ~ 127





PS
Ø 77 ~ 125



REF.	CODE	Kg.
PS 11.30	43 30 30 26 075 0	0.4
PS 12.30	43 30 30 26 095 0	0.5

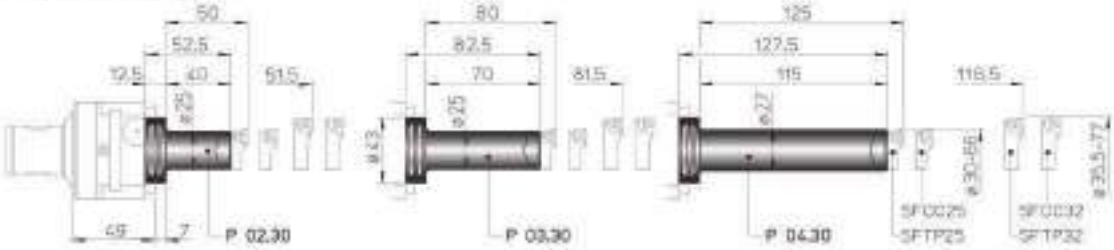
D'ANDREA

TRM 50/63
TRM 63/63 Ø 5 ~ 77

testarossad'andrea

- TOOLHOLDERS FOR TESTAROSSA
- **GRUNDHALTER FÜR TESTAROSSA**
- PORTAHERRAMIENTAS PARA TESTAROSSA
- **PORTE-OUTILS POUR TESTAROSSA**
- PORTAUTENSILI PER TESTAROSSA

P
Ø 30 – 77



REF.	CODE	Kg.
P02.30	43 10 30 25 040 0	0.3
P03.30	43 10 30 25 070 0	0.4
P04.30	43 10 30 25 115 0	0.7

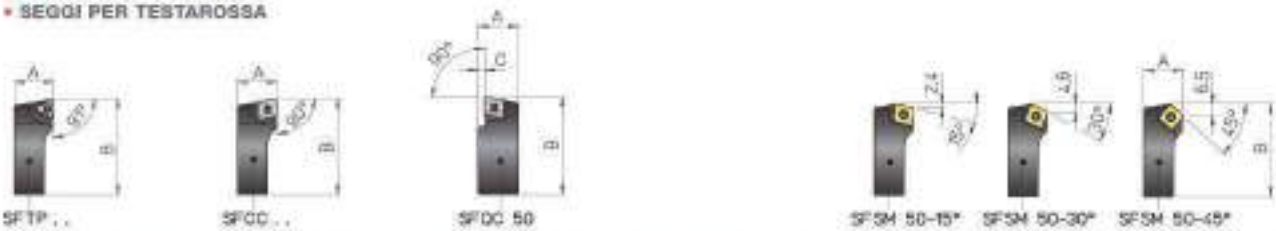
- TESTAROSSA EXTERNAL TURNING
- **TESTAROSSA AUSSENDREHEN**
- TESTAROSSA TORNEADO EXTERIOR
- TESTAROSSA TOURNAGE EXTÉRIEUR
- **TESTAROSSA TORNITURA ESTERNA**

PS + P25
Ø 5 – 35

REF.	CODE	Kg.
PS 11.30 D.16	43 30 30 26 075 5	0.4
P25.63	43 51 16 25 063 0	0.5
P25.105	43 51 16 25 105 0	0.8

- BIT-HOLDERS FOR TESTAROSSA
- **PLATTENHALTER FÜR TESTAROSSA**
- PORTA-PLAQUITAS PARA TESTAROSSA
- **PORTE-PLAQUETTES POUR TESTAROSSA**
- SEGGI PER TESTAROSSA

SF



REF.	CODE	A	B	C					Kg.
SFTP 25	47 050 05 25 001	10	26.5	–	TPGX 0902..	–	CS 260T	TORX T08	0.01
SFTP 32	47 050 05 32 001	11.5	34.5						0.02
SFTP 50	47 050 05 50 001	19	52	–	TPGX 1103..	–	CS 300890T		0.08
SFCC 25	47 050 05 25 002	10	26.5	–	–	CCGT 0602..	TS 25	TORX T08	0.01
SFCC 32	47 050 05 32 002	11.5	34.5						0.02
SFCC 50	47 050 05 50 002	19	52	–	–	CCGT 09T3..	TS 4	TORX T15	0.08
SFQC 50	47 050 05 50 062	20.5	53	3	–	CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

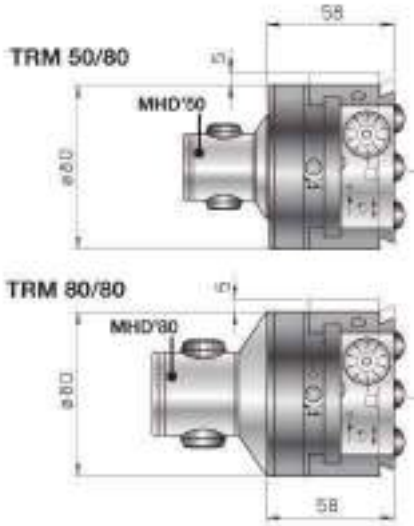
D'ANDREA

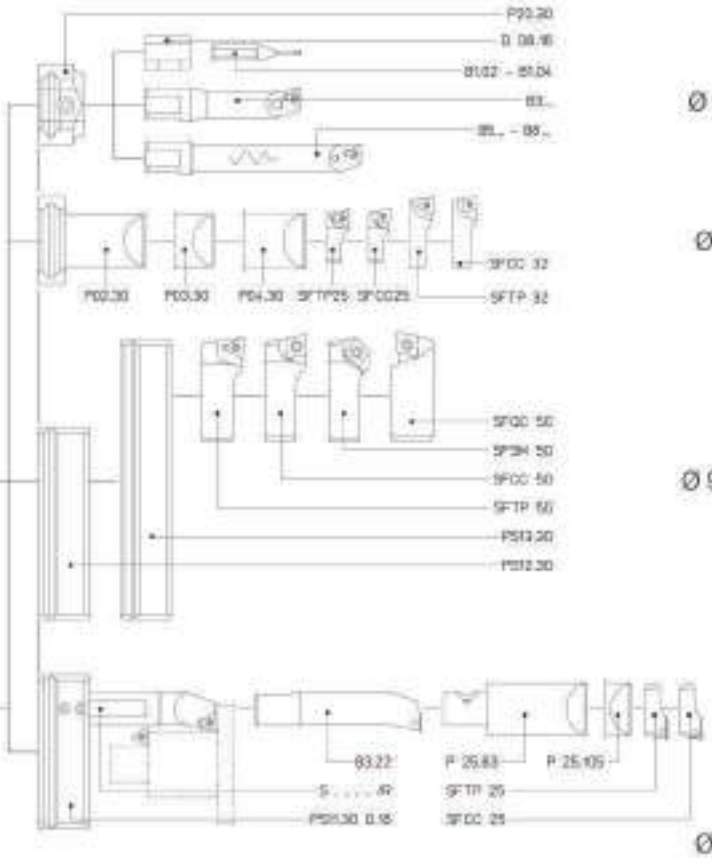
MODULHARD'ANDREA

TRM 50/80
TRM 80/80 Ø 2.5 ~ 160

• TESTAROSSA

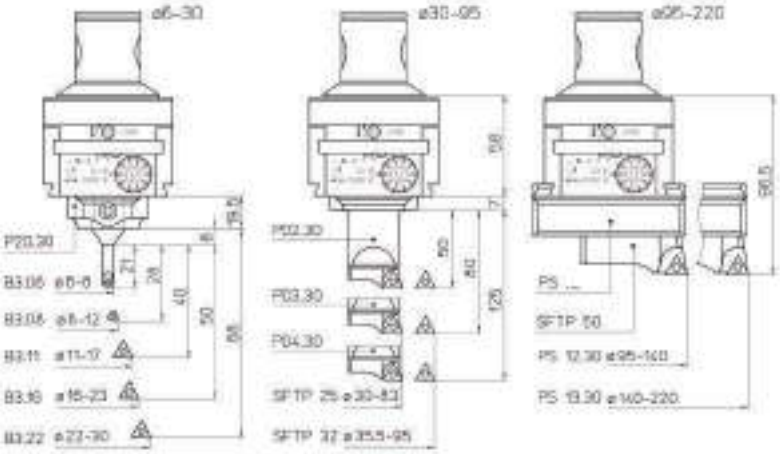
2 µm





REF.	CODE	Kg.
TRM 50/80	45 50 050 0080 0	2
TRM 80/80	45 50 080 0080 0	2.5

KIT K01
Ø 6 ~ 220



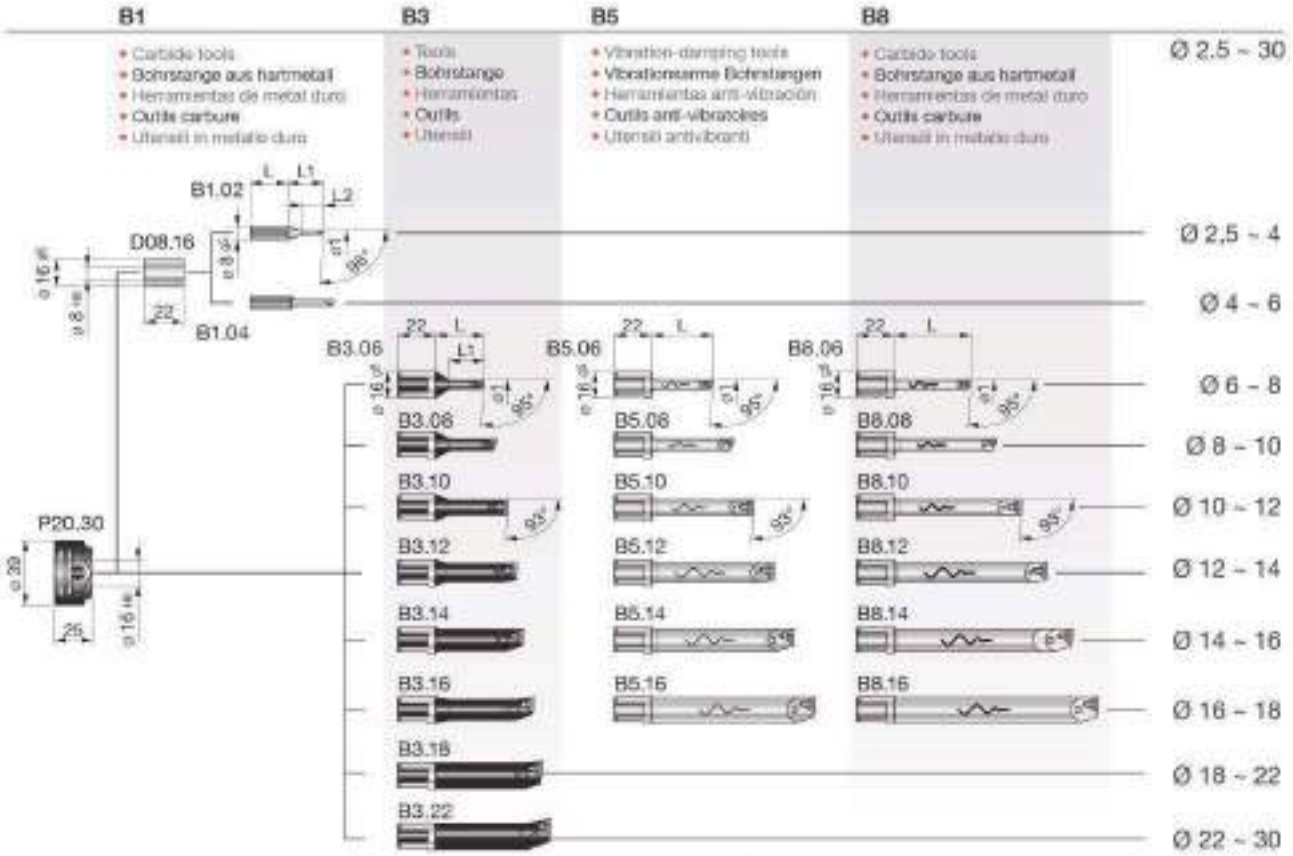
K01 TRM 50/80 - 80/80			
1 TRM../ 80			
1 P20.30	1 P02.30	1 SFTP25	1 B3.06
1 PS12.30	1 P03.30	1 SFTP32	1 B3.08
1 PS13.30	1 P04.30	1 SFTP50	1 B3.12
5 TPGX 090202L DC100			1 B3.16
1 TPGX 110302L DC100			1 B3.22
2 WOGT 020102L DC100			

REF.	CODE	Ø
K01 TRM 50/80	65 50 050 1080 1	6 ~ 220
K01 TRM 80/80	65 50 080 1080 1	

D'ANDREA

TRM 50/80
TRM 80/80 Ø 2.5 ~ 30

testarossad'andrea



REF.	CODE	Kg.
D08.16	20 056 01 16 08 2	0.02

REF.	CODE	Kg.
P20.30	43 10 30 16 030 0	0.2

REF.	CODE	Ø1	L	L1	L2	Kg.
B1.02	57 201 05 02 001	2.5 ~ 4	22	21	12.5	0.02
B1.04	57 201 05 04 001	4 ~ 6	24	24	–	

REF.	CODE	Ø1	L	L1					Kg.
B3.06	57 201 05 06 001	6 ~ 8	29	21	WCGT 0201...	–	TS 21	TORX T08	0.035
B3.08	57 201 05 08 001	8 ~ 10	36	28			TS 211		0.04
B3.10	57 201 05 10 001	10 ~ 12	43	35	–	TPGX 0902...	CS 250 T	TORX T08	0.05
B3.11	57 201 05 11 001	11 ~ 13	48	40					0.055
B3.12	57 201 05 12 001	12 ~ 14		42					0.06
B3.14	57 201 05 14 001	14 ~ 16	52	50					0.07
B3.16	57 201 05 16 001	16 ~ 18	58						
B3.18	57 201 05 18 001	18 ~ 22	63	–					0.1
B3.22	57 201 05 22 001	22 ~ 30	68						
B5.06	57 201 05 06 105	6 ~ 8	36	–	WCGT 0201...	–	TS 21	TORX T08	0.075
B5.08	57 201 05 08 105	8 ~ 10	48				TS 211		0.09
B5.10	57 201 05 10 105	10 ~ 12	60		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B5.12	57 201 05 12 105	12 ~ 14	72						
B5.14	57 201 05 14 105	14 ~ 16	84						0.2
B5.16	57 201 05 16 105	16 ~ 18	96						0.3
B8.06	57 201 05 06 108	6 ~ 8	45	–	WCGT 0201...	–	TS 21	TORX T08	0.065
B8.08	57 201 05 08 108	8 ~ 10	60				TS 211		0.08
B8.10	57 201 05 10 108	10 ~ 12	75		–	TPGX 0902...	CS 250 T	TORX T08	0.1
B8.12	57 201 05 12 108	12 ~ 14	90						0.2
B8.14	57 201 05 14 108	14 ~ 16	105						
B8.16	57 201 05 16 108	16 ~ 18	120						0.3

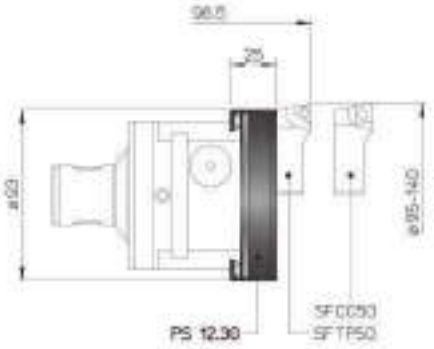
D'ANDREA

MODULHARD'ANDREA

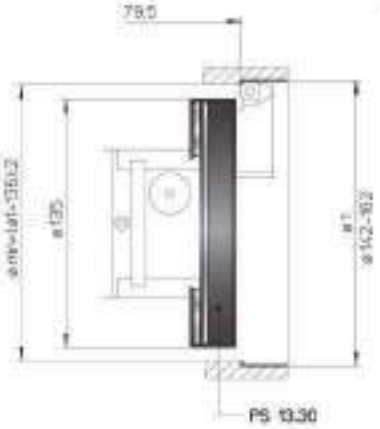
TRM 50/80
TRM 80/80 Ø 95 ~ 162

- TOOLHOLDERS FOR TESTAROSSA
- GRUNDHALTER FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

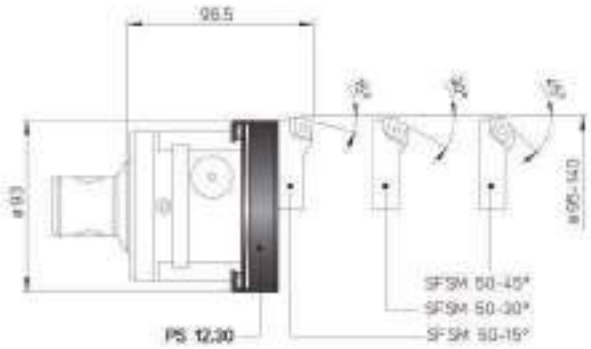
PS
Ø 95 – 160

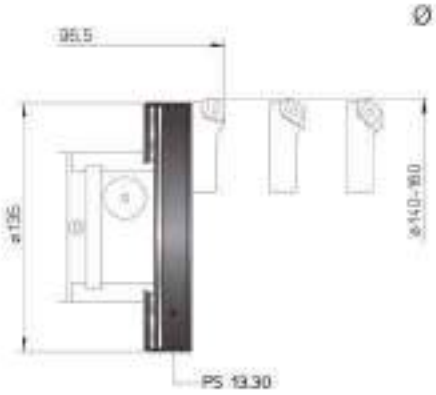


PS
Ø 100 – 162



PS
Ø 95 – 160





REF.	CODE	Kg.
PS 12.30	43 30 30 26 095 0	0.5
PS 13.30	43 30 30 26 140 0	0.7

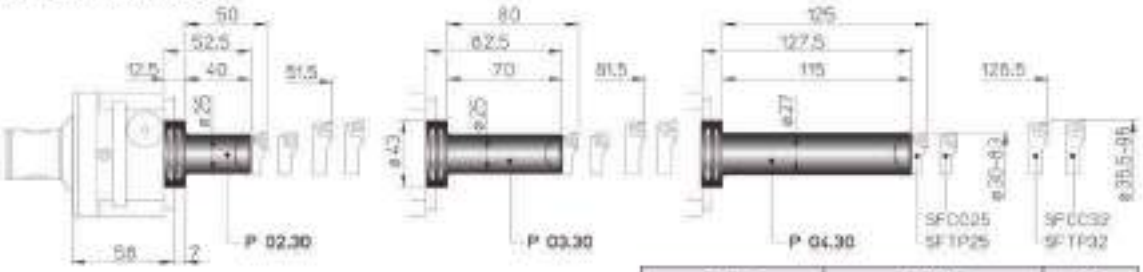
D'ANDREA

TRM 50/80
TRM 80/80 Ø 10 - 95

testarossad'andrea

- TOOLHOLDERS FOR TESTAROSSA
- **WERKZEUGE FÜR TESTAROSSA**
- PORTAHERRAMIENTAS PARA TESTAROSSA
- **PORTE-OUTILS POUR TESTAROSSA**
- PORTAUTENSILI PER TESTAROSSA

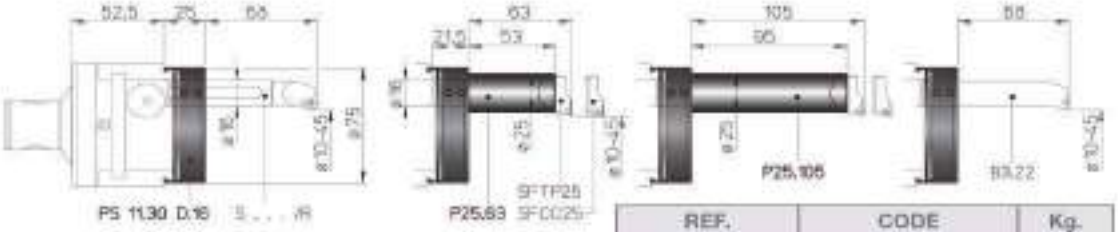
P
Ø 30 - 95



REF.	CODE	Kg.
P02.30	43 10 30 25 040 0	0.3
P03.30	43 10 30 25 070 0	0.4
P04.30	43 10 30 25 115 0	0.7

- TESTAROSSA EXTERNAL TURNING
- **TESTAROSSA AUSSENDREHEN**
- TESTAROSSA TORNEADO EXTERIOR
- TESTAROSSA TOURNAGE EXTÉRIEUR
- **TESTAROSSA TORNITURA ESTERNA**

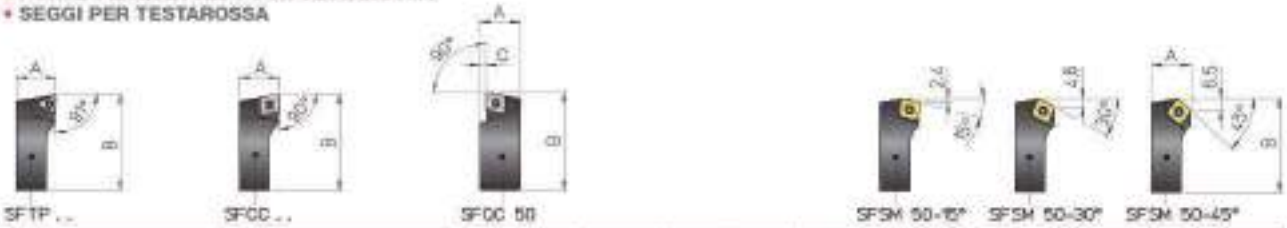
PS + P25
Ø 10 - 45



REF.	CODE	Kg.
PS 11.30 D.16	43 30 30 26 075 5	0.4
P25.63	43 51 16 25 063 0	0.5
P25.105	43 51 16 25 105 0	0.8

- BIT-HOLDERS FOR TESTAROSSA
- **PLATTENHALTER FÜR TESTAROSSA**
- PORTA-PLAQUITAS PARA TESTAROSSA
- **PORTE-PLAQUETTES POUR TESTAROSSA**
- SEGGI PER TESTAROSSA

SF



REF.	CODE	A	B	C					Kg.
SFTP 25	47 050 05 25 001	10	26.5	–	TPGX 0902..	–	CS 250T	TORX T08	0.01
SFTP 32	47 050 05 32 001	11.5	34.5						0.02
SFTP 50	47 050 05 50 001	19	52	–	TPGX 1103..	–	CS 300890T		0.08
SFCC 25	47 050 05 25 002	10	26.5	–	–	CCGT 0602..	TS 25	TORX T08	0.01
SFCC 32	47 050 05 32 002	11.5	34.5						0.02
SFCC 50	47 050 05 50 002	19	52	–	–	CCGT 09T3..	TS 4	TORX T15	0.08
SFQC 50	47 050 05 50 062	20.5	53	3	–	CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

D'ANDREA

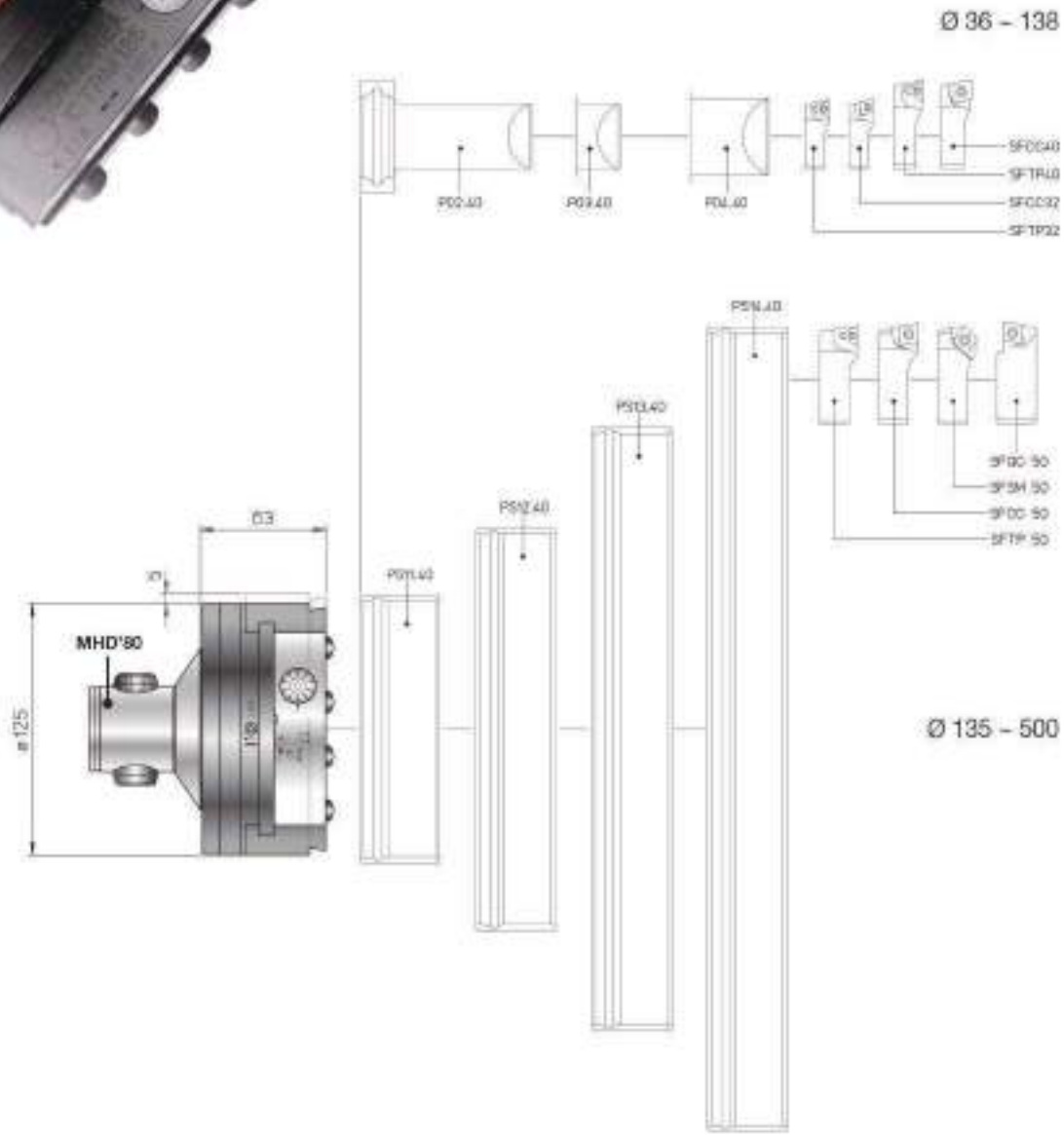
TRM 80/125 Ø 36 – 500

• TESTAROSSA

D'ANDREA

MODULHARD'ANDREA

2 µm

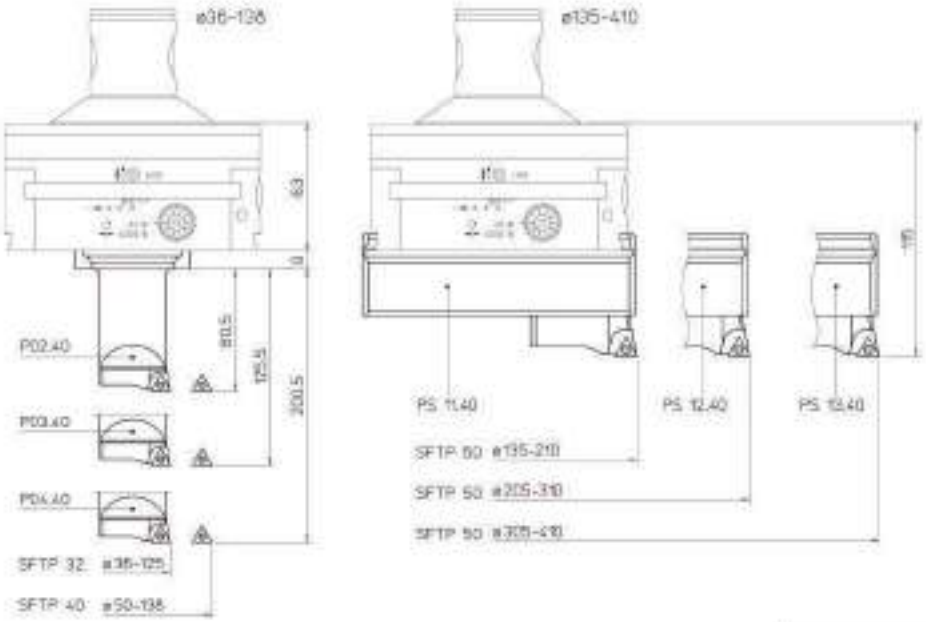


REF.	CODE	Kg.
TRM 80/125	45 50 080 0125 0	5.5

D'ANDREA

testarossad'andrea

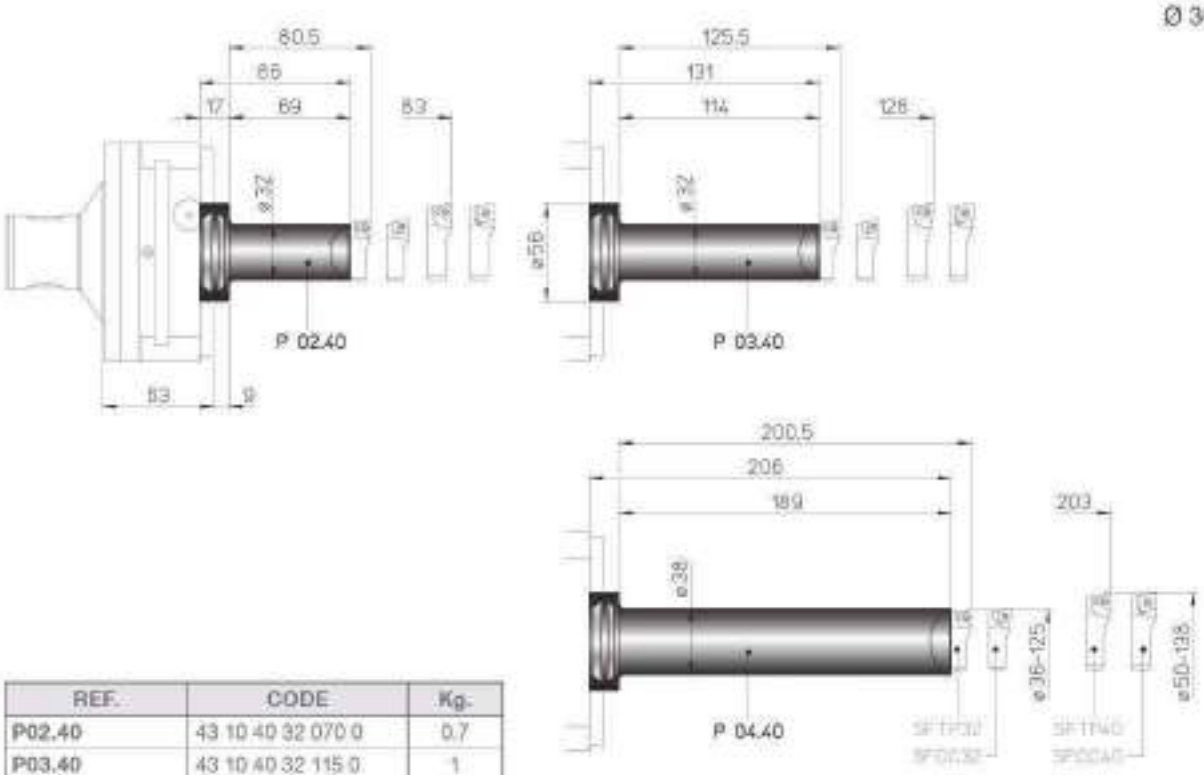
KIT K03
Ø 36 - 410



K03 TRM 80/125		
1 P02.40	1 PS11.40	
1 P03.40	1 PS12.40	1 SFTP50
1 P04.40	1 PS13.40	

REF.	CODE	Ø
K03 TRM 80/125	65 50 125 0003 0	36 - 410

P
Ø 36 ~ 138



REF.	CODE	Kg.
P02.40	43 10 40 32 070 0	0.7
P03.40	43 10 40 32 115 0	1
P04.40	43 10 40 32 190 0	2

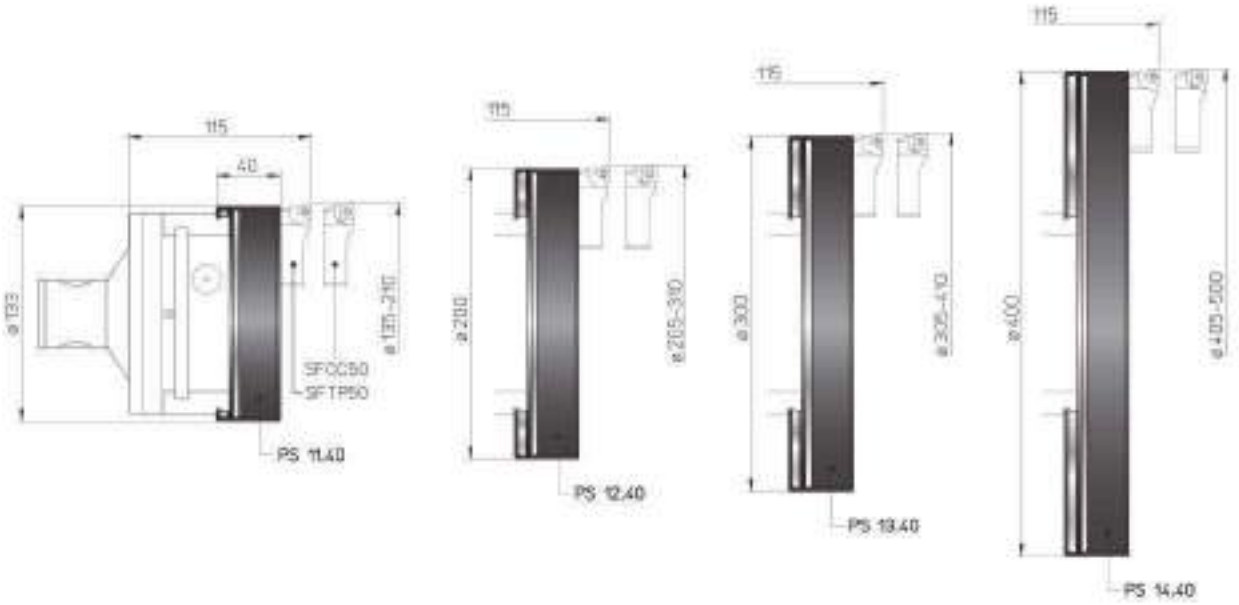
D'ANDREA

MODULHARD'ANDREA

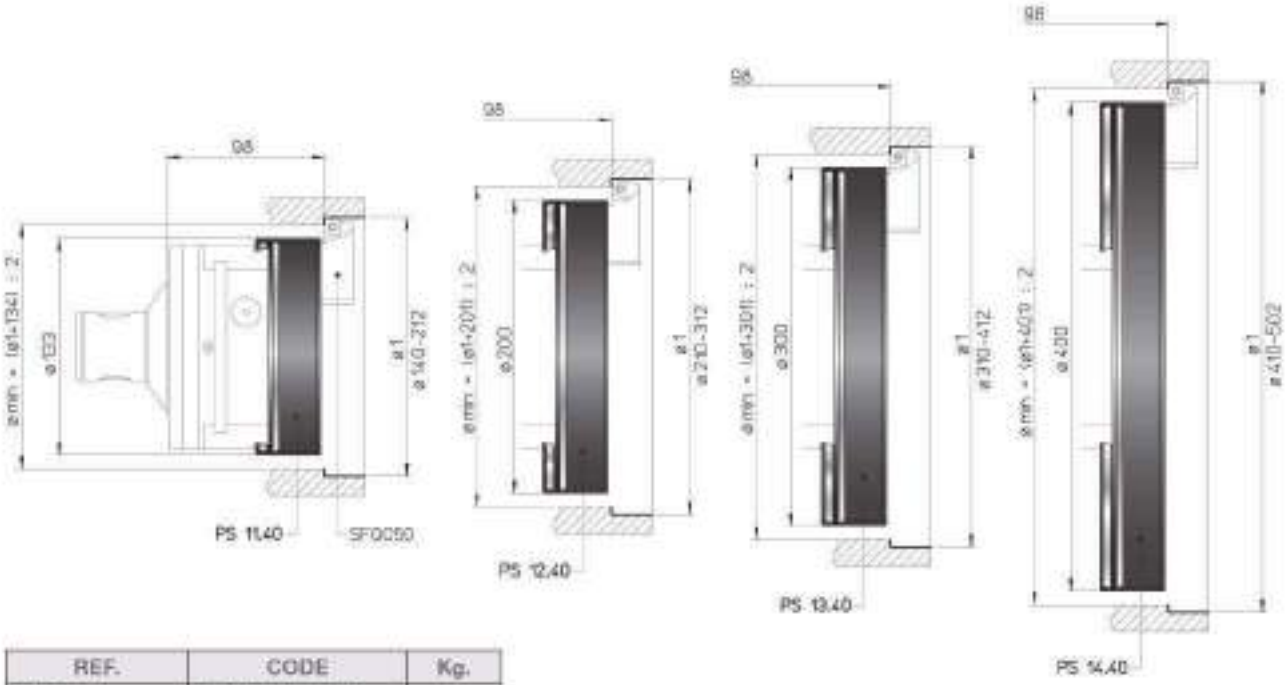
TRM 80/125 Ø 135 ~ 502

- TOOLHOLDERS FOR TESTAROSSA
- GRUNDHALTER FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

PS
Ø 135 ~ 500



PS
Ø 140 ~ 502



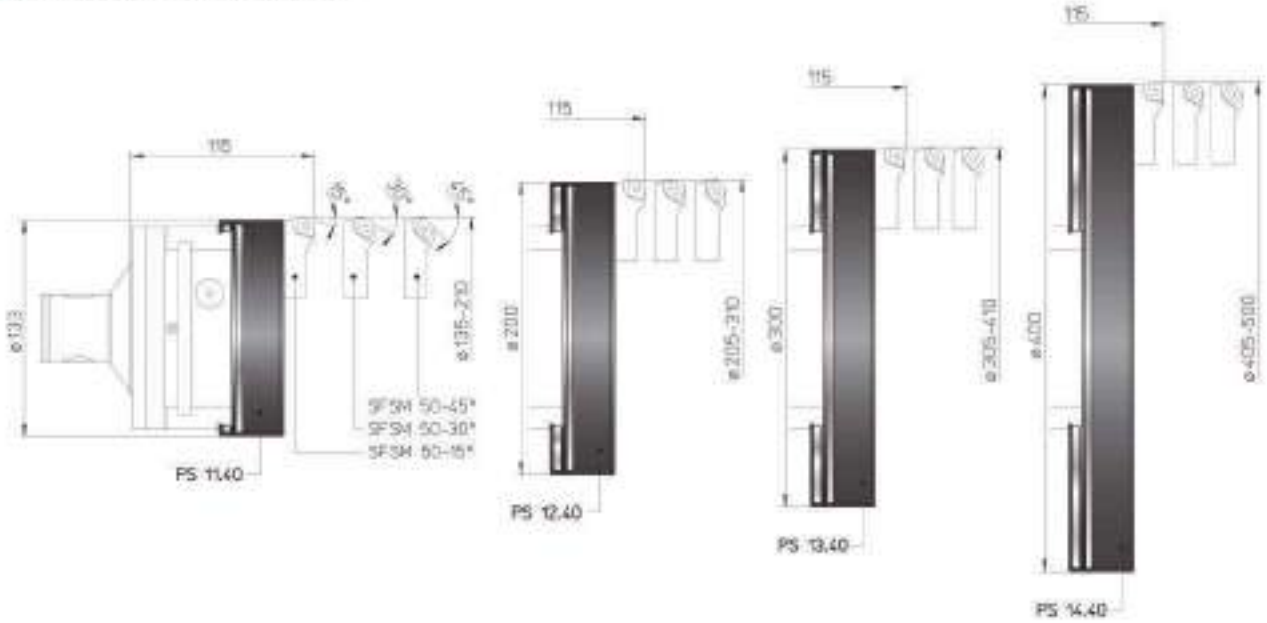
REF.	CODE	Kg.
PS 11.40	43 30 40 35 150 0	1.5
PS 12.40	43 30 40 35 230 0	2.4
PS 13.40	43 30 40 35 330 0	3.5
PS 14.40	43 30 40 35 400 0	4.6

TRM 80/125 Ø 135 ~ 500

testarossad'andrea

- TOOLHOLDERS FOR TESTAROSSA
- GRUNDHALTER FÜR TESTAROSSA
- PORTAHERRAMIENTAS PARA TESTAROSSA
- PORTE-OUTILS POUR TESTAROSSA
- PORTAUTENSILI PER TESTAROSSA

PS
Ø 135 ~ 500



- BIT-HOLDERS FOR TESTAROSSA
- PLATTENHALTER FÜR TESTAROSSA
- PORTA-PLAQUITAS PARA TESTAROSSA
- PORTE-PLAQUETTES POUR TESTAROSSA
- SEGGI PER TESTAROSSA

SF

REF.	CODE	A	B	C					Kg.
SFTP 32	47 050 05 32 001	11.5	34.5	–	TPGX 0902..	–	CS 250T	TORX T08	0.02
SFTP 40	47 050 05 40 001	14	44	–	TPGX 1103..	–	CS 300890T		0.04
SFTP 50	47 050 05 50 001	19	52						0.08
SFCC 32	47 050 05 32 002	11.5	34.5	–	–	CCGT 0602..	TS 25	TORX T08	0.02
SFCC 40	47 050 05 40 002	14	44	–	–	CCGT 09T3..	TS 4	TORX T15	0.04
SFCC 50	47 050 05 50 002	19	52						0.08
SFQC 50	47 050 05 50 062	20.5	53	3	–	CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

D'ANDREA

MHD'

TR-ELETTRA Ø 2.5 - 200
MHD'

TR-ELETTRA 50 MHD'50
Ø 2.5 - 110

TR-ELETTRA 63 MHD'63
Ø 6 - 125

TR-ELETTRA 80 - MHD'80
Ø 6 - 200

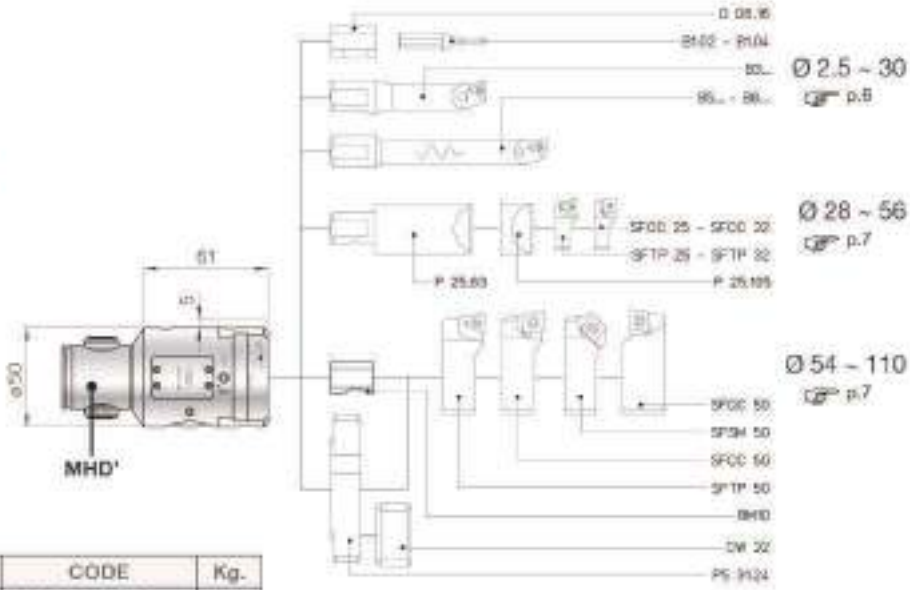
D'ANDREA

2 µm

TR-ELETTRA 50 Ø 2.5 ~ 110
MHD'50

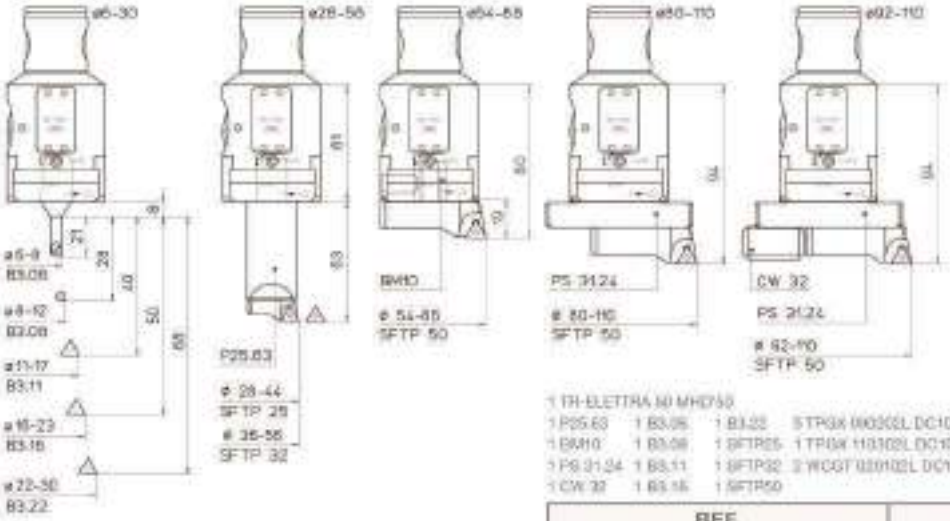
testarossad'andrea

2 µm



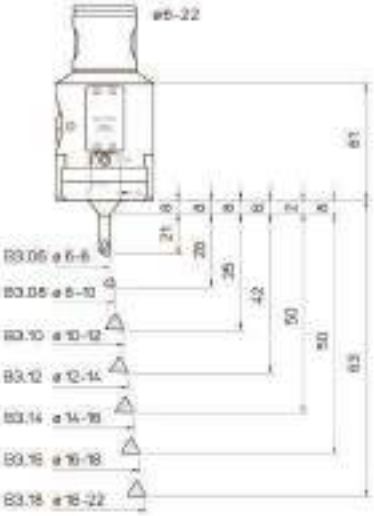
MHD'	REF.	CODE	Kg.
50	TR-ELETTRA 50 MHD'50	655200500500	1.1

KIT K01
Ø 6 ~ 110



REF.	CODE	Ø
K01 TR-ELETTRA 50 MHD'50	655200500500	6 ~ 110

KIT K00
Ø 6 ~ 22

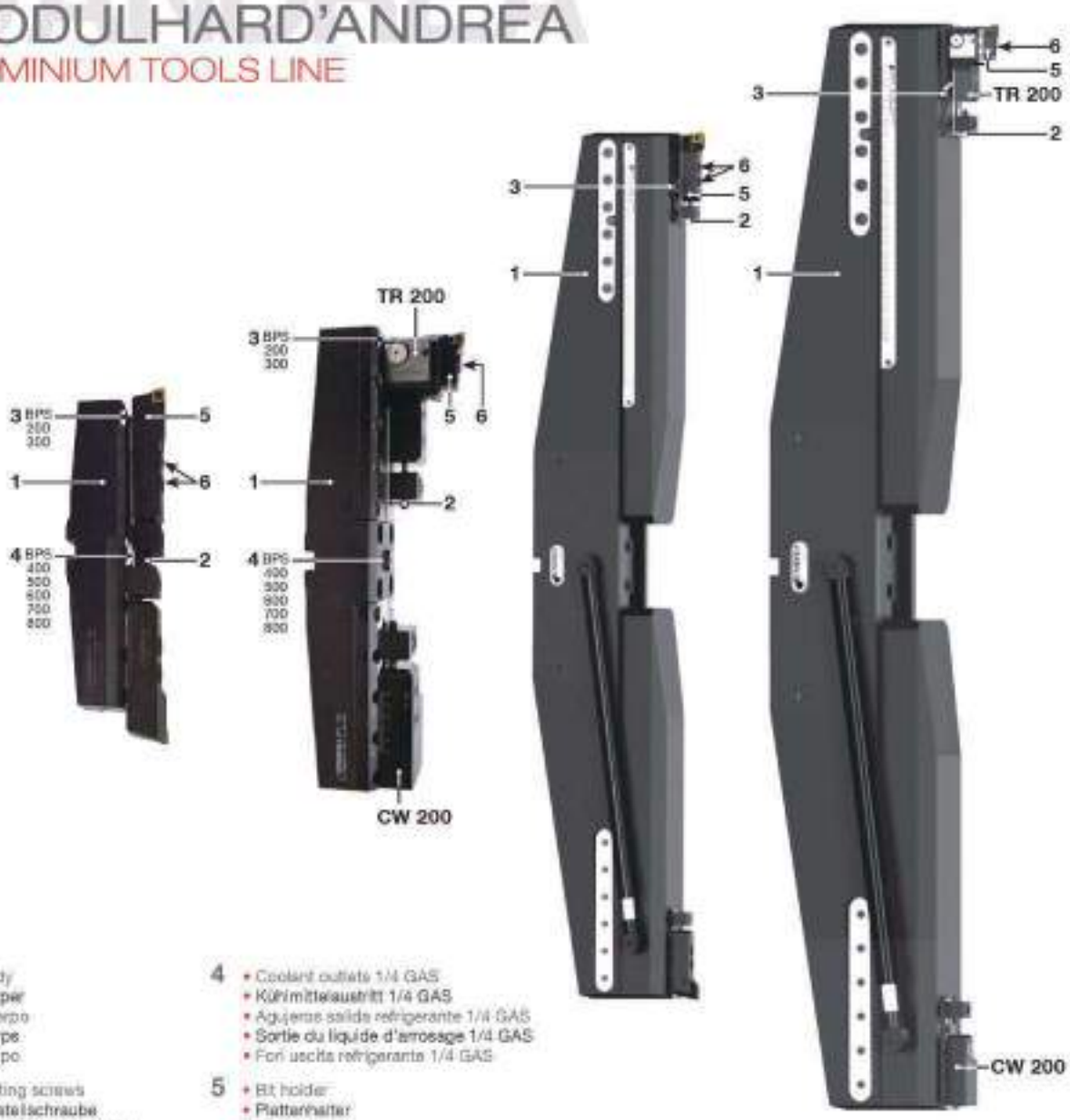


REF.	CODE	Ø
K00 TR-ELETTRA 50 MHD'50	655200500501	6 ~ 22

D'ANDREA

MODULHARD'ANDREA

ALUMINIUM TOOLS LINE



1
- Body
- Körper
- Cuerpo
- Corps
- Corpo

2
- Setting screws
- Einstellschraube
- Tornillo de regulación
- Vis de réglage
- Vite di regolazione

3
- Coolant outlets
- Kühlmittelaustritt
- Agujeros salida refrigerante
- Sortie du liquide d'arrosage
- Fori uscita refrigerante

4
- Coolant outlets 1/4 GAS
- Kühlmittelaustritt 1/4 GAS
- Agujeros salida refrigerante 1/4 GAS
- Sortie du liquide d'arrosage 1/4 GAS
- Fori uscita refrigerante 1/4 GAS

5
- Bit holder
- Plattenhalter
- Portaplaquita
- Porte-plaquettes
- Seggio portainserti

6
- Tools clamp screws
- Werkzeugklemm-schrauben
- Tornillos blocaje herramienta
- Vis blocage outil
- Viti bloccaggio utensile

KR BPS double bit 크로스바는 Φ 200 ~ 2800mm의 작업을 할 수 있습니다. BPS는 알루미늄으로 만들었고, 스틸 double bit plate와 조립되어 조작되어 집니다.

GB The BPS double-bit crossbars cover a working area from ø 200 - 2800 mm. The BPS double-bit crossbars are constructed in Aluminium and mounted on a steel double-bit plate.

D Die Zweischneider BPS bedecken ein Arbeitsfeld von ø 200 - 2800 mm. Die Bohrschienen BPS bestehen aus Aluminium auf welches die Sitzhalterungsplatte aus Stahl befestigt wird.

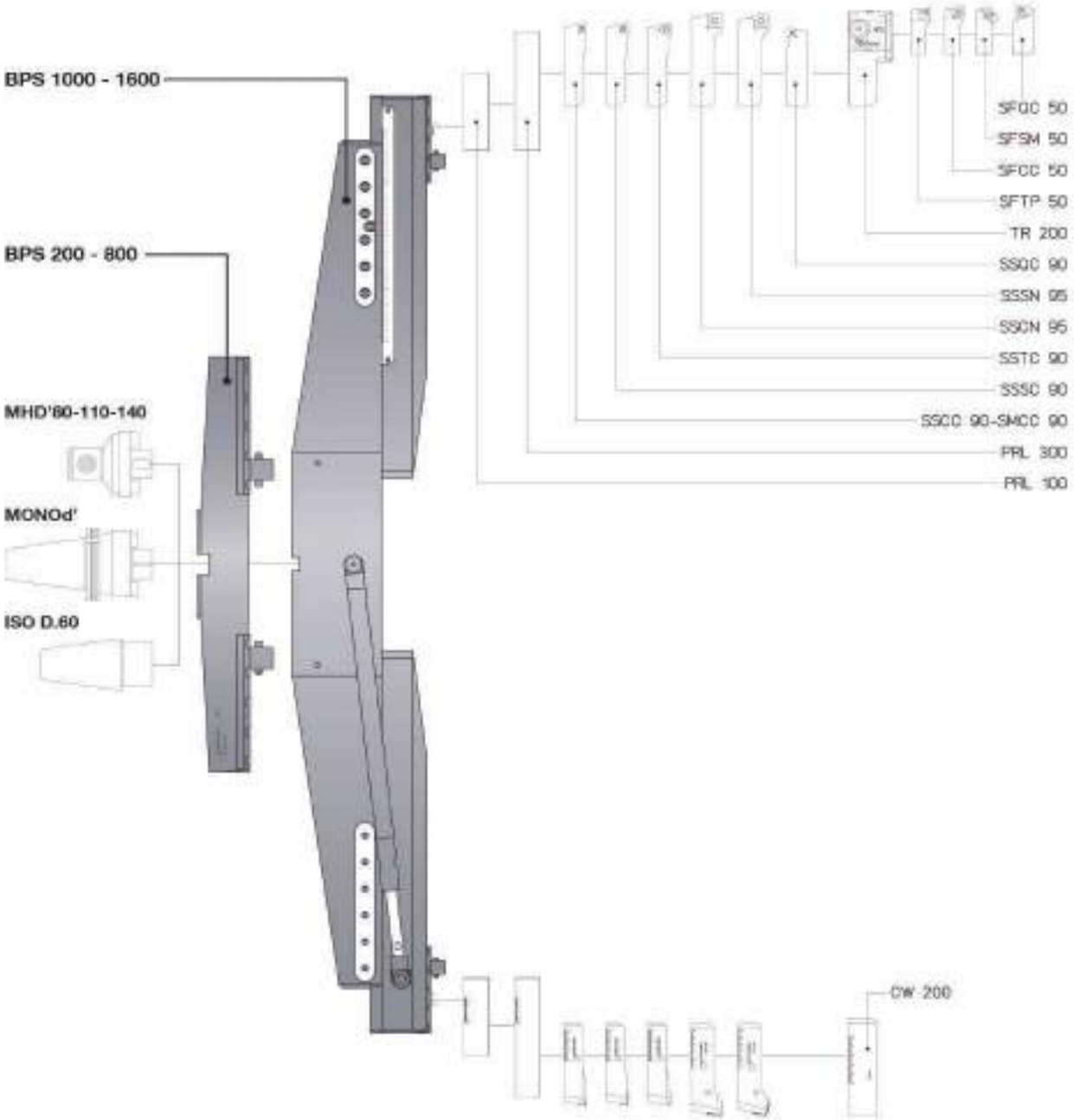
E Las barras porta-asiento BPS cubren un campo de trabajo de 200 a 2800 mm de diámetro. Las barras porta-asiento BPS están realizadas en aluminio, sobre el cual se fija la placa porta-asiento de acero.

I La barre portaseggio BPS coprono un campo di lavoro da ø 200 - 2800 mm. La barre portaseggio BPS sono costruite in alluminio sul quale viene fissata la piastra portaseggio in acciaio.

D'ANDREA

BPS Ø 200 ~ 2800

- DOUBLE-BIT CROSSBARS FOR BIG DIAMETERS
- ZWEISCHNEIDERBOHRSCHIENEN FÜR GROSSER DURCHMESSER
- BARRAS PORTA-ASIENTO DE DOS CORTES
- SEMELLES POUR A GRANDS DIAMÈTRES
- BARRE PORTASEGGIO PER GRANDI DIAMETRI



REF.	CODE	Kg.
BPS 200	43 55 40 88 198 0	3.2
BPS 300	43 55 40 88 298 0	3.9
BPS 400	43 55 40 88 398 0	6.9
BPS 500	43 55 60 88 494 0	9.4
BPS 600	43 55 60 88 594 0	9.9

REF.	CODE	Kg.
BPS 700	43 55 60 88 694 0	11.2
BPS 800	43 55 60 88 794 0	15.2
BPS 1000	43 55 60 90 1000	70
BPS 1160	43 55 60 90 1160	100
BPS 1600	43 55 60 90 1600	150

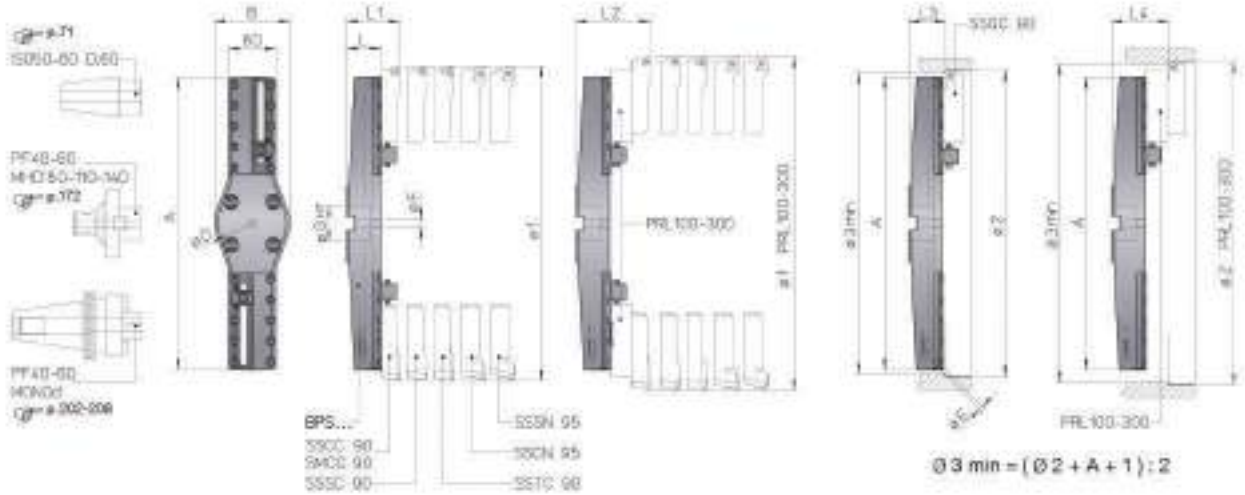
D'ANDREA

MODULHARD'ANDREA

ALUMINIUM TOOLS LINE

BPS 200~800 Ø 200 ~ 1200

- DOUBLE-BIT BORING CROSSBARS
- ZWEISCHNEIDER-BOHRSCHIENEN
- BARRAS PORTA-ASIENTO DE DOS CORTES
- LES SEMELLES PORTE-LOGEMENT À DEUX TRANCHANTS
- BARRE PORTASEGGIO BITAGLIENTI

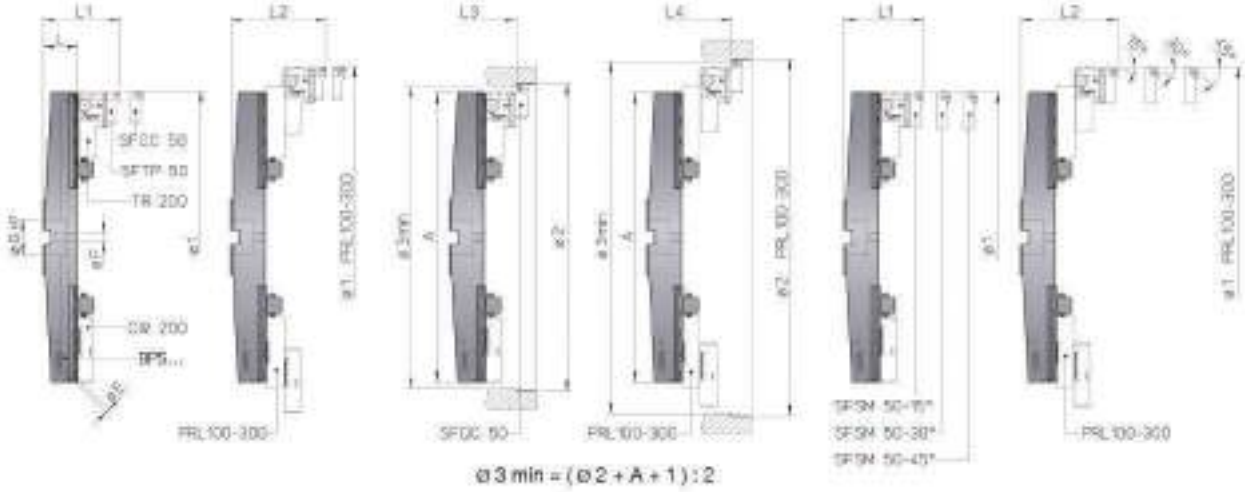


	BPS 200	BPS 300	BPS 400	BPS 500	BPS 600	BPS 700	BPS 800
A	194	288	394	494	594	694	794
B	–			128			
Ø D	(4xM12) 66.7			(4xM16) 101.6			
Ø E	2.5		–				
Ø F	–		1/4 GAS				
Ø G	40			60			
Ø 1	200 ~ 300	300 ~ 400	400 ~ 500	500 ~ 600	600 ~ 700	700 ~ 800	800 ~ 900
Ø 1 PRL 100	300 ~ 400	400 ~ 500	500 ~ 600	600 ~ 700	700 ~ 800	800 ~ 900	900 ~ 1000
Ø 1 PRL 300	400 ~ 600	500 ~ 700	600 ~ 800	700 ~ 900	800 ~ 1000	900 ~ 1100	1000 ~ 1200
Ø 2	202 ~ 302	302 ~ 402	402 ~ 502	502 ~ 602	602 ~ 702	702 ~ 802	802 ~ 902
Ø 2 PRL 100	302 ~ 402	402 ~ 502	502 ~ 602	602 ~ 702	702 ~ 802	802 ~ 902	902 ~ 1002
Ø 2 PRL 300	402 ~ 602	502 ~ 702	602 ~ 802	702 ~ 902	802 ~ 1002	902 ~ 1102	1002 ~ 1202
L	54		61	69	71	74	80
L1 S . . . 90	86		93	101	103	106	112
L1 S . . . 95	94		101	109	111	114	120
L2 PRL 100 S . . . 90	116		123	131	133	136	142
L2 PRL 300 S . . . 90	126		133	141	143	146	152
L2 PRL 100 S . . . 95	124		131	139	141	144	150
L2 PRL 300 S . . . 95	134		141	149	151	154	160
L3 SSQC 90	56.5		63.5	71.5	73.5	76.5	82.5
L4 PRL 100 SSQC 90	86.5		93.5	101.5	103.5	106.5	112.5
L4 PRL 300 SSQC 90	96.5		103.5	111.5	113.5	116.5	122.5

D'ANDREA

BPS 200~800 Ø 200 – 1200

- DOUBLE-BIT CROSSBARS FOR BIG DIAMETER FINISH
- ZWEISCHNEIDER-BOHRSCHIENEN FÜR FEINBEARBEITUNGEN GROSSER DURCHMESSER
- BARRAS PORTA-ASIENTO DE DOS CORTES
- LES SEMELLES PORTE-LOGEMENT POUR FINISSAGE DES GRANDS DIAMÈTRES
- BARRE PORTASEGGIO PER FINITURA GRANDI DIAMETRI



	BPS 200	BPS 300	BPS 400	BPS 500	BPS 600	BPS 700	BPS 800
A	194	288	394	494	594	694	794
B	–			128			
Ø D	(4xM12) 66.7			(4xM16) 101.6			
Ø E	2.5		–				
Ø F	–		1/4 GAS				
Ø G	40			60			
Ø 1	200 – 300	300 – 400	400 – 500	500 – 600	600 – 700	700 – 800	800 – 900
Ø 1 PRL 100	300 – 400	400 – 500	500 – 600	600 – 700	700 – 800	800 – 900	900 – 1000
Ø 1 PRL 300	400 – 600	500 – 700	600 – 800	700 – 900	800 – 1000	900 – 1100	1000 – 1200
Ø 2	202 – 302	302 – 402	402 – 502	502 – 602	602 – 702	702 – 802	802 – 902
Ø 2 PRL 100	302 – 402	402 – 502	502 – 602	602 – 702	702 – 802	802 – 902	902 – 1002
Ø 2 PRL 300	402 – 602	502 – 702	602 – 802	702 – 902	802 – 1002	902 – 1102	1002 – 1202
L	54		61	69	71	74	80
L1	120		127	135	137	140	146
L2 PRL 100	150		157	165	167	170	176
L2 PRL 300	160		167	175	177	180	186
L3	103		110	116	120	123	129
L4 PRL 100	133		140	148	150	153	159
L4 PRL 300	143		150	158	160	163	169

D'ANDREA

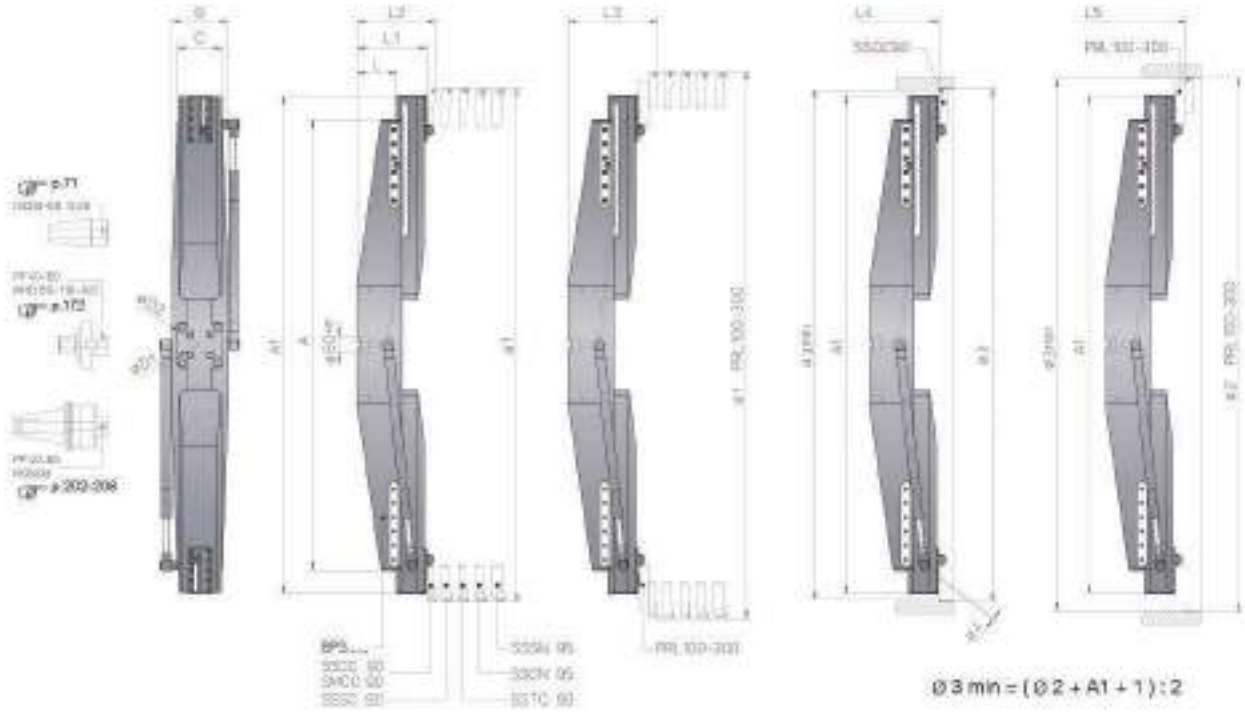
MODULHARD'ANDREA

ALUMINIUM TOOLS LINE

BPS 1000~1600

Ø 1000 ~ 2800

- DOUBLE-BIT BORING CROSSBARS
- ZWEISCHNEIDER-BOHRSCHIENEN
- BARRAS PORTA-ASIENTO DE DOS CORTES
- LES SEMELLES PORTE-LOGEMENT À DEUX TRANCHANTS
- BARRE PORTASEGGIO BITAGLIENTI

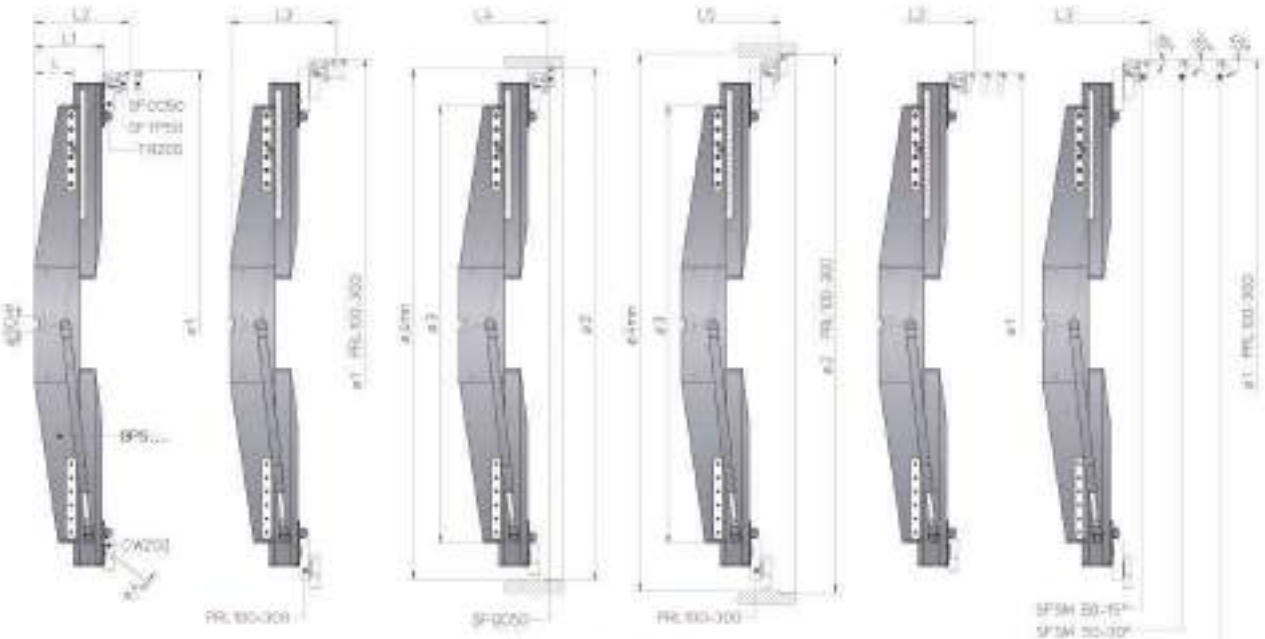


	BPS 1000	BPS 1160	BPS 1600
A	995		1595
A1	995 ~ 1495	1595 ~ 1895	1595 ~ 2395
B	160		200
C	150		160
Ø D1	(4xM16) 101.6		
Ø D2	--		(4xM20) 177.8
Ø 1	1000 ~ 1600	1600 ~ 2000	1600 ~ 2500
Ø 1 PRL 100	1100 ~ 1700	1700 ~ 2100	1700 ~ 2600
Ø 1 PRL 300	1200 ~ 1900	1800 ~ 2300	1800 ~ 2800
Ø 2	1002 ~ 1602	1602 ~ 2002	1602 ~ 2502
Ø 2 PRL 100	1102 ~ 1702	1702 ~ 2102	1702 ~ 2602
Ø 2 PRL 300	1202 ~ 1902	1802 ~ 2302	1802 ~ 2802
L	100		140
L1	191	206	246
L2 S . . . 90	223	238	278
L2 S . . . 95	231	246	286
L3 PRL 100 S . . . 90	253	268	308
L3 PRL 300 S . . . 90	263	278	318
L3 PRL 100 S . . . 95	261	276	316
L3 PRL 300 S . . . 95	271	286	326
L4 SSQC 90	193.5	208.5	248.5
L5 PRL 100 SSQC 90	223.5	238.5	278.5
L5 PRL 300 SSQC 90	233.5	248.5	288.5

BPS 1000~1600

Ø 1000 ~ 2800

- DOUBLE-BIT CROSSBARS FOR BIG DIAMETER FINISH
- ZWEISCHNEIDER-BOHRSCHIENEN FÜR FEINBEARBEITUNGEN GROSSER DURCHMESSER
- BARRAS PORTA-ASIENTO DE DOS CORTES
- LES SEMELLES PORTE-LOGEMENT POUR FINISSAGE DES GRANDS DIAMÈTRES
- BARRE PORTASEGGIO PER FINITURA GRANDI DIAMETRI



Ø 3 min = (Ø 2 + A1 + 1) : 2

	BPS 1000	BPS 1160	BPS 1600
A	995		1595
A1	995 ~ 1495	1595 ~ 1895	1595 ~ 2395
B	160		200
C	150		160
Ø D1	(4xM16) 101.6		
Ø D2	-		(4xM20) 177.8
Ø 1	1000 ~ 1600	1600 ~ 2000	1600 ~ 2500
Ø 1 PRL 100	1100 ~ 1700	1700 ~ 2100	1700 ~ 2600
Ø 1 PRL 300	1200 ~ 1900	1800 ~ 2300	1800 ~ 2800
Ø 2	1002 ~ 1602	1602 ~ 2002	1602 ~ 2502
Ø 2 PRL 100	1102 ~ 1702	1702 ~ 2102	1702 ~ 2602
Ø 2 PRL 300	1202 ~ 1902	1802 ~ 2302	1802 ~ 2802
L	100		140
L1	191	206	246
L2	257	272	312
L3 PRL 100	287	302	342
L3 PRL 300	297	312	352
L4	240	255	295
L5 PRL 100	270	285	325
L5 PRL 300	280	295	335

D'ANDREA

MODULHARD'ANDREA

BPS Ø 200 ~ 2800

- MICROMETRIC HEAD
- MIKROMETRISCHER AUSDREHKOPF
- CABEZAL MICROMÉTRICO
- TÊTE MICROMÉTRIQUE
- TESTINA MICROMETRICA

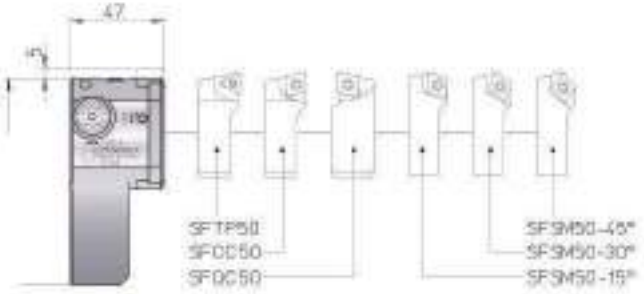
TR 200

1
- Body
- Körper
- Cuerpo
- Corps
- Corpo

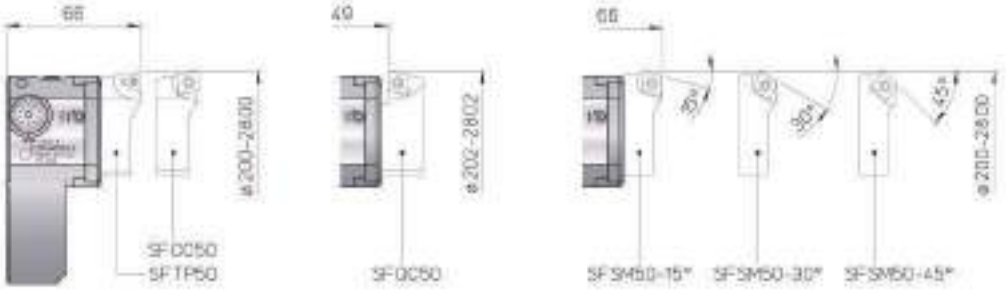
2
- Slide toolholder
- Werkzeugschlitten
- Guia portaherramientas
- Coulisseau
- Slitta portautensili

3
- Micrometric vernier scale
- Mikrometrischer Nonius
- Nonio micrométrico
- Vernier micrométrique
- Nonio micrometrico

4
- Slide clamp screw
- Schlittenklemmschraube
- Tornillo blocaje guia
- Vis blocage coulisseau
- Vite bloccaggio slitta



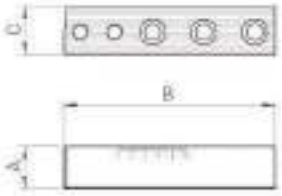
REF.	CODE	Kg.
TR 200	45 50 200 0200 0	1.3



CW

REF.	CODE	Kg.
CW 200	39 20 110 105 01	1.3

PRL



REF.	CODE	A	B	C	Kg.
PRL 100	39 20 110 155 01	31	155	35.5	1.1
PRL 300	39 20 110 300 01	41	255		2.8

D'ANDREA

BPS Ø 200 ~ 2800

- BIT-HOLDERS FOR DOUBLE-BIT ITEMS
- PLATTENHALTER FÜR ZWEISCHNEIDERWERKZEUGE
- PORTAPLAQUITAS PARA ASIENTOS A DOS CUCHILLAS
- PORTE-PLAQUETTES POUR PRODUITS À DEUX COUPANTS
- SEGGI PER BITAGLIENTI

SS-SM

SSC...

SMCC..

SSS...

SSTC..

SSQC..

REF.	CODE	A	A1	B	C						Kg.
SSCC 90	47 050 05 90 201	32	–	130	–	CCMT 1204..	–	–	TS 5	TORX T25	0.7
SSCN 95	47 050 05 95 201	40				CNM. 1906..	–	–	p.152		0.9
SMCC 90	47 050 05 90 203	–	31.7	130	–	CCMT 1204..	–	–	TS 5	TORX T25	0.7
SSSC 90	47 050 05 90 202	32	–	130	–	–	SCMT 1204..	–	TS 5	TORX T25	0.7
SSSN 95	47 050 05 95 202	40				–	SNM . 1906..	–	p.152		0.9
SSTC 90	47 050 05 90 206	32	–	130	–	TCMT 2204..	–	–	TS 5	TORX T25	0.7
SSQC 90	47 050 05 90 261	31.5	–	122	3.5	CCMT 1204..	–	–	TS 5	TORX T25	0.8

- BIT-HOLDERS FOR TESTAROSSA
- PLATTENHALTER FÜR TESTAROSSA
- PORTA-PLAQUITAS PARA TESTAROSSA
- PORTE-PLAQUETTES POUR TESTAROSSA
- SEGGI PER TESTAROSSA

SF

SFTP 50

SFCC 50

SFQC 50

SFSM 50-15°

SFSM 50-30°

SFSM 50-45°

REF.	CODE	A	B	C					Kg.
SFTP 50	47 050 05 50 001	19	52	–	TPGX 1103...	–	CS 300890T	TORX T08	0.08
SFCC 50	47 050 05 50 002	19	52	–	–	CCGT 09T3...	TS 4	TORX T15	0.08
SFQC 50	47 050 05 50 062	20.5	53	3	–	CCMT 09T3...	TS 4	TORXT15	0.1
SFSM 50-15°	47 050 05 50 011	19	50.5	–	–	CCMT 09T3...	TS 4	TORXT15	0.07
SFSM 50-30°	47 050 05 50 013								
SFSM 50-45°	47 050 05 50 015								

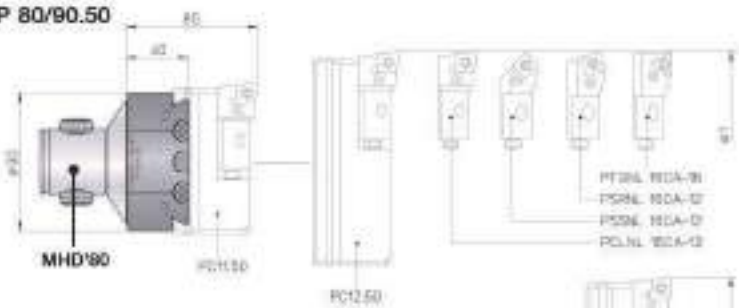
D'ANDREA

MODULHARD'ANDREA

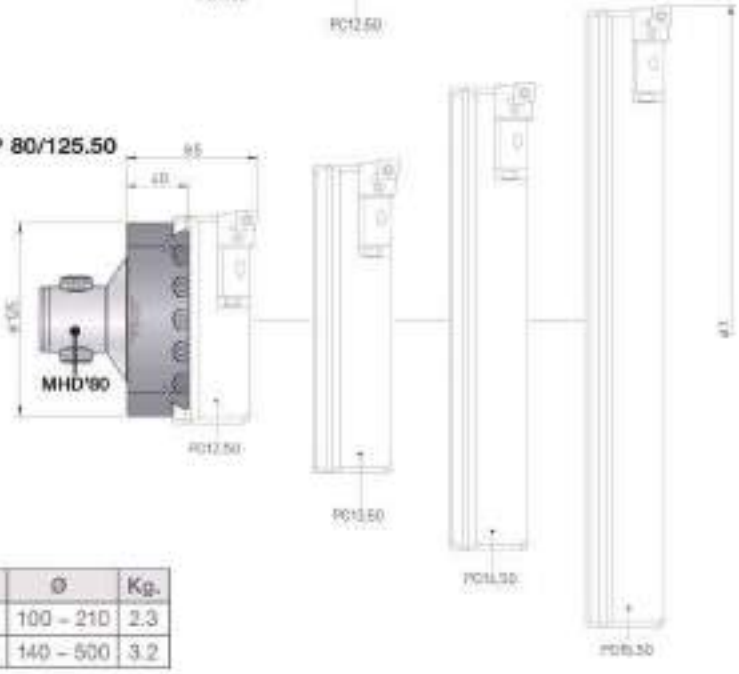
TP Ø 100 ~ 500

- TOOLHOLDERS
- WERKZEUGHALTER
- PORTAHERRAMIENTAS
- PORTE-OUTILS
- PORTAUTENSILI

TP 80/90.50



TP 80/125.50

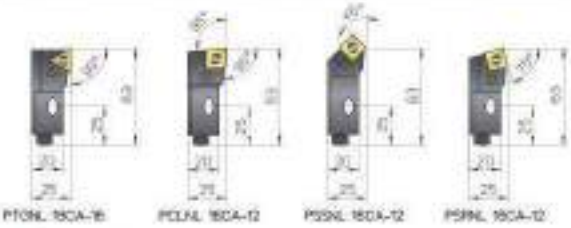


REF.	CODE	Ø	Kg.
TP 80/90.50	46 04 080 50 0 01	100 ~ 210	2.3
TP 80/125.50	46 04 080 50 0 02	140 ~ 500	3.2

PC

REF.	CODE	B	Ø 1 TP80/90.50	Ø 1 TP80/125.50	Kg.
PC 11.50	43 30 50 16 095 0	95	100 ~ 140	–	1.3
PC 12.50	43 30 50 16 135 0	135	140 ~ 210	140 ~ 210	2
PC 13.50	43 30 50 16 200 0	200	–	210 ~ 310	3.2
PC 14.50	43 30 50 16 300 0	300	–	310 ~ 410	4.8
PC 15.50	43 30 50 16 400 0	400	–	410 ~ 500	6.3

16CA ISO 5611



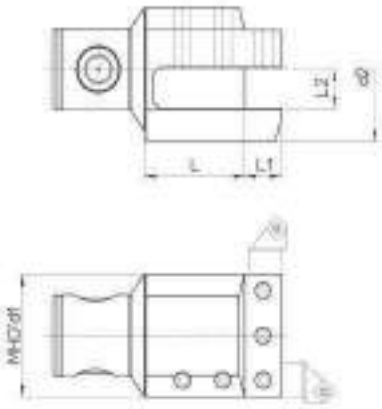
REF.	CODE	
PTGNL 16CA-16	48 3 01 016 1 001	TNM. 1604..
PCLNL 16CA-12	48 3 01 016 1 002	CNM. 1204..
PSSNL 16CA-12	48 3 01 016 1 003	SNM. 1204..
PSRNL 16CA-12	48 3 01 016 1 004	

- On request
- Auf Anfrage
- A petición
- Sur demande
- Fornibili su richiesta

D'ANDREA

- TOOLHOLDERS
- **WERKZEUGHALTER**
- PORTAHERRAMIENTAS
- **PORTE-OUTILS**
- PORTAUTENSILI

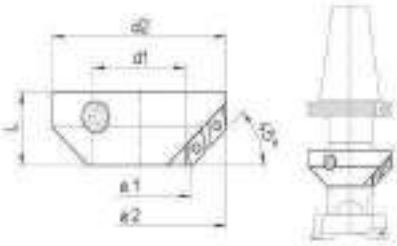
TU



REF.	CODE	MHD' d1	d2	L	L1	L2	Kg.
TU 50/60.16	46 05 050 16 001	50	60	44	16	16	1.2
TU 63/75.20	46 05 063 20 001	63	75	55	20	20	2.4
TU 80/95.25	46 05 080 25 001	80	95	65	25	25	3.6

- CHAMFERING TOOLS
- **FASRINGE**
- HERRAMIENTAS PARA ACHAFLANAR
- **OUTIL À CHANFREINER**
- ANELLO PER SMUSSI

AS.. 45°



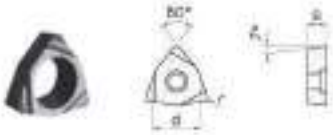
REF.	CODE	Ø1	d1	d2	L				Kg.
AS 16.45	65 56 016 0013 0	18 - 28	16	28	13	DCMT 0702..	TS 25	TORX T08	0.035
AS 20.45	65 56 020 0015 0	23 - 32	20	32	15				0.045
AS 25.45	65 56 025 0018 0	28 - 43	25	43	18				0.1
AS 32.45	65 56 032 0022 0	35 - 54	32	54	22				0.2
AS 40.45	65 56 040 0030 0	46 - 72	40	72	30	DCMT 11T3..	TS 4	TORX T15	0.5
AS 50.45	65 56 050 0038 0	56 - 95	50	95	38				1.1
AS 63.45	65 56 063 0046 0	75 - 125	63	125	46	DCMT 1504..	TS 5	TORX 25	2.3
AS 80.45	65 56 080 0058 0	95 - 165	80	165	58				5.2

D'ANDREA

MODULHARD'ANDREA

- INSERTS
- WENDEPLATTEN
- PLAQUITAS
- PLAQUÉTTES
- INSERTI

WCGT○○○○○○L



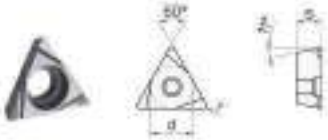
REF.	d	s	r			CARBIDE DP300	CARBIDE DK100	CERMET DC100	COATED CERMET DC100T
WCGT 020102 L	3.97	1.59	0.2	TS 21*-TS 211*	TORX T06	•	•	•	•
WCGT 020104 L			0.4			•	•	•	•

* TS21 : B...06
* TS211 : B...06

CCGT○○○○○○L

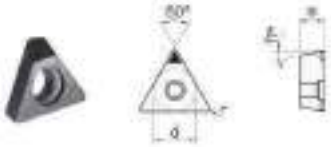
REF.	d	s	r			CARBIDE DP300	CARBIDE DK100	CERMET DC100	COATED CERMET DC100T
CCGT 060200 L10°	6.35	2.38	0	TS 25	TORX T08	•	•	•	•
CCGT 060202 L			0.2			•	•	•	•
CCGT 060204 L			0.4			•	•	•	•
CCGT 09T302 L	9.525	3.97	0.2	TS 4	TORX T15	•	•	•	•
CCGT 09T304 L			0.4			•	•	•	•

TPGX○○○○○○L



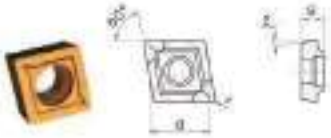
REF.	d	s	r			CARBIDE DP300	CARBIDE DK100	CERMET DC100	COATED CERMET DC100T
TPGX 090200 L10°	5.56	2.38	0	CS250T	TORX T08	•	•	•	•
TPGX 090202 L			0.2			•	•	•	•
TPGX 090204 L			0.4			•	•	•	•
TPGX 110300 L10°	6.35	3.18	0	CS300890T	TORX T08	•	•	•	•
TPGX 110302 L			0.2			•	•	•	•
TPGX 110304 L			0.4			•	•	•	•

TPGX○○○○○○



REF.	d	s	r			SINTERED DIAMOND D20 MDC	CUBIC BORON NITRIDE D20 CBN	CUBIC BORON NITRIDE D25 CBN
TPGX 090202	5.56	2.38	0.2	CS250T	TORX T08	•	•	•
TPGX 090204			0.4			•	•	•
TPGX 110302	6.35	3.18	0.2	CS300890T	TORX T08	•	-	•
TPGX 110304			0.4			•	•	•

CCMT○○○○○○



REF.	d	s	r			CARBIDE DP300	CVD COATED CARBIDE DP100 R
CCMT 060202	6.35	2.38	0.2	TS 25	TORX T08	•	•
CCMT 060204			0.4			•	•
CCMT 09T304	9.525	3.97	0.4	TS 4	TORX T15	•	•
CCMT 09T308			0.8			•	•
CCMT 120404	12.7	4.76	0.4	TS 5	TORX T25	•	•
CCMT 120408			0.8			•	•

- BORING GRADE
- ÜBERSICHT AUSBOHRQUALITÄTEN
- CALIDAD DE MANDRINADO
- QUALITÉ D'ALÉSAGE
- QUALITÀ DI BARENATURA

ISO	CARBIDE HARTMETALL METAL DURO CARBURE METALLO DURO	CERMET	COATED CERMET CERMET BESCHICHTET CERMET RECUBIERTO CERMET REVÊTU CERMET RIVESTITO	CVD COATED CARBIDE HARTMETALL CVD BESCHICHTET METAL DURO RECUBERTO CVD CARBURE REVÊTU CVD METALLO DURO RIVESTITO CVD
P01				
P10		DC100	DC100T	DP100R
P20				
P30	DP300			
P40				
K01				
K10	DK100	DC100	DC100T	DP100R
K20	DP300			
K30				

DP300
- Roughing and finishing. Low carbon steel - stainless steels
- Schruppen und Schlichten. Stahl mit niedrigem Kohlenstoffgehalt - rostfreier Stahl
- Desbaste y acabado. Aceros con bajo contenido de carbono - Aceros inoxidables
- Ébauche et finition. Acier à bas teneur en carbon - acier inoxydable
- Sgrossatura e finitura. Acciai a basso tenore di carbonio - acciai inox

DK100
- Roughing and finishing. Aluminium alloy Cast iron
- Schruppen und Schlichten. Aluminium-Legierungen Gusseisen
- Desbaste y acabado. Aleaciones de aluminio Fundiciones
- Ébauche et finition. Alliage aluminium Fonte
- Sgrossatura e finitura. Leghe di alluminio Ghise

DP100R
- Roughing. Steels, alloy steels and cast iron
- Schruppen. Stahl, legierter Stahl und Gusseisen
- Desbaste. Aceros, aceros aleados y fundiciones
- Ébauche. Aciers, alliage acier et fonte
- Sgrossatura. Acciai, acciai legati e ghise

DC100
- Finishing.Alloy steels and cast iron
- Schlichten. Legierter Stahl und Gusseisen
- Acabado. Aceros aleados en general y fundiciones esferoidales
- Finition. Alliage acier et fonte ductile
- Finitura.Acciai legati in genere e ghise sferoidali

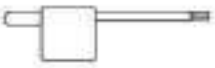
DC100T
- Finishing.Alloy steels, stainless steels and cast iron
- Schlichten. Legierter Stahl, rostfreier Stahl und Gusseisen
- Acabado. Aceros aleados en general, aceros inoxidables y fundiciones esferoidales
- Finition. Alliage acier, acier inoxydable et fonte ductile
- Finitura. Acciai legati in genere, acciai inox e ghise sferoidali

D20MDC
- Finishing. Aluminium alloys, non-ferrous materials and non-metals
- Schlichten. Aluminium-Legierungen, Nichteisenmetalle und nicht-metallische Materialien
- Acabado. Aleaciones de aluminio, materiales no ferrosos y no metálicos
- Finition. Alliage aluminium, non-ferreux et composites
- Finitura. Leghe di alluminio, materiali non-ferrosi e non-metalli

D20CBN
- Finishing. High hardness steels (over 50 HRC) (it may replace the grinding)
- Schlichten. Stahl mit Härte über 50 HRC (kann gegebenenfalls das Schleifen ersetzen)
- Acabado. Aceros de dureza elevada superior a 50 HRC (puede sustituir el rectificado)
- Finition. Acier à haute dureté, supérieure à 50 HRC (il peut remplacer la rectification)
- Finitura. Acciai con elevata durezza superiore 50 HRC (può sostituire la rettifica)

D25CBN
- Finishing. High hardness steel (over 50 HRC) and interrupted cutting (it may replace the grinding)
- Schlichten. Stahl mit Härte über 50 HRC und bei unterbrochenem Schnitt (kann gegebenenfalls das Schleifen ersetzen)
- Acabado. Aceros de dureza elevada superior a 50 HRC y corte interrumpido (puede sustituir el rectificado)
- Finition. Acier à haute dureté, supérieure à 50 HRC et coupe interrompue (il peut remplacer la rectification)
- Finitura. Acciai con elevata durezza superiore 50 HRC e taglio interrotto (può sostituire la rettifica)

TORX



REF.	CODE	M	L	D	REF.	CODE
TS 21	49 40 1 0002034	M 2x0.4	3.7	2.7	TORX T06	10 150 09 0 0600
TS 211	49 40 1 0002040		4			
CS 250 T	49 40 1 0002585	M 2.5x0.45	6	3.7	TORX T08	10 150 09 0 0800
CS 300890 T	49 40 1 0003009	M 3x0.5	8	4.1		
TS 25	49 40 1 0002555	M 2.5x0.45	5.7	3.45		
TS 4	49 40 1 0004008	M 4x0.7	10	5.5	TORX T15	10 150 09 0 1500
TS 5	49 40 1 0005009	M 5x0.8	11.5	7	TORX T25	10 150 09 0 2500
DMC US53	49 40 1 0035070	M 3.5x0.6	10	5.2	TORX T15	10 150 09 0 1500

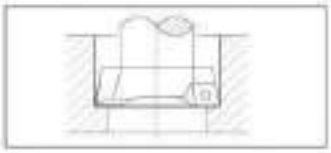
D'ANDREA

MODULHARD'ANDREA

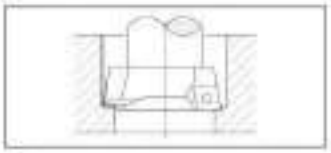
- **RECOMMENDED CUTTING CONDITIONS FOR ROUGHING OPERATIONS WITH DOUBLE-BIT HEADS TS**
- **DATI DI TAGLIO CONSIGLIATI PER SGROSSATURA DI FORI CON TESTINE BITAGLIENTI TS**

material / materiale	boring bar dimensions / dimensioni bareno	working conditions / condizioni di lavoro	cutting speed Vc = m/min. velocità di taglio Vc = m/min. — diameter / diametro D < 38	D = 38-120	D > 120	feed fn = mm/rev (twin cutters) avanzamento f = mm/giro (due taglienti) — insert radius / raggio inserto R = 0.2	R = 0.4	R = 0.8
carbon steel / acciaio al carbonio HB ≤ 200	L / d = 2.5	good / buona	120 - 190	140 - 200	160 - 250	–	0.2 - 0.4	0.3 - 0.5
	L / d = 4	normal / normale	100 - 160	120 - 180	140 - 200	–	0.2 - 0.4	0.3 - 0.5
	L / d = 6.3	difficult / difficile	70 - 100	70 - 100	70 - 100	0.15 - 0.3	0.2 - 0.4	-
carbon steel / acciaio al carbonio HB > 200	L / d = 2.5	good / buona	100 - 160	120 - 180	140 - 200	–	0.2 - 0.4	0.3 - 0.5
	L / d = 4	normal / normale	80 - 140	100 - 160	120 - 180	–	0.2 - 0.4	0.3 - 0.5
	L / d = 6.3	difficult / difficile	60 - 90	70 - 100	70 - 100	0.15 - 0.3	0.2 - 0.4	-
stainless steel / acciaio inox AISI 304 - 316	L / d = 2.5	good / buona	80 - 110	90 - 120	100 - 140	–	0.2 - 0.4	0.3 - 0.5
	L / d = 4	normal / normale	70 - 100	80 - 110	90 - 120	–	0.2 - 0.4	0.3 - 0.5
	L / d = 6.3	difficult / difficile	60 - 90	60 - 90	60 - 90	0.15 - 0.3	0.2 - 0.4	-
cast iron / ghisa	L / d = 2.5	good / buona	90 - 120	100 - 140	120 - 160	–	0.2 - 0.4	0.3 - 0.5
	L / d = 4	normal / normale	70 - 100	90 - 120	100 - 140	–	0.2 - 0.4	0.3 - 0.5
	L / d = 6.3	difficult / difficile	60 - 90	60 - 90	60 - 90	0.15 - 0.3	0.2 - 0.4	-
aluminium / alluminio	L / d = 2.5	good / buona	160 - 250	200 - 300	250 - 350	–	0.3 - 0.5	0.4 - 0.6
	L / d = 4	normal / normale	140 - 200	160 - 250	200 - 300	–	0.3 - 0.5	0.4 - 0.6
	L / d = 6.3	difficult / difficile	100 - 150	100 - 150	100 - 150	0.2 - 0.4	0.3 - 0.5	-

cutting depth / profondità di passata ap = mm	working range / campo di lavoro Ø = mm	max. cutting depth / max. profondità di passata — steel / acciaio	cast iron, aluminium / ghisa, alluminio
	18 - 28	1.5 - 2	2 - 2.5
	28 - 50	2 - 3	2.5 - 5.5
	50 - 68	3 - 4	3.5 - 5
	68 - 200	4 - 5	5 - 7
	200 - 500	5 - 6	6 - 8



- Twin cutters at the same cutting diameter
- Due taglienti sullo stesso diametro



- Twin cutters at different cutting diameters
- Due taglienti su diametri diversi

- It's advisable to start with B hole ≥ the boring bar diameter d.
- È consigliabile che il preforo B sia ≥ al diametro del bareno d.

- **ATTENTION:** For boring operations at different diameters, reduce to a half the feed indicated on the above table.
- **ATTENZIONE:** Per lavorare con un solo tagliente o con differenti diametri di taglio, dimezzare l'avanzamento indicato in tabella.

- **RECOMMENDED CUTTING CONDITIONS FOR BORING OPERATIONS WITH DOUBLE-BIT TESTAROSSA TRD**
- **DATI DI TAGLIO CONSIGLIATI PER ALESATURA CON TESTAROSSA BITAGLIENTE TRD**

material / materiale	boring bar dimensions / dimensioni bareno	working conditions / condizioni di lavoro	cutting speed Vc = m/min. velocità di taglio Vc = m/min.	feed fn = mm/rev avanzamento f = mm/giro — insert radius / raggio inserto R = 0.2	R = 0.4	quality insert / qualità inserto — roughing / sgrossatura	finishing / finitura	cutting depth / profondità di passata — finishing / finitura	roughing / sgrossatura ø20 ø45	ø45 ø75	ø75 ø120
carbon steel / acciaio al carbonio HB ≤ 200	L / d = 2.5	good / buona	160 - 250	0.1 - 0.2	0.1 - 0.2	DC100 DP300	DP300 DP100R	0.15 - 0.3	1.5	2	2.5
	L / d = 4	normal / normale	120 - 180	0.1 - 0.2	0.1 - 0.2						
	L / d = 6.3	difficult / difficile	70 - 100	*0.1 - 0.15	0.1 - 0.2						
carbon steel / acciaio al carbonio HB > 200	L / d = 2.5	good / buona	140 - 200	0.1 - 0.2	0.1 - 0.2	DC100	DP300 DP100R	0.15 - 0.3	1.5	2	2.5
	L / d = 4	normal / normale	100 - 160	0.1 - 0.2	0.1 - 0.2						
	L / d = 6.3	difficult / difficile	70 - 100	*0.1 - 0.15	0.1 - 0.2						
stainless steel / acciaio inox AISI 304 - 316	L / d = 2.5	good / buona	100 - 140	0.1 - 0.2	0.1 - 0.2	DP300	DP300	0.15 - 0.3	1.5	2	2.5
	L / d = 4	normal / normale	80 - 110	0.1 - 0.2	0.1 - 0.2						
	L / d = 6.3	difficult / difficile	60 - 90	*0.1 - 0.15	0.1 - 0.2						
cast iron / ghisa	L / d = 2.5	good / buona	120 - 160	0.1 - 0.2	0.1 - 0.2	DK100 DC300	DP100R	0.15 - 0.3	2	2.5	3
	L / d = 4	normal / normale	90 - 120	0.1 - 0.2	0.1 - 0.2						
	L / d = 6.3	difficult / difficile	60 - 90	*0.1 - 0.15	0.1 - 0.2						
aluminium / alluminio	L / d = 2.5	good / buona	250 - 350	0.1 - 0.2	0.1 - 0.2	DK100	DK100	0.15 - 0.3	2	2.5	3
	L / d = 4	normal / normale	160 - 250	0.1 - 0.2	0.1 - 0.2						
	L / d = 6.3	difficult / difficile	100 - 150	*0.1 - 0.15	0.1 - 0.2						

* Only for finishing inserts
* Solo per inserti di finitura

• RECOMMENDED CUTTING CONDITIONS FOR BORING OPERATIONS WITH TESTAROSSA TRC / TRM / TR-PSC
• DATI DI TAGLIO CONSIGLIATI PER L'ALESATURA CON TESTAROSSA TRC / TRM / TR-PSC

material materiale	boring bar dimensions dimensioni barena	working conditions condizioni di lavoro	cutting speed Vc= m/min. velocità di taglio Vc= m/min.	feed fn= mm/rev avanzamento fn= mm/giro insert radius raggio inserto R = 0.0	R = 0.2	R = 0.4	quality insert qualità inserto	cutting depth profondità di passata
carbon steel acciaio al carbonio HB ≤ 200	L / d = 2.5	good / buona	200 - 300	–	0.05 - 0.08	0.07 - 0.1	DC100 DP100	0.1 - 0.25 mm
	L / d = 4	normal / normale	150 - 250	–	0.05 - 0.08	0.07 - 0.1		
	L / d = 6.3	difficult / difficile	70 - 100	0.05 - 0.08	0.05 - 0.08	–		
carbon steel acciaio al carbonio HB > 200	L / d = 2.5	good / buona	160 - 250	–	0.05 - 0.08	0.07 - 0.1	DC100	
	L / d = 4	normal / normale	150 - 200	–	0.05 - 0.08	0.07 - 0.1		
	L / d = 6.3	difficult / difficile	70 - 100	0.05 - 0.08	0.05 - 0.08	–		
stainless steel acciaio inox AISI 304 - 316	L / d = 2.5	good / buona	120 - 160	–	0.05 - 0.08	0.07 - 0.1	DP100	
	L / d = 4	normal / normale	100 - 140	–	0.05 - 0.08	0.07 - 0.1		
	L / d = 6.3	difficult / difficile	70 - 100	0.05 - 0.08	0.05 - 0.08	–		
cast iron ghisa	L / d = 2.5	good / buona	120 - 160	–	0.05 - 0.08	0.07 - 0.1	DK100 DC100	
	L / d = 4	normal / normale	100 - 140	–	0.05 - 0.08	0.07 - 0.1		
	L / d = 6.3	difficult / difficile	70 - 100	0.05 - 0.08	0.05 - 0.08	–		
aluminium alluminio	L / d = 2.5	good / buona	300 - 400	–	0.05 - 0.08	0.07 - 0.1	DK100	
	L / d = 4	normal / normale	250 - 350	–	0.05 - 0.08	0.07 - 0.1		
	L / d = 6.3	difficult / difficile	100 - 150	0.05 - 0.08	0.05 - 0.08	–		
steel acciaio HB ≤ 200	L / d = 2.5	good / buona	80 - 100	–	0.04 - 0.06	0.05 - 0.07	D20CBN	
	L / d = 4	normal / normale	80 - 100	–	0.04 - 0.06	0.05 - 0.07		

• CALCULATION FORMULAS FOR BORING
• FORMULA DI CALCOLO PER ALESATURA

Vc • cutting speed (m/min.)
• velocità di taglio (m/min.)

D • diameter of workpiece (mm)
• diametro del pezzo da lavorare (mm)

n • number of revolutions / min' (rev./min)
• numero di giri al minuto (giri/min.)

Vf • feed rate (mm/min.)
• velocità avanzamento (mm/min.)

fn • feed / rev. (mm/rev)
• avanzamento al giro (mm/giro)

π • 3.14

$$Vc = \frac{\pi \cdot D \cdot n}{1000}$$

$$n = \frac{Vc \cdot 1000}{\pi \cdot D}$$

$$Vf = n \cdot fn$$

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