

Ver-2021

MAIN CATALOGUE

SELUX

NC TOOLING SYSTEM

FOR MACHINING CENTER



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 | 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 개발 | Feb 2010 | Products HSK Tooling System. |
| 2011 05 | 연구소설립 | May 2011 | Estdished 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 개발 | Dec 2014 | Products GBT two face contact Tooling System. |
| 2015 04 | 열박음척 개발 | Apr 2015 | Products SHRINK FIT Tooling System. |
| 2017 11 | 현 공장으로 확장이전 | Nov 2017 | Moved in Extended Factory. |
| 2017 12 | (주)세광 세룩스로 사명변경 | Dec 2017 | Changed the firm name as Sekwang selux co.,Ltd |
| 2020 03 | Endmill Collet Chuck 개발 | Apr 2020 | Products Endmill Collet Chuck |
| | Synchro Tapping Chuck 개발 | | Products Synchro Tapping Chuck |
| | Coolant K Collet 개발 | | Products Coolant K Collet |

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NC TOTAL TOOLING SYSTEM SELUX

HYDRAULIC CHUCK



High Precision Run-out Accuracy

D p138~139

Clamping Range :
 $\varnothing 3,0 \sim \varnothing 32,0$

GBT SHANK	18~19
BT SHANK	42~43
HSK SHANK	82~83
SK SHANK	102

MILLING CHUCK



Powerful Chucking Force

MAX
520kg f.m

K..... p140

Clamping Range :
 $\varnothing 3,0 \sim \varnothing 42,0$

GBT SHANK	20
BT SHANK	44~45
HSK SHANK	84
SK SHANK	103
NT/MT SHANK	114~116

HIGH SPEED MILLING CHUCK



Excellent Run-out Accuracy

K..... p140

Clamping Range :
 $\varnothing 3,0 \sim \varnothing 32,0$

GBT SHANK	21
BT SHANK	46
HSK SHANK	85

SHRINK FIT HOLDER

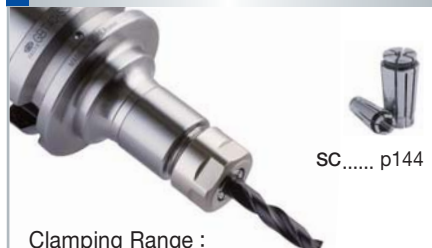


Excellent Run-out Accuracy

Clamping Range :
 $\varnothing 3,0 \sim \varnothing 20,0$

GBT SHANK	22~23
BT SHANK	48~49
HSK SHANK	86~88
SK SHANK	104
ST SHANK	126~127
ACCESSORY	153

SSK COLLET CHUCK



SC..... p144

Clamping Range :
 $\varnothing 1,0 \sim \varnothing 25,4$

GBT SHANK	24~25
BT SHANK	50~51
HSK SHANK	89
SK SHANK	105
ST SHANK	124~125

HIGH SPEED GSK CHUCK (P CLASS)



SC..... p144

Clamping Range :
 $\varnothing 1,0 \sim \varnothing 25,4$

GBT SHANK	26~27
BT SHANK	52~53
HSK SHANK	90~91

ER COLLET CHUCK



ER..... p146

Clamping Range :
 $\varnothing 0,5 \sim \varnothing 26,0$

GBT SHANK	28
BT SHANK	54~55
HSK SHANK	92
SK SHANK	106
NT/MT SHANK	117~119
ST SHANK	128~129

ENDMILL COLLET CHUCK



SE..... p147

Clamping Range :
 $\varnothing 6 \sim \varnothing 20$

GBT SHANK	29
BT SHANK	56
HSK SHANK	93

ER SLIM COLLET CHUCK



ER..... p146

Clamping Range :
 $\varnothing 0,5 \sim \varnothing 16,0$

BT SHANK	57
ST SHANK	130

NC TOTAL TOOLING SYSTEM SELUX

SYNCHRO TAPPING CHUCK



TER... p148

GBT SHANK	30
BT SHANK	58
HSK SHANK	94

TAPPING CHUCK



TCA... p149

Clamping Range :
M3 ~ M36

GBT SHANK	31
BT SHANK	59
HSK SHANK	95
SK SHANK	108
ST SHANK	133

NC DRILL CHUCK



Clamping Range :
ø0,3 ~ ø13,0

GBT SHANK	32
BT SHANK	60
HSK SHANK	96
SK SHANK	107
NT/MT SHANK	120
ST SHANK	132

SIDE LOCK HOLDER



Clamping Range :
ø6,0 ~ ø42,0

GBT SHANK	33
BT SHANK	61~64
HSK SHANK	97
SK SHANK	109
NT/MT SHANK	120

JACOBS TAPER ARBOR



BT SHANK	66
SK SHANK	108

MORSE TAPER HOLDER



■ for Morse taper shank with tang.

**TAPER 접촉을
80% 이상 진동없음.**

GBT SHANK	35
BT SHANK	67,68
HSK SHANK	98
SK SHANK	111

FACE MILL ARBOR



GBT SHANK	36~38
BT SHANK	69~75
HSK SHANK	99~100
SK SHANK	112
NT/MT SHANK	121~122
ST SHANK	134~135

PRO MILL ARBOR



GBT SHANK	39
BT SHANK	76
SK SHANK	110
ST SHANK	136

SIDE CUTTER ARBOR



GBT SHANK	40
BT SHANK	77

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NC TOTAL TOOLING SYSTEM **SELUX**

MOLD SIDE LOCK HOLDER



Clamping Range :
 $\varnothing 3.0 \sim \varnothing 32.0$

GBT SHANK 34

BT SHANK 65

SQUARE BORING BAR



Boring Range :
 $\varnothing 25.0 \sim \varnothing 260.0$

BT SHANK 79~80

GYRO CHUCK



※ CNC 편심조정!!

Clamping Range :
 $\varnothing 0.5 \sim \varnothing 16.0$

ST SHANK 131

FLOATING ER TAP CHUCK



Clamping Range :
 $\varnothing 0.5 \sim \varnothing 20.0$

※ CNC 선반 TAP작업시 능률 UP!!

ST SHANK 133

TEST BAR



ACCESSORY 150

BLANK TOOL



ACCESSORY 151

ACCESSORY



ACCESSORY 153



ACCESSORY 154



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UNIVERSAL
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GBT TOOLING SYSTEM

Product is Simple, Quality is not Simple

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	BT	GBT
BT 50	ø69.85	ø100
BT 40	ø44.45	ø63
BT 30	ø31.75	ø46

Basic Concept

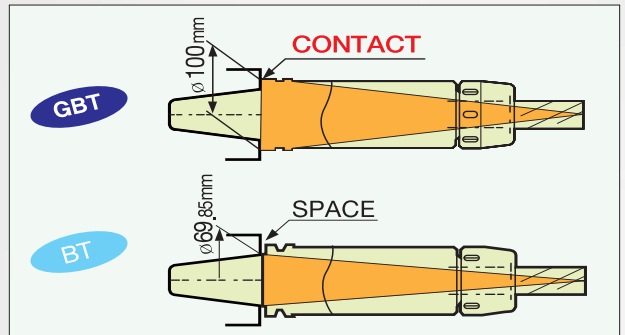
GBT 이면구속 시스템은 표준 BT타입을 기반으로한 가장 최신 기술입니다.

The GBT Dual Contact System is based on the most current available standards in BT (JIS B6339).

일반 테이퍼 홀더는 게이지 라인의 직경을 기준으로 스피indle에 접촉되어 사용되지만 GBT 홀더는 플랜지 면의 직경을 기준으로 접촉되어 스피indle 장착에 기존 테이퍼의 홀더보다 우수한 내구성 및 가공성의 효과를 가지고 있습니다.

A conventional steep taper toolholder is supported on a reference diameter called the gauge face. On the contrary, a GBT toolholder is supported on the flange face, which brings remarkable improvement to rigidity.

INCREASED CONTACT DIAMETER (Example of BT)



Perfect Interchangeability

GBT는 일반 표준 스피indle의 장비에서 사용될 수 있습니다.

GBT toolholder can be used on existing standard machine spindles.

표준 툴 홀더들은 이면구속 스피indle에서 사용 될 수 있습니다.

Existing standard toolholders can also be used on dual contact spindles.

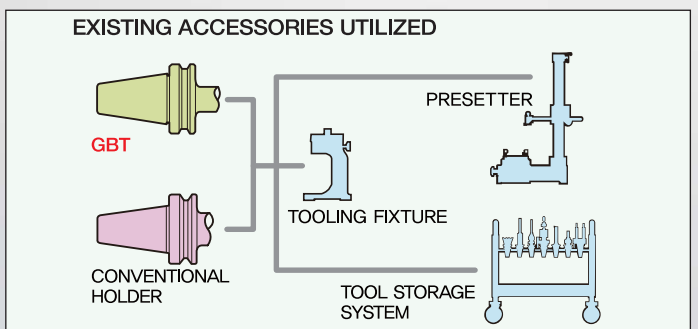
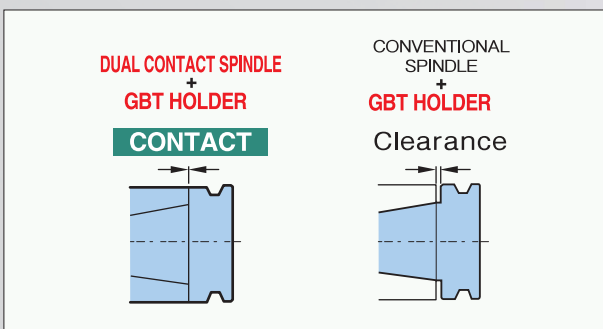
이러한 경우, 동시 접촉 즉 이면구속의 효과는 없습니다.

In this case, simultaneous contact cannot be attained.

다른 동시 접촉 시스템은 이면구속 툴 홀더, 툴프리셋터, 툴클램프 등의 별도의 약세사리들을 요구하지만 GBT 이면구속 스피indle들은 현재 사용중인 BT 타입의 약세사리들을 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

Product is Simple, Quality is not Simple

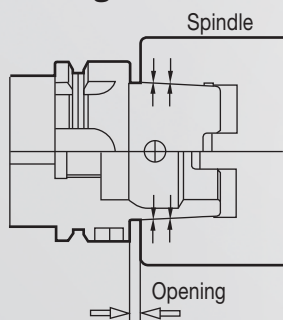
SELUX
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HSK Shank perfect two-surface constrained system

2면 구속형 HSK Shank

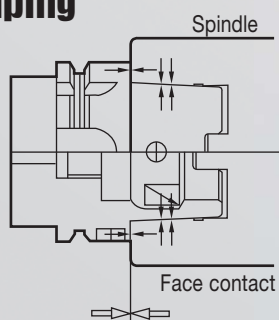
Connecting



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

Taper의 탄성변형이 Flange 단면에 Spindle에 밀착시킴

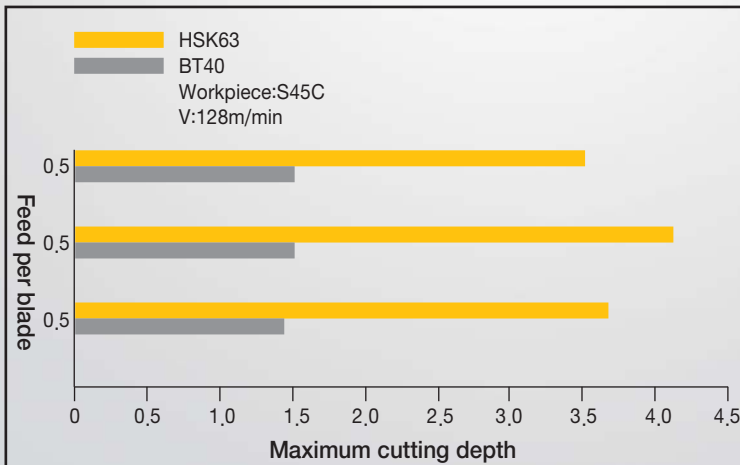
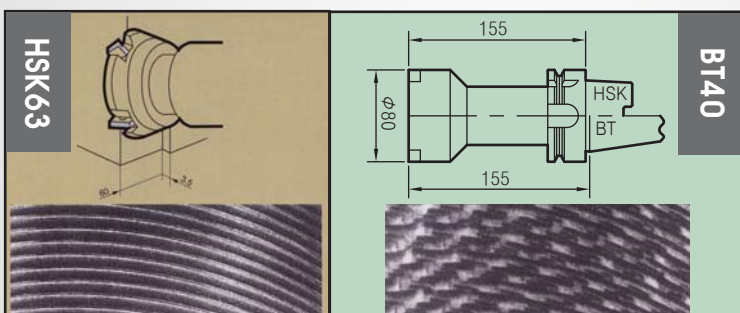
Clamping



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.



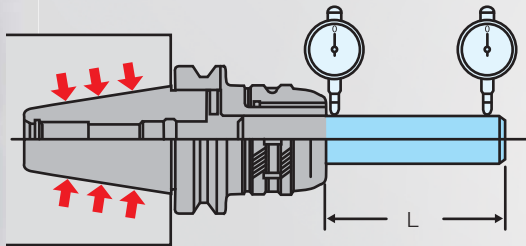
MILLING CHUCK

Product is Simple, Quality is not Simple

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NC TOOLING SYSTEM



Excellent Runout Accuracy



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

5 μ m(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

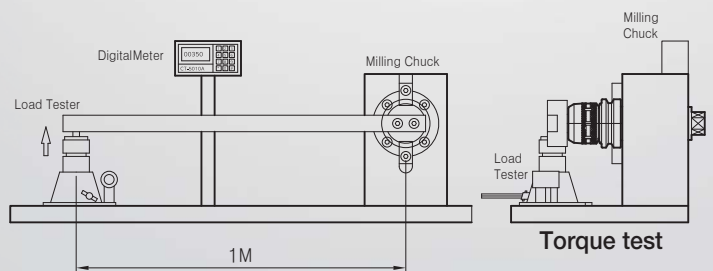
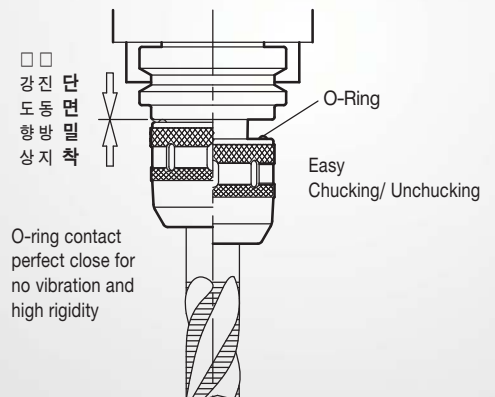
Model	Torque
	kg f.m
MC20	120
MC25	170
MC4032	250
MC5032	350
MC5042	500

(SKP)	When oil removed completely with thinner cleanly
	MC20
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 with 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.



Product is Simple, Quality is not Simple

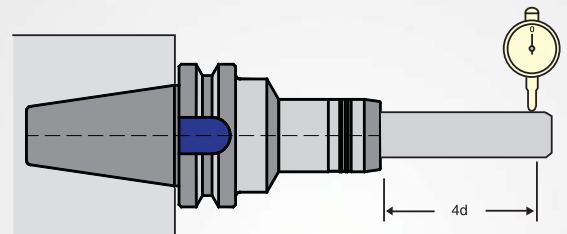
SELUX
NC TOOLING SYSTEM



Excellent Runout Accuracy

SELUX 유압척은 $4D \times 3\mu\text{m}$ (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 $3\mu\text{m}$ at $4D$ (T.I.R) and has been designed and optimized for high speed machining.
(Max G2.5 at 25,000 rpm)



Clamping Torque Test Data

Ø	N.m	Ø	N.m	Ø	N.m	Ø	N.m	Ø	N.m
6	16	10	45	14	110	18	240	25	400
8	23	12	95	16	185	20	330	32	650



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 exchange cutting tools.

Variety Use

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

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



SELUX SSK COLLET CHUCK

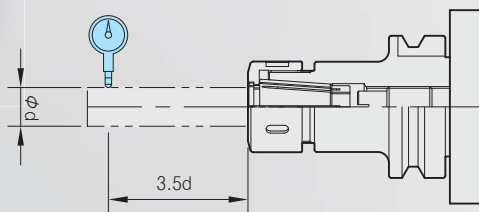
Product is Simple, Quality is not Simple

SELUX
NC TOOLING SYSTEM



Excellent Run-out Accuracy

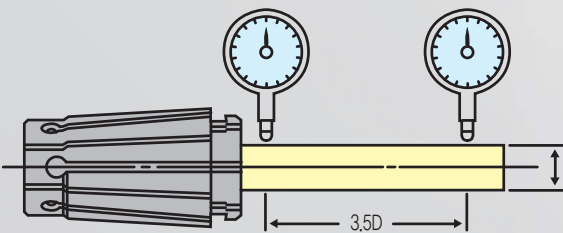
(All grounded collet chuck for speed and high accuracy.)



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

정직한 RUN-OUT 결과를 보증하는 SELUX SSK COLLET CHUCK은 정밀가공에 최적화된 제품입니다.

SELUX SSK COLLET CHUCK that guarantee accuracy RUN-OUT is optimal product for precision operation.



3.5D 선단에서 표준 5 μm , 정밀급 3 μm 을 전수검사로 보증합니다.

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

SELUX SSK COLLET CHUCK은 엔드밀, 드릴, 리머 등 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



- 고속가공에서 높은 정도
- 8° Taper의 강력한 파지력
- 원형 너트로 컴팩트한 디자인
- 스페너는 PH스페너 사용(별매)
- G2.5X max 40,000 RPM
- 고속형GSK적에는 P CLASS 콜릿 사용을 권장

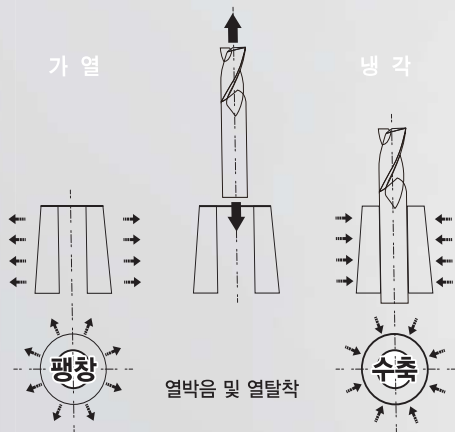
Product is Simple, Quality is not Simple

SELUX
NC TOOLING SYSTEM



Easy chucking

Power Clamping



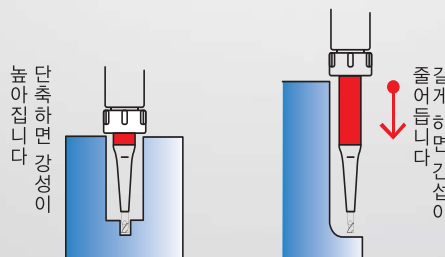
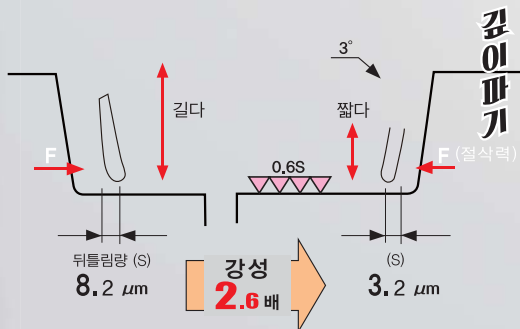
	SHRINK FIT	Collet Holder
Chucking System 척킹원리	홀더의 열팽창을 이용한 열박음 시스템 The shrink fit system is based on Thermal expansion of the shrink fit holder	콜렛의 탄성으로 공구를 고정하는 시스템 The system to Clamp cutting tool using elastic collet
Chanking force 열팽창을 (ø 6)	6.2 kgf.m	2.1kgf.m
	 열팽창을 ▶ 수축력	 탄성변형

Optimal operation with slim and symmetrical design

공구 돌출부분을 최단으로!
Set The shortest lenth of cutting tool
콜렛 홀더

길이조정 자유자재, 완벽한 접근성.
Easy to adjust tool lenth, perfect operation accssibility

스트레이트 타입은 필요에 따라 길이를 조정할 수 있습니다.



Straight Type

Product is Simple, Quality is not Simple

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NC TOOLING SYSTEM

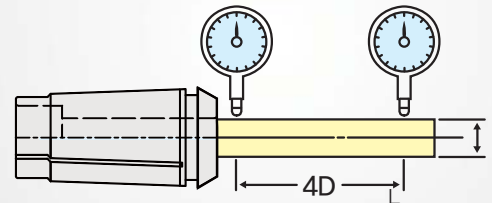
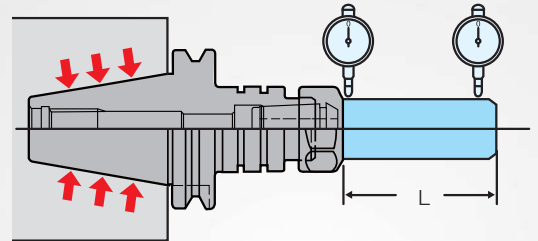


Excellent Runout Accuracy

SELUX END MILL COLLET CHUCK은 $4D \times 5\mu\text{m(T.I.R)}$ 이내의 RUN-OUT을 보장 (max. G6.3 at 10,000rpm)
SELUX END MILL COLLET CHUCK ensure high precision runout accuracy is less than $5\mu\text{m}$ at $4D$ (T.I.R) (Max G2.5 at 20,000 rpm)

SELUX END MILL COLLET CHUCK은 SELUX 전용 콜릿, SE COLLET을 사용하고 SE COLLET은 전수 검사를 통해 $4D \times 5\mu\text{m(T.I.R)}$ 이내의 RUN-OUT 보증

SELUX END MILL COLLET CHUCK can use only SELUX SE COLLET. SELUX SE COLLET is not compatible with other collet chuck. We inspect all SE COLLETS and garrantee accuracy $4D \times 5\mu\text{m(T.I.R)}$



Strong Clamping (Grip) Power

SELUX SE COLLET CHUCK은 낮은 각도와 넓은 접촉면으로 설계되어 기존 COLLET CHUCK 보다 강력한 파지력으로 가공 가능합니다. It has a lower angle and contact surface than the existing ER scale, showing up to 2 times the amount of ground strength

Clamping Torque Test Data

Model	Troque		Model	Troque		Model	Troque	
	Nm			Nm			Nm	
ER20	50		ER25	70		ER32	140	
SK13	60		SK16	120		SK20	120	
SE20	120		SE25	148		SE32	180	

※스패너는 ER척과 공용으로 사용가능 합니다.

Product is Simple, Quality is not Simple

SELUX
NC TOOLING SYSTEM



Excellent Balance

SELUX SYNCHRO TAPPING 척은 4D x 25 μ m(T.I.R) 이내의 흔들림 정도를 보장하며 고속가공 최적화된 제품입니다. (max. G6.3 at 10,000rpm)

SELUX SYNCHRO TAPPING CHUCK ensure high precision runout accuracy is less than 25 μ m at 4D (T.I.R) and has been designed and optimized for high speed. (Max G6.3 at 10,000 rpm)

SELUX만의 특수 설계(특허보유)로 인한 0.01이하의 미세 상하 플로팅 기능 및 5도 이하의 좌/우 움직임 기능으로 기존 TAPPING 작업 대비 30% 이상의 원가 절감 가능합니다. (생산성 향상 및 공구 수명 연장)

SELUX SYNCHRO TAPPING CHUCK is designed with special technology that is micro movement

* up and down: less than 0.01

* right and left : less than 5 degree.

SELUX SYNCHRO TAPPING CHUCK improve the productivity and tool life.



TEST RESULT DATA

Model	COLLET CHUCK	SELUX SYNCHRO TAPPING CHUCK
TAP	M6X1.0 D12	
소재	ADC12-T6	
RPM	400	1200
가공수(HOLE)	3500	5500

※리지드탭 기능이 없는 장비는 사용시 탭이 파손될수 있습니다.

※스패너는 ER척과 공용으로 사용가능 합니다

**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
ENDMILL COLLET CHUCK
SYNCRO TAPPING CHUCK
TAPPING CHUCK HOLDER
NC DRILL CHUCK
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

GBT SHANK HYDRAULIC CHUCK

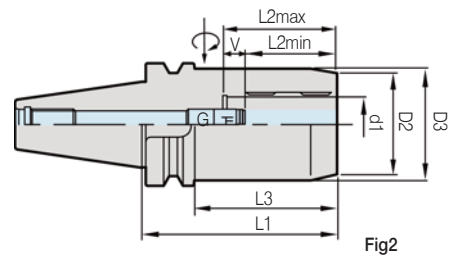
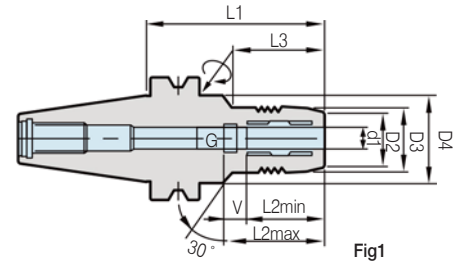
Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



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



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

- 4D 선단에서 3 μ m이내의 흔들림정도
- 높은 정밀도와 고속가공에 최적화
- 유압방식의 강력한 파지력
- 렌치 하나로 쉽게 공구고정
- 3 μ m(T.I.R) Run-out at 4D away from shank nose.
- The optimal chck 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									
SHC 10 - 75	10	29	32		75	32,5	42,5		38	M6X1,0		0,75
SHC 12 - 75	12	31	34									
SHC 16 - 90	16	35	38	90	42,5	52,5	48		M8X1,0	Fig2	0,9	
SHC 20 - 90	20	40	43									-

- ▶ 유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
- ▶ 유압척 SHC12, SHC20, SHC32는 D또는 OD콜릿을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
- ▶ 유압척 전용 콜릿은 **P138~P139**
- ▶ 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. **P138~P139**
- ▶ We do not recommend to use hydraulic chuck for roughing operation.

HYDRAULIC CHUCK

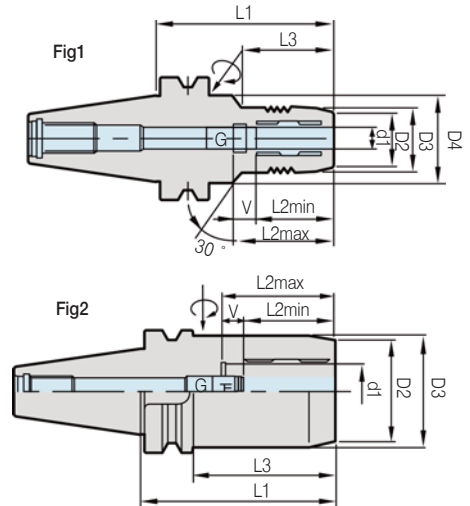
Coolant-through hole
Clamping Range : $\varnothing 3.0 \sim \varnothing 32.0$



CODE No.
GBT50 SHC20 140
 Shank Chucking Dia Length



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

- 4D 선단에서 3 μ m이내의 흔들림정도
- 높은 정밀도와 고속가공에 최적화
- 유압방식의 강력한 파지력
- 렌치 하나로 쉽게 공구고정
- 3 μ m(T.I.R) Run-out at 4D away from shank nose.
- The optimal chuk 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						44	M6X1,0		1,35		
SHC12 - 90	12	31	34						37,5	47,5		1,35		
SHC16 - 90	16	35	38						42,5	52,5		1,4		
SHC20 - 90	20	40	43						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	-	M16X1,0	Fig2	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	4,1							
- 140					140	4,7								
SHC10 - 120					10	29	32		120	44		M6X1,0	4,3	
- 140	140	4,9												
SHC12 - 120	12	31	34		120	37,5	47,5		44	M6X1,0		4,3		
- 140					140							4,9		
SHC16 - 120	16	35	38		120	42,5	52,5		10	48		M8X1,0	Fig1	4,4
- 140					140									5,0
SHC20 - 90	20	40	43		90	42,5	52,5		10	32		M8X1,0	Fig1	4,0
- 120					120					4,4				
- 140				140	5,0									
SHC25 - 105				25	53			57		105	51			61
- 150	112	5,6												
SHC32 - 115	32	58	63	115	55	65	10	77	M16X1,0	Fig2	4,7			
- 150				150				6,0						

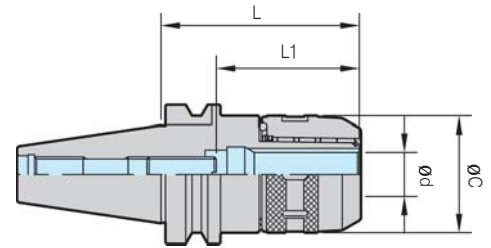
MILLING CHUCK

Coolant-through hole
Clamping Range : $\varnothing 3.0 \sim \varnothing 42.0$



CODE No.

GBT50
MC32
105
 Shank Chucking Dia Length

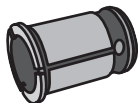



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
 GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- 높은 정밀도
- 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.
- 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.	$\varnothing d$	L	$\varnothing C$	L1	Collet	Weight (kg)
GBT30 - MC20 - 80	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				1.6
MC32 - 85	32	85	72	90	K32, NC32	2
		105				2.4
GBT50 - MC20 - 105	20	105	53	82	K20, NC20	4.4
		135				4.8
MC32 - 105	32	105	74	125	K32, NC32	4.9
		135				5.7
- 165	32	165	74	125	K32, NC32	6.5
		165				6.5
MC42 - 105	42	105	94	130	K42, NC42	5.5
		135				6.9
- 165	42	165	94	130	K42, NC42	8.3

Spare Parts		
Type	Option	
	Collet	Spanner
		
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 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶ 밀링척 전용 콜릿은 P140~P143
- ▶ 밀링척 스페너는 별도 판매품 입니다. P157

- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are referred. P140~P143
- ▶ Spanner is ordered separately. P157

HIGH SPEED MILLING CHUCK

GBT SHANK HIGH SPEED MILLING CHUCK

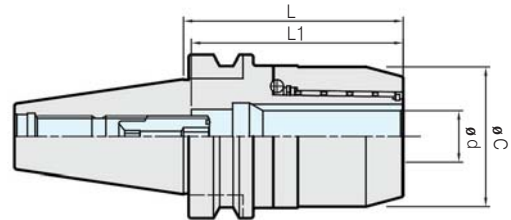
Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



CODE No.
GBT40 **MC32** **85** **G**
 Shank Chucking Dia Length High Speed



MAX
25,000
min⁻¹

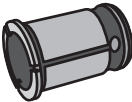



GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
 GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- 고속 가공에서 높은 정도
- 강력한 파지력
- 스패너는 GH 스패너 사용(별매)
- G6.3 max 25,000RPM
- 원형너트로 고속 절삭시 소음 감소
- Excellent Run-out Accuracy.
- Powerful clamping force.
- GH spanner is ordered separately.
- 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	20,000	1.6
- 105G		105					90
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	15,000	4.7
- 135G		135					135

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

- ▶ 고속형밀링척은 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶ 밀링척 전용 콜릿은 **P140 ~ P143**
- ▶ 고속형밀링척 GH스패너는 별도 판매품 입니다. **P157**

- ▶ High speed MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-CHUCK COLLET is referred. **P140~P143**
- ▶ GH SPANNER for high speed milling chuck is ordered separately. **P157**

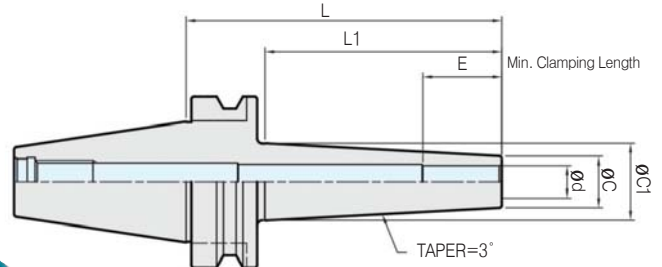
SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 12.0$

CODE No.
GBT40 **SSF10** **S** **120**
 Shank Chucking Dia Shim Length



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 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적, 슬림한 디자인으로 가공최적화
- 전제품 내부급유 (Coolant Through Hole)
- 3 μ m(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.	ϕd	ϕC	$\phi C1$	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
- 120			21	120	95	24	
SSF 8S - 80	8	13	19	80	55		24
- 120			23	120	95	30	
SSF10S - 80	10	16	22	80	55		30
- 120			26	120	95	0.45	
SSF12S - 80	12	19	25	80	55		30
- 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	30	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	30	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 **P153**
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. **P153**
- ▶ 열박음홀더 사용시 오일홀 풀스터드 볼트를 권장합니다.
- ▶ Please use only carbide cutting tools of a shank tolerance within H6.
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is referred. **P153**
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. **P153**
- ▶ We recommend oil hole Pull stud bolt for shrink fit holder.

SHRINK FIT HOLDER

Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 20.0$

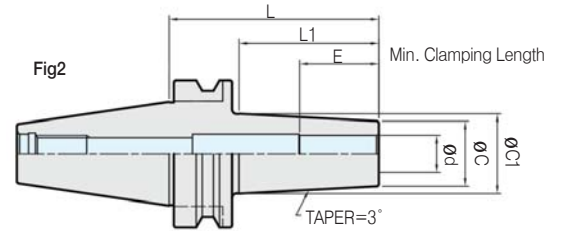
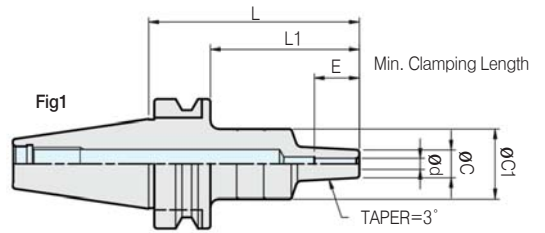
CODE No.

GBT40 SSF10 160

Shank Chucking Dia Length



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 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적,슬림한 디자인으로 가공최적화
- 전제품 내부급유 (Coolant Through Hole)
- 3 μ m(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.	ϕd	ϕC	$\phi C1$	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		
SSF 6 - 75	6	12				24		
SSF 8 - 75	8	14				26		
SSF10 - 75	10	16				26		
SSF12 - 75	12	20				30		
SSF16 - 75	16	26				34		
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	160	130	18	2	1.2
- 160			21					1.4
SSF 8 - 90	8	18	24	90	60	24	2	1.2
- 160			32					1.4
SSF10 - 90	10	22	28	90	60	30	2	1.3
- 160			36					1.5
SSF12 - 90	12	24	30	90	60	30	2	1.3
- 160			38					1.6
SSF16 - 90	16	28	34	90	60	34	2	1.3
- 160			42					1.8
SSF20 - 90	20	34	40	90	60	40	2	1.3
- 160			48					2.1
GBT50 - SSF 6 - 100	6	14	20	100	130	18	2	3.7
- 160			26					3.9
SSF 8 - 100	8	18	24	100	59	24	2	3.7
- 160			30					3.9
SSF10 - 100	10	22	28	100	59	30	2	3.8
- 160			34					4.1
SSF12 - 100	12	24	30	100	59	30	2	3.8
- 160			36					4.1
SSF16 - 100	16	28	34	100	59	34	2	3.8
- 160			40					4.1
SSF20 - 100	20	34	46	100	59	40	2	3.9
- 160			53					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.

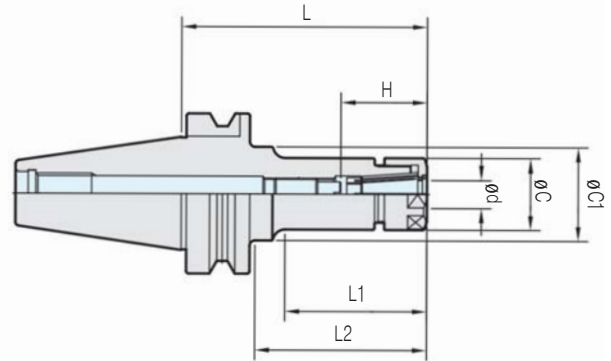
SSK COLLET CHUCK



Coolant-through hole
Clamping Range : $\varnothing 1.0 \sim \varnothing 25.4$

CODE No.

GBT50 **SSK10** **135**
Shank Chucking Dia 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

- 8° Taper 의 강력한 파지력
- 높은 정밀도와 빠른 가공에 적합
- 드릴, 센터드릴, 엔드밀, 텀, 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.	$\varnothing d$	$\varnothing C$	$\varnothing C1$	H		L	L1	L2	Collet	Weight (kg)
				Min	Max					
GBT30 - SSK 6 - 60	0.9~6.0	19.5	19.5	21	35	60	33	33	SC6	0.7
			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	65	65		1.0
						120	95	95		1.1
SSK13 - 60	2.75~13.0	33	33	31	50	60	35	35	SC13	1.0
						90	65	65		1.1
SSK16 - 60	2.75~16.0	40	40	45	60	60	37	37	SC16	1.1
						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
			32			90	51	60		1.1
						120	60	90		1.4
SSK10 - 60	1.75~10.0	27.5	27.5	30	50	60	32	32	SC10	1.1
			40			90	48	60		1.2
						120	73	90		1.4
			34.5			150	118	118		1.6
SSK13 - 60	2.75~13.0	33	33	31	65	60	28	28	SC13	1.2
						90	58	58		1.4
						120	88	88		1.6
SSK16 - 60	2.75~16.0	40	40	50	65	60	32	32	SC16	1.3
				40	67	90	58	58		1.5
				40	70	120	88	88		1.7
						150	118	118		1.9
SSK20 - 60	3.6~20.0	48.5	48.5	47	60	60	32	32	SC20	1.3
				47	80	90	60	60		1.6
						120	90	90		2.0
SSK25 - 75	15.6~25.4	55	55	40	60	75	46	46	SC25	1.5
				55	75	90	61	61		1.8
				55	85	120	91	91		2.0

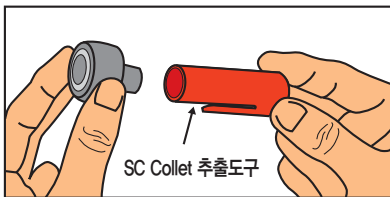
SSK COLLET CHUCK



Code No.	ød	øC	øC1	H		L	L1	L2	Collet	Weight (kg)
				Min	Max					
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	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			45			135	92	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			50			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			135	92	92		4.6
- 165			165			165	122	122		5.0
SSK25 - 105	15.6~25.4	55	55	50	85	105	62	62	SC25	5.2
- 135			135			135	92	92		5.4
- 165			165			165	122	122		5.6

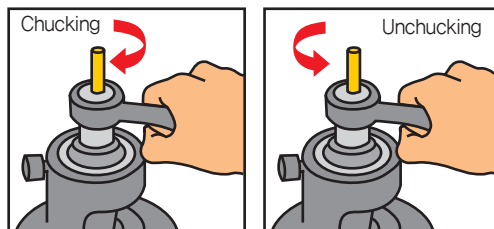
Spare Parts				
Type	Basic		Option	
	Nut	Adjust Screw	Spanner	Collet
SSK 6	SCN- 6 (HEXA)	BTD0825-C	SC 6-SP	SC 6-ø
SSK10	SCN-10 (HEXA)	BTD1225-C	SC10-SP	SC10-ø
SSK13	SCN-13	BTD1525-C	SC13-SP	SC13-ø
SSK16	SCN-16	BTD1830-C	SC16-SP	SC16-ø
SSK20	SCN-20	BTD2230-C	SC20-SP	SC20-ø
SSK25	SCN-25	BTD2838-C	SC25-SP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

- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. **P157**
- ▶ 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.
- ▶ SSK적 콜렛은 **P144~P145**
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트 및 홀더가 파손 될 수 있습니다.
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. **P157**
- ▶ 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. **P144 ~ P145**
- ▶ The nut or shank of chuck can be destroyed if you too strongly clamp nut and holder.
- ▶ Extra charge for high speed balance.



SSK NUT에 SC COLLET 체결시에는 전용 콜렛 추출도구를 사용하시길 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)

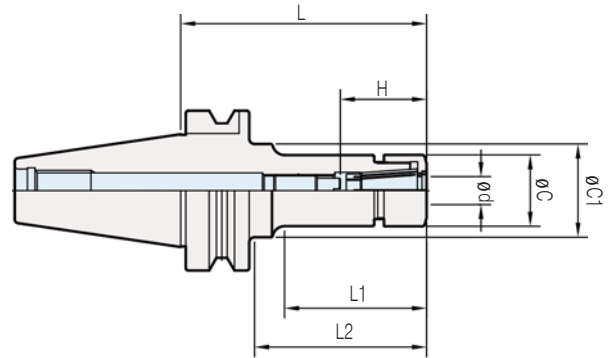
Coolant-through hole
Clamping Range : $\phi 1.0 \sim \phi 25.4$

CODE No.

GBT50 **GSK10** **105** **P**
Shank SC Collet Length High Speed



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 콜릿 사용을 권장
- Excellent Run-out Accuracy.
- Powerful clamping force of 8° taper.
- Circle style nut designed compactly
- PH spanner is orderd separately.
- 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		L	L1	L2	Collet	MAX rpm	Weight (kg)		
				Min	Max								
GBT30 - GSK 6- 60P	0.9~6.0	19.5	19.5	21	35	60	33	33	SC6P	40,000	0.7		
			32			90	56	65			0.7		
GSK10- 60P	1.75~10.0	27.5	27.5	30	50	60	35	35	SC10P	40,000	0.9		
						90	65	65			1.0		
						120	95	95			1.1		
GSK13- 60P	2.75~13.0	33	33	31	65	60	35	35	SC13P	30,000	1.0		
						90	65	65			1.1		
GSK16- 60P	2.75~16.0	40	40	45	65	60	37	37	SC16P	30,000	1.1		
						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		
			32			90	51	60			1.1		
						120	60	90			1.4		
GSK10- 60P	1.75~10.0	27.5	27.5	30	50	60	32	32	SC10P	25,000	1.1		
			40			90	48	60			1.2		
			40			120	73	90			1.4		
			34.5			150	118	118			1.6		
GSK13- 60P	2.75~13.0	33	33	31	65	60	28	28	SC13P	20,000	1.2		
						90	58	58			1.4		
						120	88	88			1.6		
GSK16- 60P	2.75~16.0	40	40	50	65	60	32	32	SC16P	20,000	1.3		
						40	67	90			58	58	1.5
						40	70	120			88	88	1.7
						40	70	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		
						47	80	90			60	60	1.6
						47	80	120			90	90	2.0
GSK25- 75P	15.6~25.4	55	55	40	60	75	46	46	SC25P	20,000	1.5		
						55	75	90			61	61	1.8
						55	85	120			91	91	2.0

HIGH SPEED GSK CHUCK(P CLASS)

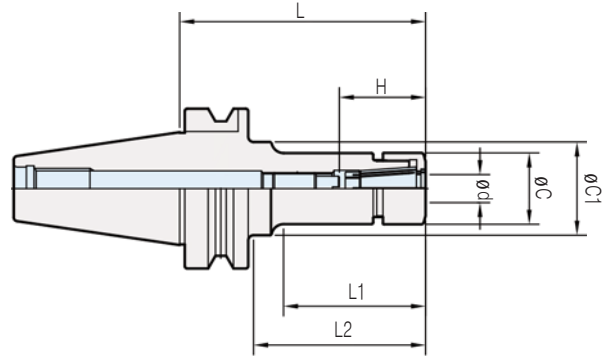
Coolant-through hole
Clamping Range : $\phi 1.0 \sim \phi 25.4$



CODE No.
GBT50 **GSK10** **105** **P**
 Shank SC Collet Length High Speed



MAX
40,000
 min⁻¹



Code No.	ød	øC	øC1	H		L	L1	L2	Collet	MAX rpm	Weight (kg)
				Min	Max						
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	60	114			4.2
GSK10 - 105P	1.75~10.0	27.5	27.5	30	50	105	57	57	SC10P	20,000	4.2
- 135P			32			70	92	4.4			
- 165P			36			75	114	4.6			
GSK13 - 105P	2.75~13.0	33	33	31	65	105	62	62	SC13P	20,000	4.5
- 135P			45			92	92	4.7			
- 165P			45			92	122	4.9			
GSK16 - 105P	2.75~16.0	40	40	40	70	105	62	62	SC16P	20,000	4.7
- 135P			50			92	92	4.9			
- 165P			50			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	92	4.6			
- 165P			165			122	122	5.0			
GSK25 - 105P	15.6~25.4	55	55	50	85	105	62	62	SC25P	15,000	5.2
- 135P			135			92	92	5.4			
- 165P			165			122	122	5.6			

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

- ▶ 너트, 조절나사 및 콜릿추출도구는 부속되어 있습니다. ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ 스패너는 별매입니다. **P157** ▶ Spanner is ordered separately. **P157**
- ▶ GSK척 콜릿은 **P144~P145** ▶ P CLASS SC COLLET for GSK CHUCK is referred. **P144 ~ P145**
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트 및 홀더가 파손 될 수 있습니다. ▶ It can be destoried nut or shank of chuck if you too strongly clamp nut and holder.

ER COLLET CHUCK

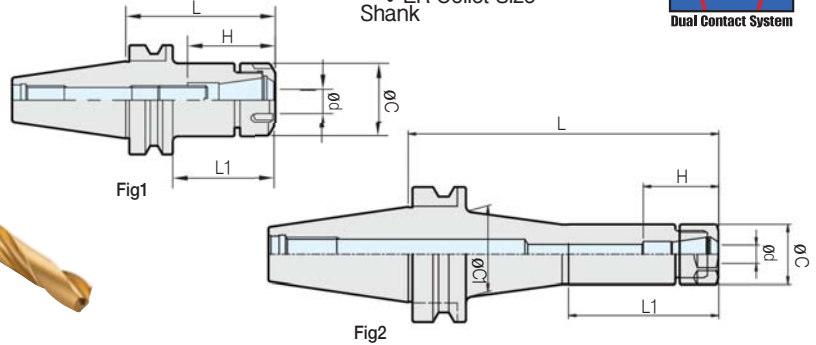
GBT SHANK

ER COLLET CHUCK



Coolant-through hole
Clamping Range : $\phi 0.5 \sim \phi 20.0$

CODE No.
GBT50 **ER16** **105**
 Shank ER Collet Size 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.

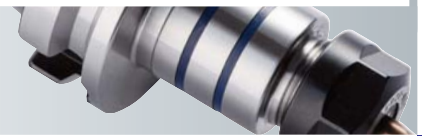
PRODUCT INFORMATION

- 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.	ϕd	ϕC	C1	H		L	L1	Collet	Fig	Weight (kg)	
				Min	Max						
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	1	0.5	
- 90						90	65			0.6	
ER20 - 60	1.0~13.0	35	-	25	48	60	35	ER20	1	0.5	
- 90						90	65			0.7	
ER25 - 60	1.0~16.0	42		34	54	60	35	ER25	1	0.6	
- 90						90	65			0.8	
ER32 - 60	2.0~20.0	50		40	60	60	35	ER32	1	0.5	
- 90						90	65			0.9	
GBT40 - ER11 - 60	0.5~7.0	19	-	19	34	60	28	ER11	1	1.0	
- 90			26			90	58		2	1.1	
- 120						120	65			1.2	
ER16 - 60	0.5~10.0	28	-	23	43	60	28	ER16	1	1.1	
- 90						90	58		1	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	1.3
- 120						120	90				1.5
ER25 - 60	1.0~16.0	42	-	34	54	60	30	ER25	1	1.2	
- 90						90	60			1	1.4
- 120						120	90				1.6
ER32 - 60	2.0~20.0	50	-	40	60	60	30	ER32	1	1.3	
- 90						90	60			1	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		1	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		1	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			1	4.9
- 165						165	122				5.0

- ▶ 내부급유 사용시에는 방수형콜릿이나 방수형 너트를 사용 해주세요.
- ▶ ER콜릿은 **P146**
- ▶ 스페너는 별매입니다. **P157**
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ ER척 스페어 파트는 **P56**
- ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER COLLET is referred. **P146**
- ▶ Spanner is ordered separately. **P157**
- ▶ Extra charge for high speed balance.
- ▶ The spare parts for ER CHCUK are referred. **P56**

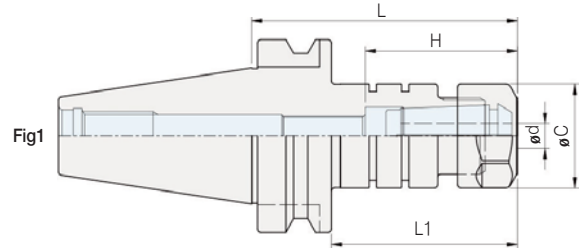
ENDMILL COLLET CHUCK



Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 20.0$



CODE No.
GBT50 **SE25** **105**
 Shank SE collet Size Length



PRODUCT INFORMATION

- SE척 전용 콜릿 사용
- ENDMILL 전용 COLLET CHUCK
- 4도 TAPER의 강력한 파지력
- 5 μ m at 4D (T.I.R) (Max G2.5 at 20,000 rpm)
- Please use dedicated collet for SE COLLET CHUCK
- SE COLLET CHUCK for dedicated ENDMILL
- Strong Clamping Power of 4 degree TAPER
- 5 μ m at 4D (T.I.R) (Max G2.5 at 20,000 rpm)

CODE NO.	ϕd	ϕC	H	L	L1	Collet	Weight (kg)	Fig
GBT40 - SE20 - 90	6,8,10,12	34	40,5	90	63	SE20	1	1
SE25 - 90	6,8,10,12,16	42	48			SE25	1.4	
SE32 - 90	6,8,10,12,16,20	50	58			SE32	1.5	
GBT50 - SE20 - 105	6,8,10,12	34	40,5	105	67	SE20	1.6	
- 135				135	97		2	
- 165				165	127		2.4	
SE25 - 105	6,8,10,12,16	42	48	105	67	SE25	4.4	
- 135				135	97		4.8	
- 165				165	127		4.9	
SE32 - 105	6,8,10,12,16,20	50	58	105	67	SE32	5.7	
- 135				135	97		6.5	
- 165				165	127		5.5	

Spare Parts				
Type	Option			
	NUT	Adjust Screw	Spanner	SE Collet
SE20				
SE25	UM/SE20(HEXA)	BTD1325-C	SE20-SP	SE20- ϕ
SE32	UX/SE25	BTD1830-C	SE25-SP	SE25- ϕ
	UX/SE32	BTD2230-C	SE32-SP	SE32- ϕ

- ▶ SE NUT와 ER NUT은 호환성이 있으나 SE너트로 별도 구매 바랍니다. (ER NUT를 SE CHUCK에 사용을 금지합니다.)
- ▶ 스패너는 별도 구매 입니다.
- ▶ SE콜릿은 P147
- ▶ Nut has compatible with SE NUT and ER NUT. But Please order separately when you need NUT. (Prohibit that SE CHUCK use ER NUT)
- ▶ Spanner is ordered separately
- ▶ SE COLLET is referred. P147

SYNCHRO TAPPING CHUCK

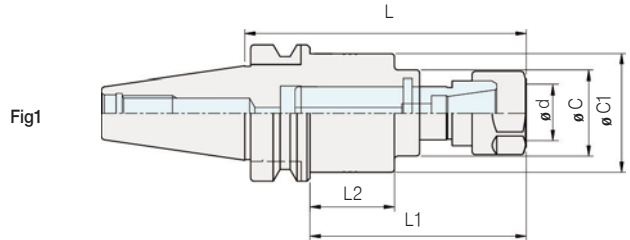
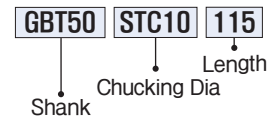
GBT SHANK

SYNCHRO TAPPING CHUCK

Coolant-through hole
Clamping Range : M2.0 ~ M22.0



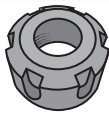


CODE No.



PRODUCT INFORMATION

- 고속 가공용 TAPPING CHUCK (Max. G6.3 at 10,000 rpm)
- 4D x 25 μ m(T.I.R)
- 특수 설계로 인한 TAP 파손 방지
- ER TAP COLLET 사용 권장 (STC3 은 일반 ER11 COLLET)
- TAPPING CHUCK for high speed. (Max. G6.3 at 10,000 rpm)
- 4D x 25 μ m(T.I.R)
- Special designed Tapping chuck for Tapping
- recommend ER TAP COLLET When you use Synchro tapping chuck (STC3 use ER11 collet)

CODE NO.	ϕd	ϕC	$\phi C1$	L	L1	L2	Collet	Weight (kg)	Fig
GBT30 - STC 3 - 80	M1~M3	36	25	80	58	22,5	ER11	0,6	1
STC 10 - 95	M2~M10	40	29	95	73	28,5	TER16	0,9	
GBT40 - STC 10 - 100	M2~M10	40	29	100	73	28,5	TER16	1,3	
STC 22 - 115	M4~M22	54	42	115	88	28	TER32	1,4	
GBT50 - STC 10 - 115	M2~M10	40	29	115	77	32,5	TER16	1,5	
STC 22 - 120	M4~M22	65	48	120	82	21	TER32	1,6	

Spare Parts			
Type	Option		
	NUT	Spanner	TER Collet
STC 3	 UM/ER11(HEXA)	 ER11-SP	 ER11- ϕ
STC 10	UM/ER16(HEXA)	ER16-SP	TER16- ϕ
STC 22	UX/ER32	ER32-SP	TER32- ϕ

- ▶ 스페너는 별매입니다.
- ▶ 동기화 기능(리지드)이 있는 장비에서 사용 가능합니다.
- ▶ ER콜릿은 P146
- ▶ TER콜릿은 P148

- ▶ Spanner is ordered separately.
- ▶ The machining Center has Syncro function (RIGID TAP) to use STC CHUCK
- ▶ ER COLLET is refered. P146
- ▶ TER COLLET is refered. P148

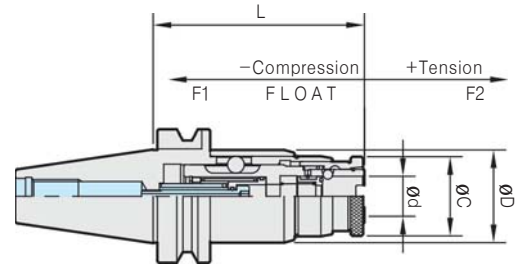
TAPPING CHUCK HOLDER

Tapping Range : M3 ~ M36



CODE No.

GBT50 **TCH12** **125**
 Shank MAX Tapping 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

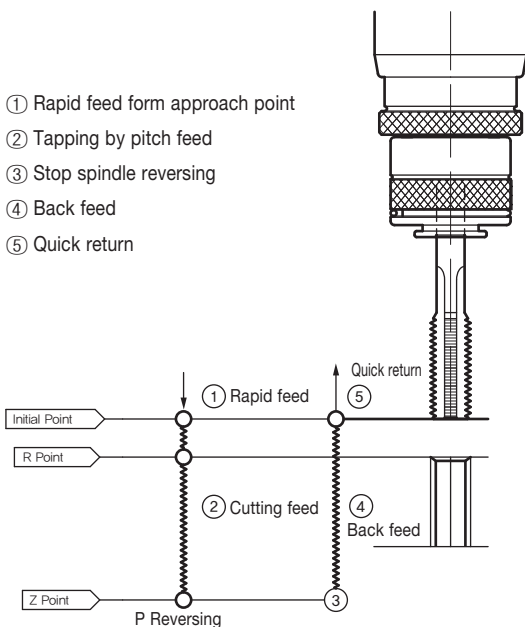
- 플로팅 타입으로 인장수축 장치 내장
- 공구교환이 빠르고 편리함
- 관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능
- The tapping chuck is equipped with tension system by floating type.
- Easy and quick tool exchange.
- It is possible for tapping operation of blind hole and through hole.

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
			125				1.9
TCH22 - 150	31	63	115	52	10	15	2.4
			177				3.0
GBT50 - TCH12 - 135	19	44	110	35	6	12	4.2
			140				4.8
			170				5.0
TCH22 - 165	31	63	132	52	10	15	5.7
			162				6.3
			192				6.9
TCH36 - 210	48	67	165	83	15	20	8.0
			195				8.5

▶ 적용 탭콜릿은 P149

▶ Private tap collets are referred. P149

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

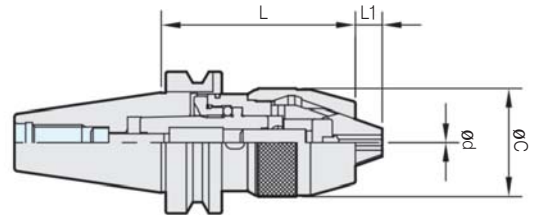


NC DRILL CHUCK

Clamping Range : $\phi 0.3 \sim \phi 13.0$



CODE No.
GBT40 **NPU13** **90**
 ↓ ↓ ↓
 Chucking Dia Length
 Shank



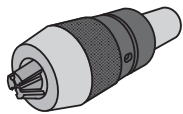
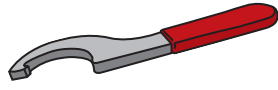
GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
 GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

머시닝 센터의 일반적인 드릴링 공구입니다. **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.

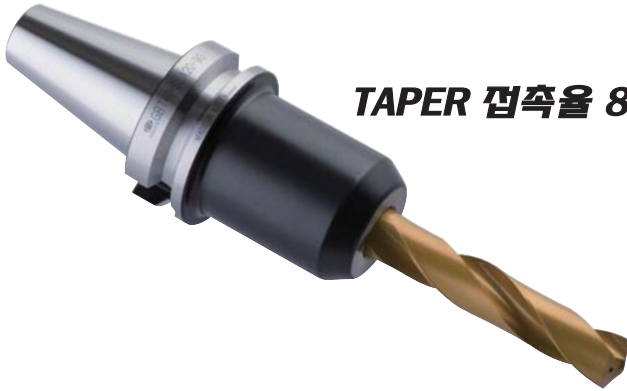
Code No.	ϕd	ϕC	L	L1	Weight (kg)
GBT30 - NPU 8 - 80	0.3~8.0	38	80	8.5	0.8
NPU 13 - 105	1.0~13.0	50	105	11.5	1.5
GBT40 - NPU 8 - 75	0.3~8.0	38	75	8.5	1.3
- 105			105		1.6
- 150			150		2.0
NPU13 - 90	1.0~13.0	50	90	11.5	1.7
- 130			130		2.0
- 175			175		2.4
GBT50 - NPU 8 - 85	0.3~8.0	38	85	8.5	3.8
- 120			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		
Type	Basic	
	Chuck	Spanner
		
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 length of cutting tools.
 NPU8 : more 20mm
 NPU13 : more 30mm
- ▶ Spanner is ordered separately.

SIDE LOCK HOLDER

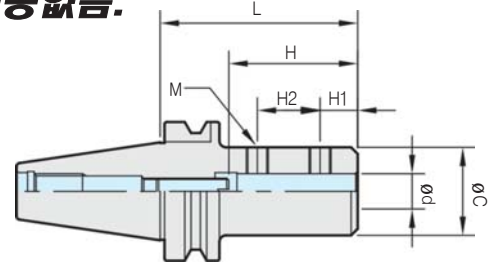
Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 42.0$



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



TAPER 접촉을 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.	ϕd	L	ϕC	H		H1	H2	M	Weight (kg)
				Min	Max				
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			M10	1.0
SLA16 - 75	16		45	50	65	16	20	M12	1.1
SLA20 - 75	20		48	55	70			M14	1.2
SLA25 - 85	25	85	58	65	80	20	24	M14	1.3
SLA32 - 105	32	105	58	65	80	20	22	M14	1.5
GBT40 - SLA 6 - 75	6	75	25	20	35	20	-	M 5	1.2
SLA 8 - 75	8		30	25	40			M 6	1.2
SLA10 - 90	10	90	35	35	45	14	15	M 8	1.3
SLA12 - 90	12		40	40	50			M10	1.4
SLA16 - 90	16		45	50	65	20	M12	1.5	
SLA20 - 90	20		50	55	70			M14	1.8
SLA25 - 90	25	52	55	70	25	25	M16	2.0	
SLA32 - 90	32	62	65	80				2.2	
SLA40 - 105	40	105	72	65	80	25	25	M16	2.5
SLA42 - 105	42		76	65	80				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	90	35	35	45	14	15	M 8	4.1
SLA12 - 90	12		40	40	50			M10	4.2
SLA16 - 90	16	105	45	50	65	20	20	M12	4.2
- 105									4.4
SLA20 - 105	20	135	50	60	75	20	M14	4.4	
- 135								4.6	
SLA25 - 105	25	105	52	60	75	20	M14	4.4	
- 135								4.7	
- 165	5.1								
SLA32 - 105	32	105	62	65	80	25	25	M16	4.8
- 135		135							5.4
- 165		165							6.2
SLA40 - 105	40	105	72	65	80	25	25	M16	5.2
- 135		135							5.5
SLA42 - 105	42	105	76	65	80	25	25	M16	5.8
- 135		135							6.0

▶ 사이드락홀더 스페어 파트는 P64 ▶ The spare parts for SIDE LOCK HOLDER are referred. P64

MOLD SIDE LOCK HOLDER

GBT SHANK

MOLD SIDE LOCK HOLDER

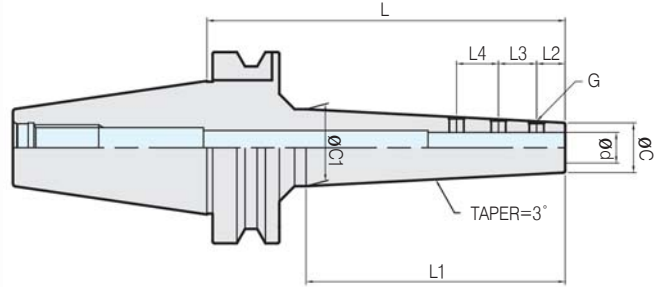
Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



CODE No.
GBT50 **MSL12** **150** **S**
 Shank Chucking Dia Length
 Gage line not included



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		1.4	
MSL 8 - 135	8	15	25				13.5		18		1.4	
MSL10 - 150	10	17	29	150	109	15	20	M6	15,000	1.6		
MSL12 - 150	12	22	34				16			16	M8	1.7
GBT50 - MSL12 - 150S	12	22	37				188			136	15	20
- 200S			42	238	186	12,000	5.0					
MSL16 - 150S	16	26	41	188	136	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	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

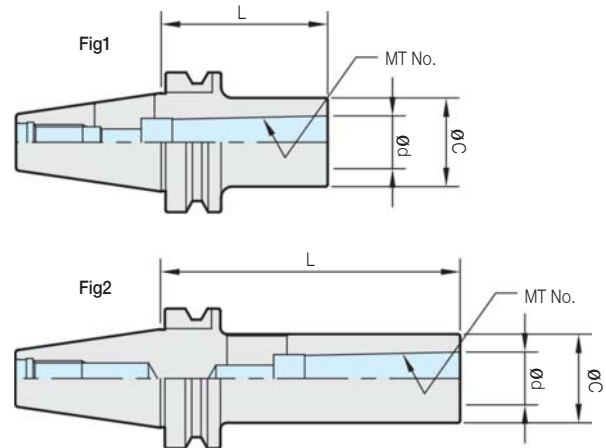
Item	Size	Length/pcs	chuck
MSL3 - BS	M3*0.5P	5mm / 2pcs.	MSL3
MSL4 - BS	M4*0.5P	5mm / 2pcs.	MSL4
MSL6 - BS	M6*0.75P	5, 6mm / 1pcs, Each	MSL6
MSL8 - BS		5, 6mm / 1pcs, Each	MSL8
MSL10 - BS	M8*0.75P	7mm / 1pcs, 8mm / 1pcs, 9mm / pcs.	MSL10
MSL12 - BS		7mm / 1pcs, 8mm / 1pcs, 9mm / pcs.	MSL12
MSL16 - BS		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**
 Shank | Morse Taper No. | Length



TAPER 접촉을 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
- 120	120	2		4,2		
- 180	180	2		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
- 210	210	2		7,2		

Drill Dia and Shank

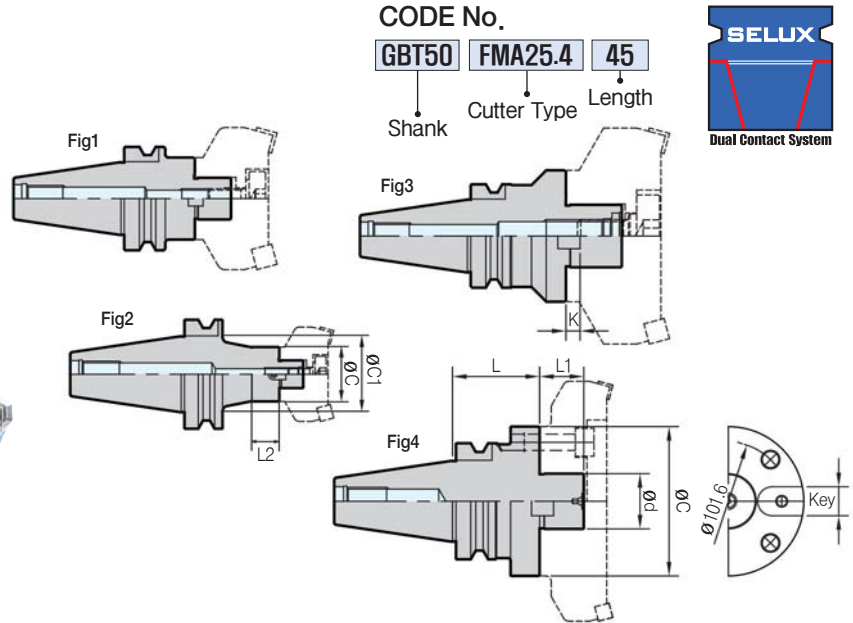
Shank		MT1	MT2	MT3	MT4	MT5
Drill dia	Min	3,0	14,5	23,5	32,0	51,0
	Max	14,0	23,0	31,5	50,0	76,0

FACE MILL ARBOR



GBT SHANK

FACE MILL ARBOR



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

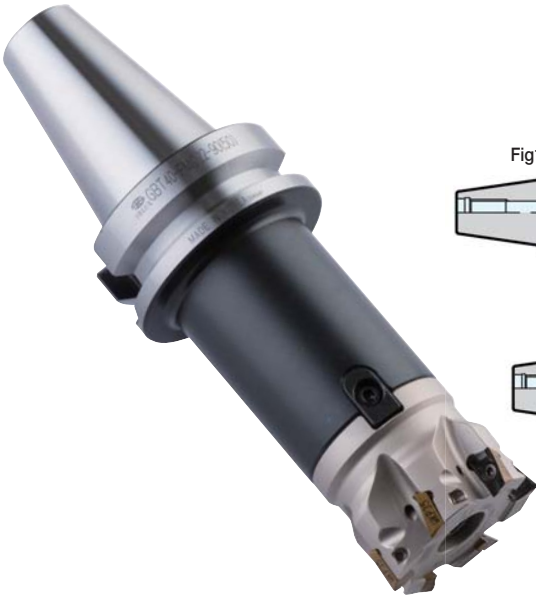
- JIS B4113 face milling용입니다. ■ For face-milling cutter conforming to JIS B4113.

Code No.	ϕd	Cutter Dia	L	ϕC	$\phi C1$	L1	L2	Key	K	Fig	Weight (kg)							
GBT30 - FMA25.4 - 45	25.4	80	45	50	-	22	-	K9.5 - S	5	3	0.8							
			60	60														
- FMA31.75 - 45	31.75	100				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	50														
- 90								K9.5 - L			3.0							
FMA31.75 - 45	31.75	100	45	60	-	30	-	K12.7 - S	7	1	2.0							
			75	60														
- 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									60	25	2	4.5			
			150									70	25	2	5.5			
FMA31.75 - 45	31.75	100	45	60	-	30	-	K12.7 - S	7	1	4.6							
			75									70	25	2	5.2			
			105									70				K12.7 - L	7	5.5
			150									70						
FMA38.1 - 45	38.1	125	45	80	-	34	-	K15.85 - S	9	1	4.3							
			75										K15.85 - L	9	5.0			
			105													5.5		
			150														8.5	
FMA50.8 - 45	50.8	160	45	100	-	36	-	K19 - S	10	1	4.8							
			75										K19 - S	10	6.8			
			105													7.8		
FMA47.625 - 75	47.625	200	75	128.5		38		K25.4	12.5	4	7.6							

▶ 페이스밀아바 스페어 파트는 P75

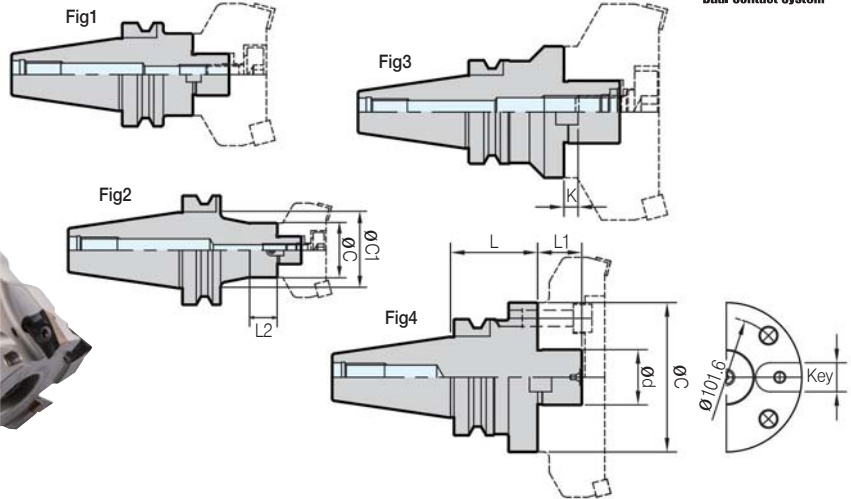
▶ The spare parts for FACE MILL ARBOR are referred. P75

FACE MILL ARBOR



CODE No.

GBT50 **FMC22** **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

- JIS B4113 face milling용입니다. ■ For face-milling cutter conforming to JIS B4113.
- (S)Type은 표준길이(+38mm) ■ 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
			90	45				K10-S	5.5		1.5
FMC22 - 45	22	50/63	45	60	-	20	-	K12-S	6	3	1.5
			90	80				K14-S	7		2.0
FMC27 - 45	27	63/80	45	80	-	22	-	K8-S	5	1	1.7
			90	45				K10-S	5.5		2.0
FMC32 - 45	32	100	45	38	-	16	-	K10-L	5.5	3	2.2
			90	45				K9.5-S	6		2.5
GBT40 - FMC16 - 45	16	40	45	38	-	16	-	K12-S	6	1	2.5
			90	45				K12-L	6		3.4
FMC22 - 45	22	50/63	45	60	-	20	-	K14-S	7	3	3.4
			90	80				K14-L	7		3.8
FMC25.4 - 60	25.4	63/80	60	70	-	20	-	K15.85-S	7	3	4.7
			90	60				K15.85-L	7		5.0
FMC27 - 60	27	63/80	60	60	-	20	-	K15.85-S	8	4	5.2
			90	60				K8-S	5.0		3.2
FMC32 - 60	32	100	60	80	-	22	-	K10-S	5.5	1	3.6
			90	80				K10-L	5.5		7.3
FMC38.1 - 60	38.1	100	60	85	-	22	-	K10-L	5.5	2	7.3
			90	85				K9.5-S	6		4.1
FMC40 - 60	40	125/160	60	90	-	26	-	K9.5-L	6	1	6.0
			90	90				K12-S	6		5.0
GBT50 - FMC16 - 60	16	40	60	38	-	16	-	K12-L	6	1	6.0
			105	45				K14-S	7		7.5
FMC22 - 105	22	50/63	105	45	-	18	-	K14-L	7	3	7.5
			150	58				48	63		25
FMC25.4 - 45	25.4	63/80	45	70	-	20	-	K15.85-L	7	3	9.8
			90	70				K15.85-S	8		6.2
FMC27 - 45	27	63/80	45	60	-	20	-	K15.85-L	7	3	5.8
			90	60				K15.85-S	8		7.0
FMC32 - 45	32	100	45	80	-	22	-	K15.85-L	7	3	6.0
			75	80				K15.85-S	8		6.2
FMC32 - 75	32	100	75	80	-	22	-	K15.85-L	7	3	6.8
			105	80				K15.85-S	8		7.0
FMC38.1 - 45	38.1	100	45	85	-	22	-	K15.85-L	7	3	6.0
			75	85				K15.85-S	8		6.2
FMC38.1 - 75	38.1	100	75	85	-	22	-	K15.85-L	7	3	6.8
			105	85				K15.85-S	8		7.0
FMC40 - 45	40	125/160	45	90	-	26	-	K15.85-L	7	3	6.2
			75	90				K15.85-S	8		6.8

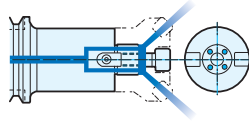
▶ 페이스밀러바 스페어 파트는 P75

▶ The spare parts for FACE MILL ARBOR are referred. P75

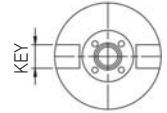
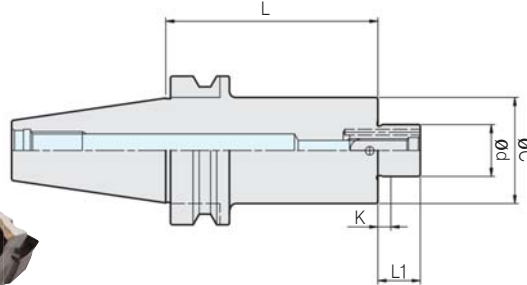
FACE MILL ARBOR

GBT SHANK

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

- 콜러트 �터 전용
- �터 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		90	18	5.5	K10-S	1.5	
- 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		90	18	5.5	K10-S	2.0	
- 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		90	20	6	K9,5-S	2.5	
- 90									
FMH31,75 - 60	31,75	76	60	30	7	K12,7-S	2.7		
- 90			90						
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						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

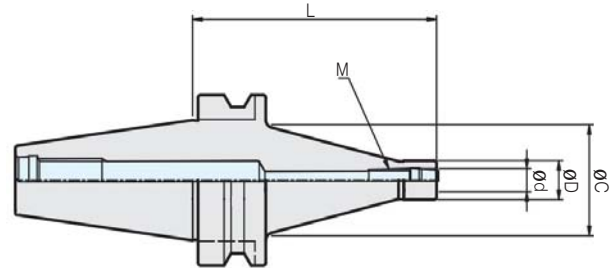
▶ FMH 클램프볼트 및 부품은 일반 FMA, FMC 아바와 호환합니다.
 ▶ 페이스밀아바 스페어 파트는 P75

▶ FMH clamp bolt and other parts is compatible with FACE MILL ARBOR FMA, FMC.
 ▶ The spare parts for FACE MILL ARBOR are referred. P75

PRO MILL ARBOR



CODE No.
GBT50 **M06** **135**
 Shank Cutter Type Length



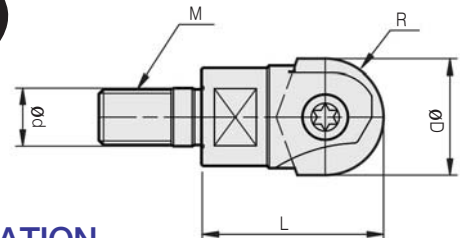
GBT Tooling System은 BT 2면구속 Spindle에서 2면구속으로 사용이 가능하며 일반 BT Spindle에서도 사용이 가능합니다.
 GBT Tooling System can be used as the double face contact with the double face contact spindle and also used with BT standard spindle.

PRODUCT INFORMATION

- 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				1,5	
M08 - 90	8,5	90	14,4		M8	1,2	
		120				1,5	
M10 - 90	10,5	90	18		M10	1,3	
		120				1,5	
		150				1,9	
M12 - 120	12,5	120	22,5		M12	1,5	
		150				1,9	
GBT50 - M06 - 135	6,5	135	10		65	M6	4,2
		165					4,9
M08 - 135	8,5	135	14,4			M8	4,2
		165		4,9			
M10 - 135	10,5	135	18	M10		4,2	
		165				4,9	
M12 - 135	12,5	135	22,5	M12		4,2	
		165				4,9	

PRO MILL CUTTER(Ball Type)



PRODUCT INFORMATION

- HITACHI 인서트 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				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 스패너는 별매입니다.

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

SIDE CUTTER ARBOR

GBT SHANK

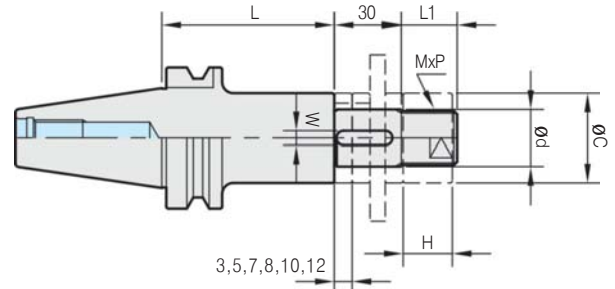
SIDE CUTTER ARBOR



CODE No.

GBT50 **SCA25.4** **90**

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 B4219,4109,4107 side cutter type 입니다. ■ For side cutters conforming to JIS B4219, 4019, and 4107.
- Key, collar 및 nut는 부착되어 있습니다. ■ 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						2.5
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	2.6
		120						2.9
GBT50 - SCA25.4 - 90	25.4	90	40	25	6.35	21	M24X1.5	4.7
		135						5.0
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	5.1
		135						5.7
SCA38.1 - 90	38.1	90	55	36	9.53	31	M36X1.5	5.8
		135						6.8

Spare Parts

Type	Parallel Key	Coller	Lock Nut
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

HYDRAULIC CHUCK



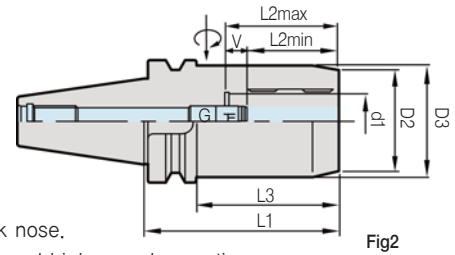
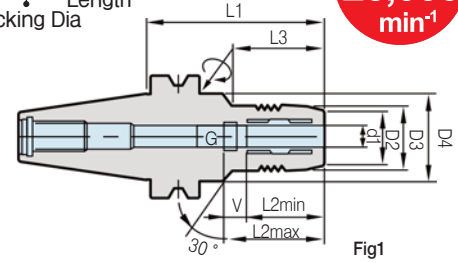
Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



CODE No.

BT50 **SHC20** **140**
Shank Chucking Dia Length

MAX
25,000
min⁻¹



PRODUCT INFORMATION

- 4D 선단에서 3 μ m이내의 흔들림정도
- 높은 정밀도와 고속가공에 최적화
- 유압방식의 강력한 파지력
- 렌치 하나로 쉽게 공구고정
- 3 μ m(T.I.R) Run-out at 4D away from shank nose.
- The optimal chck 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		75	32,5	42,5		38	M6X1,0		0,65			
SHC10 - 75	10	29	32		36	37,5	47,5		44			0,75			
SHC12 - 75	12	31	34		85	48	M8X1,0		0,80						
SHC14 - 85	14	33	36		50	90	42,5		52,5	48		M8X1,0	Fig2	0,80	
SHC16 - 90	16	35	38			90	42,5		52,5	48				0,90	
SHC18 - 90	18	38	41			90	42,5		52,5	48				0,90	
SHC20 - 90	20	40	42	-		-	-	-	48	0,90					
BT40 - SHC 6 - 65	6	25	28	50		65	27,5	37,5	10	23	M5X0,8			Fig1	1,0
- 90						90				23					1,3
- 140						140				23					1,9
SHC 8 - 65	8	27	30		65	27,5	37,5	39		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		M6X1,0	1,1				
- 90					90			23			1,35				
- 140					140			44			1,95				
SHC12 - 65	12	31	34		65	37,5	47,5	23		M6X1,0	1,1				
- 90					90			23			1,35				
- 140					140			44			1,96				
SHC14 - 65	14	33	36		65	37,5	47,5	23		M6X1,0	1,2				
- 90					90			23			1,35				
- 140					140			44			1,96				
SHC16 - 65	16	35	38	65	42,5	52,5	23	M8X1,0	1,15						
- 90				90			23		1,4						
- 140				140			48		1,96						
SHC18 - 75	18	38	41	75	42,5	52,5	30	M8X1,0	1,15						
- 90				90			30		1,45						
- 140				140			48		1,98						
SHC20 - 75	20	40	43	75	55	65	30	M16X1,0	1,2						
- 90				90			30		1,5						
- 140				140			48		2,0						
SHC25 - 100	25	53	57	100	51	61	73	M16X1,0	1,7						
- 135				108			2,3								
SHC32 - 105	32	58	63	100	55	65	-	M16X1,0	2,1						
- 135				-			2,6								

BT SHANK
HYDRAULIC CHUCK

HYDRAULIC CHUCK

Coolant-through hole
Clamping Range : $\varnothing 3.0 \sim \varnothing 32.0$

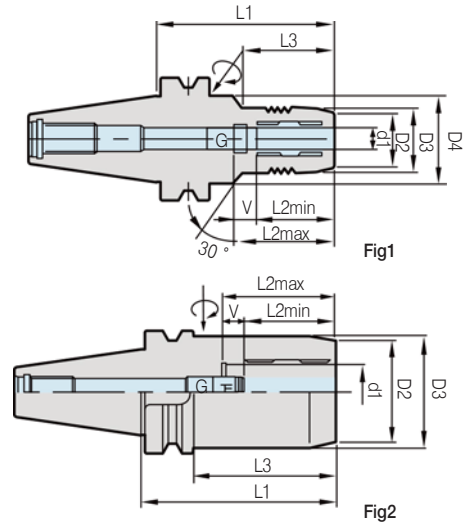


CODE No.

BT50	SHC20	140
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 Shank Chucking Dia Length

MAX
25,000
min⁻¹



BT SHANK HYDRAULIC CHUCK

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				44			4.7
SHC 8 - 90	8	27	30		90	37.5	47.5		32	M6X1.0		3.75
- 120					120				40			4.1
- 140					140				44			4.7
SHC10 - 90	10	29	32		90	42.5	42.5		32	M6X1.0		3.9
- 120					120				44			4.3
- 140					140				44			4.9
SHC12 - 90	12	31	34		90	47.5	47.5		32	M6X1.0		3.9
- 120					120				44			4.3
- 140					140				44			4.9
SHC14 - 90	14	33	36		90	52.5	52.5		32	M8X1.0		3.9
- 120					120				44			4.3
- 140					140				44			4.9
SHC16 - 90	16	35	38	90	61	61	32	M8X1.0	4.0			
- 120				120			48		4.4			
- 140				140			48		5.0			
SHC18 - 90	18	38	41	90	65	65	32	M16X1.0	4.0			
- 120				120			77		4.4			
- 140				140			77		5.0			
SHC20 - 90	20	40	43	90	65	65	32	M16X1.0	4.0			
- 120				120			112		4.4			
- 140				140			112		5.0			
SHC25 - 105	25	53	57	105	65	65	67	M16X1.0	4.4			
- 150				150			112		5.6			
SHC32 - 115	32	58	63	115	65	65	77	M16X1.0	4.7			
- 150				150			112		6.0			

- ▶ 유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
- ▶ 유압척 SHC12, SHC20, SHC32는 D또는 OD콜릿을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
- ▶ 유압척 전용 콜릿은 **P138~P139**
- ▶ 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. **P138~P139**
- ▶ We do not recommed to use hydraulic chuck for roughing operation.

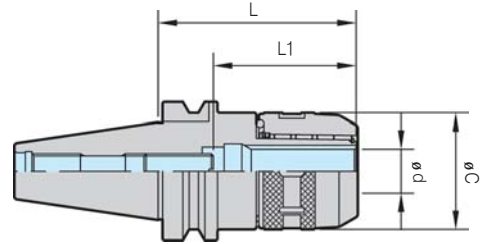
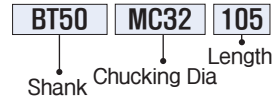
MILLING CHUCK



Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 42.0$

CODE No.



PRODUCT INFORMATION

- 높은 정밀도
- 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.
- 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.	ϕd	L	ϕC	L1	Collet	Weight (kg)
BT30 - MC 20 - 80	20	75	53	70	K20, NC20	1.0
MC 25 - 80	25	80	62		K25, NC25	1.2
MC 32 - 100	32	100	72		K32, NC32	1.4
BT40 - MC 20 - 80	20	80	53	82	K20, NC20	1.5
90		90				1.6
105		105				1.7
120		120				1.9
MC 25 - 80		80				62
90	90	2.2				
105	105	2.4				
120	120	2.7				
MC 32 - 85	85	72	80	K32, NC32	2.0	
105	105		90		2.4	
120	120		105		2.7	

Spare Parts		
Type	Option	
	Collet	Spanner
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 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶ 밀링척 전용 콜릿은 P140~P143
- ▶ 밀링척 스패너는 별도 판매품 입니다. P157
- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are refered. P140~P143
- ▶ Spanner is ordered separately. P157

BT SHANK
MILLING CHUCK

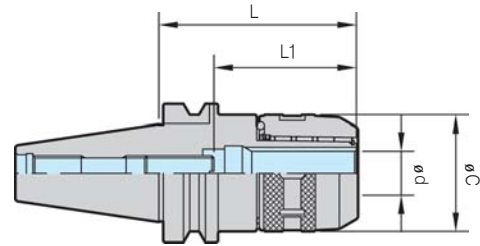
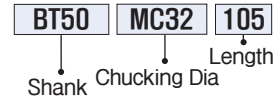
MILLING CHUCK



Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 42.0$

CODE No.



BT SHANK MILLING CHUCK

PRODUCT INFORMATION

- 높은 정밀도
- 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.
- 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.

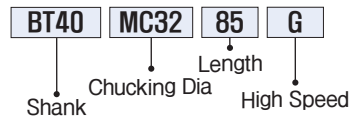
CODE NO.	ϕd	L	ϕC	L1	Collet	Weight (kg)
BT50 - MC 20 - 90	20	90	53	82	K20, NC20	4.1
105		105				4.4
120		120				4.6
135		135				4.8
165		165				5.3
200		200				6.0
250		250				7.5
300		300				9.5
MC 25 - 90	25	90	62	90	K25, NC25	4.5
105		105				4.8
120		120				5.0
135		135				5.2
165		165				5.6
200		200				6.5
250		250				8.0
300	300	10.0				
MC 32 - 95	32	95	74	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

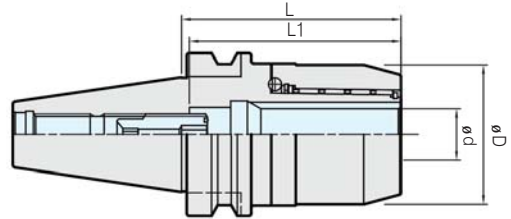
Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 32.0$

CODE No.



MAX
25,000
min⁻¹



PRODUCT INFORMATION

- 고속 가공에서 높은 정도
- 강력한 파지력
- 스패너는 GH 스패너 사용(별매)
- G6.3 max 25,000RPM
- 원형너트로 고속 절삭시 소음 감소
- Excellent Run-out Accuracy.
- Powerful clamping force.
- 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	20,000	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	15,000	4,7
- 135G		135		135			5,2

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

- ▶ 고속밀링척은 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다. ▶ High speed MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ 밀링척 전용 콜릿은 P140 ~ P143 ▶ K-COLLET is refered. P140~P143
- ▶ 고속밀링척 GH스패너는 별도 판매품 입니다. P157 ▶ GH SPANNER for high speed milling chuck is ordered separately. P157

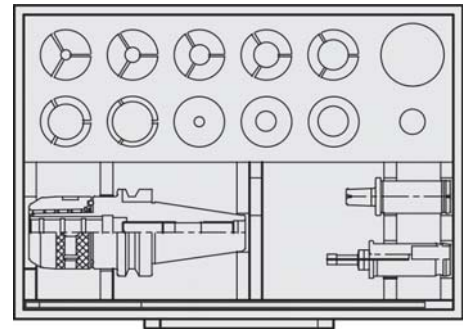
BT SHANK HIGH SPEED MILLING CHUCK

MILLING CHUCK SET

Coolant-through hole
Clamping Range : $\varnothing 3.0 \sim \varnothing 42.0$

CODE No.

BT40	MC32	85	SET
Shank	Chucking Dia	Length	SET



BT SHANK
MILLING CHUCK 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	K32-6,8,10,12,16,20,25	K32-MT1,2,3	K32-JT6	MC32-SP
BT50-MC32-105 SET	BT50-MC32-105	K32-6,8,10,12,16,20,25	K32-MT1,2,3	K32-JT6	MC32-SP
BT50-MC42-105 SET	BT50-MC42-105	K42-6,8,10,12,16,20,25,32	K42-MT1,2,3,4	K42-JT6	MC42-SP

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

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

SHRINK FIT HOLDER



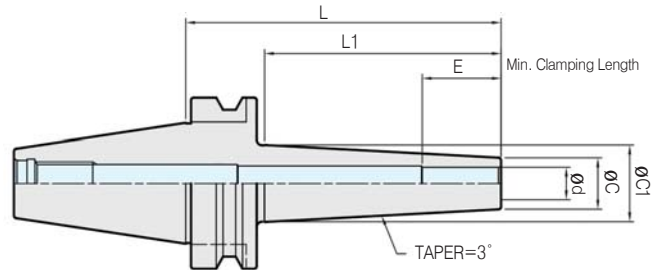
Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 12.0$

CODE No.



MAX
25,000
min⁻¹



PRODUCT INFORMATION

- 4D선단에서 3 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적, 슬림한 디자인으로 가공최적화
- 전제품 내부급유 (Coolant Through Hole)
- 3 μ m(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.	ϕd	ϕC	$\phi C1$	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 **P153**
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. **P153**
- ▶ 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 tolerance within H6.
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is referred. **P153**
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. **P153**
- ▶ 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 toolife.

BT SHANK SHRINK FIT HOLDER

SHRINK FIT HOLDER



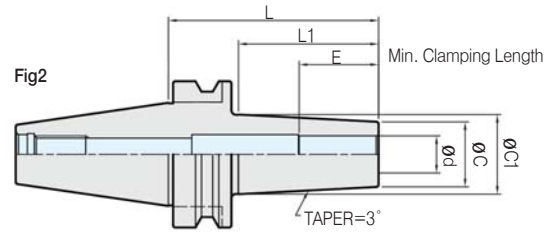
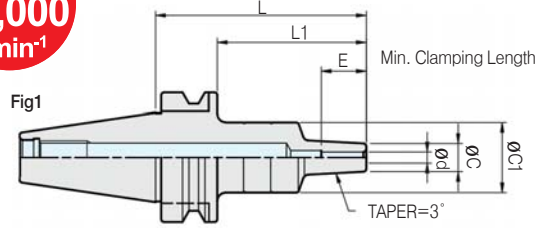
Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 20.0$

CODE No.

BT40 **SSF10** **160**
Shank Chucking Dia Length

MAX
25,000
min⁻¹



PRODUCT INFORMATION

- 4D선단에서 3 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적,슬림한 디자인으로 가공최적화
- 전제품 내부급유 (Coolant Through Hole)
- 3 μ m(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.

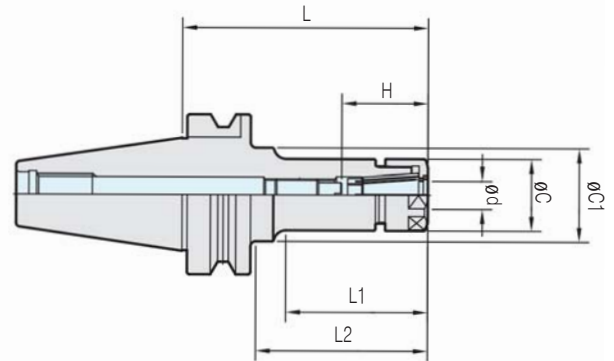
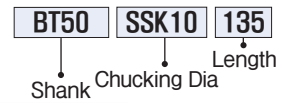
Code No.	ϕd	ϕC	$\phi C1$	L	L1	E	Fig	Weight (kg)
BT30 - SSF 3 - 75	3	7.5	25	75	53	12	1	0.5
SSF 4 - 75	4	10				16		0.5
SSF 6 - 75	6	12				24		0.5
SSF 8 - 75	8	14				26		0.5
SSF10 - 75	10	16				26		0.5
SSF12 - 75	12	20				30		0.5
SSF16 - 75	16	26				34		0.5
BT40 - SSF 3 - 90	3	7.5	26	90	37	9	1	1.0
SSF 4 - 90	4	10				12		1.0
SSF 6 - 90	6	14	20	160	130	18	2	1.2
- 160			21					1.4
SSF 8 - 90	8	18	24	90	60	24	2	1.2
- 160			32					160
SSF10 - 90	10	22	28	90	60	30	2	1.3
-160			36					160
SSF12 - 90	12	24	30	90	60	34	2	1.3
- 160			38					160
SSF16 - 90	16	28	34	90	60	34	2	1.3
- 160			42					160
SSF20 - 90	20	34	40	90	60	40	2	1.3
- 160			48					160
BT50 - SSF 6 - 100	6	14	20	100	130	18	2	3.7
- 160			26					160
SSF 8 - 100	8	18	24	100	59	24	2	3.7
- 160			30					160
SSF10 - 100	10	22	28	100	59	30	2	3.8
- 160			34					160
SSF12 - 100	12	24	30	100	59	34	2	3.8
- 160			36					160
SSF16 - 100	16	28	34	100	59	34	2	3.8
- 160			40					160
SSF20 - 100	20	34	46	100	59	40	2	3.9
-160			53					160

BT SHANK SHRINK FIT HOLDER

SSK COLLET CHUCK

Coolant-through hole
Clamping Range : $\phi 1.0 \sim \phi 25.4$

CODE No.



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.	ϕd	L	ϕC	$\phi C1$	H		L1	L2	Collet	Weight (kg)			
					Min	Max							
BT30 - SSK 6 - 60	0.9~6.0	60	19.5	19.5	21	35	33	33	SC6	0.7			
		90									32	56	65
SSK10 - 45	1.75~10.0	45	27.5	27.5	30	50	22	22	SC10	0.8			
		60									35	35	0.9
		90									65	65	1.0
		120									95	95	1.1
SSK13 - 60	2.75~13.0	60	33	33	31	50	35	35	SC13	1.0			
		90									65	65	1.1
		120									95	95	1.2
SSK16 - 60	2.75~16.0	60	40	40	45	60	37	37	SC16	1.1			
		90									67	67	1.2
		120									97	97	1.3
SSK20 - 75	3.6~20.0	75	48.5	48.5	65	70	53	53	SC20	1.0			
		90									65	75	67
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		32			51	60		1.1			
		120		25			60	90		1.4			
		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		40			48	60		1.2			
		120		34.5			73	90		1.4			
		150		39			118	148		1.6			
		180		39			148	148		1.6			
		180		39			148	148		1.6			
SSK13 - 60	2.75~13.0	60	33	33	31	65	28	28	SC13	1.2			
		90		58			58	1.4					
		120		88			88	1.6					
		150		88			118	1.8					
		180		40			148	148		1.8			
		180		40			148	148		1.8			
SSK16 - 60	2.75~16.0	60	40	40	40	70	50	65	SC16	1.3			
		90		40			67	58		58	1.5		
		120		40			88	88		1.7			
		150		40			118	118		1.9			
		180		40			148	148		2.0			
		180		40			148	148		2.0			
SSK20 - 60	3.6~20.0	60	48.5	48.5	47	80	47	60	SC20	1.3			
		90		47			60	60		1.6			
		120		47			80	90		90	2.0		
		150		47			118	118		2.4			
		180		47			148	148		2.9			
		180		47			148	148		2.9			

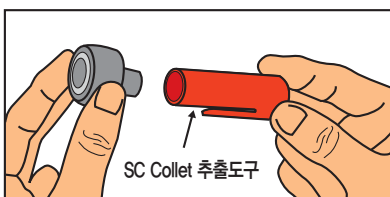
SSK COLLET CHUCK



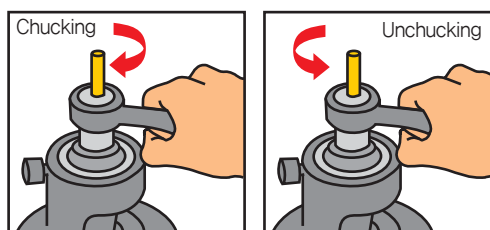
Code No.	ød	L	øC	øC1	H		L1	L2	Collet	Weight (kg)
					Min	Max				
BT40 - SSK25 - 75	16,0~25,4	75	55	55	40	60	46	46	SC25	1,5
					55	75	61	61		1,8
					55	85	91	91		2,0
					55	90	120	120		2,6
					55	90	150	150		3,1
BT50 - SSK 6 - 105	0,9~6,0	105	19,5	32	21	35	55	64	SC6	3,8
		135					92	4,0		
		165					114	4,2		
SSK10 - 105	1,75~10,0	105	27,5	27,5	30	50	57	57	SC10	4,2
		135		32			92	4,6		
		165		36			114	4,8		
		195		36			146	5,0		
		225		36			178	5,2		
SSK13 - 105	2,75~13,0	105	33	33	31	65	62	62	SC13	4,5
		135		45			92	4,7		
		165		45			122	4,9		
		195		45			152	5,2		
SSK16 - 105	2,75~16,0	105	40	40	40	70	62	62	SC16	4,7
		135		50			92	4,9		
		165		52			122	5,1		
		195		52			152	5,5		
SSK20 - 105	3,6~20,0	105	48,5	48,5	47	80	62	62	SC20	4,3
		135					92	4,7		
		165					122	5,0		
		195					152	5,7		
SSK25 - 105	15,6~25,4	105	55	55	50	85	62	62	SC25	5,2
		135					92	5,4		
		165					122	5,6		
		195					152	6,0		

Spare Parts				
Type	Basic		Option	
	Nut	Adjust Screw	Spanner	Collet
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 콜릿추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. **P157**
- ▶ 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 콜릿은 **P144~P145**
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트 및 바디가 파손 될 수 있습니다.
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. **P157**
- ▶ 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 **P144 ~ P145**
- ▶ 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 콜릿 추출도구를 사용하시기 바랍니다.
Please use private remover when you insert the SSK COLLET in SSK NUT



SSK Collet chuck은 Nut와 Body 체결시 40 Torque 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 Torque (※ **WARNING** SSK6, SSK10)

HIGH SPEED GSK CHUCK(P CLASS)

Coolant-through hole

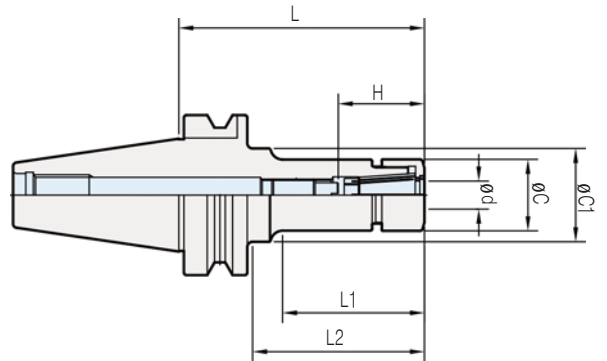
Clamping Range : $\phi 1.0 \sim \phi 25.4$

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 콜릿 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		L1	L2	Collet	MAX rpm	Weight (kg)
					Min	Max					
BT30 - GSK 6 - 60P	0.9~6.0	60	19.5	19.5	21	35	33	33	SC6P	40,000	0.7
		90		32			56	65			0.7
GSK10 - 60P	1.75~10.0	60	27.5	27.5	30	50	35	35	SC10P		0.9
		90					65	65			1.0
		120					95	95			1.1
GSK13 - 60P	2.75~13.0	60	33	33	31	50	35	35	SC13P		1.0
		90					65	65		1.1	
GSK16 - 60P	2.75~16.0	60	40	40	45	60	37	37	SC16P	30,000	1.1
		90					67	67			1.2
BT40 - GSK 6 - 60P	0.9~6.0	60	19.5	19.5	21	35	30	30	SC6P	25,000	1.0
		90		32			51	60			1.1
		120		60			90	1.4			
GSK10 - 60P	1.75~10.0	60	27.5	27.5	30	50	32	32	SC10P		1.1
		90		40			48	60			1.2
		120		73			90	1.4			
GSK13 - 60P	2.75~13.0	60	33	33	31	65	28	28	SC13P	1.6	
		90					58	58		1.2	
		120					88	88		1.4	
GSK16 - 60P	2.75~16.0	60	40	40	50	65	32	32	SC16P	1.3	
		90			40	67	58	58		1.5	
		120			40	70	88	88		1.7	
		150			118	118	1.9				
GSK20 - 60P	3.6~20.0	60	48.5	48.5	47	60	32	32	SC20P	20,000	1.3
		90			47	80	60	60			1.6
		120			90	90	2.0				
GSK25 - 75P	15.6~25.4	75	55	55	40	60	46	46	SC25P		1.5
		90			55	75	61	61			1.8
		120			55	85	91	91			2.0

HIGH SPEED GSK CHUCK(P CLASS)

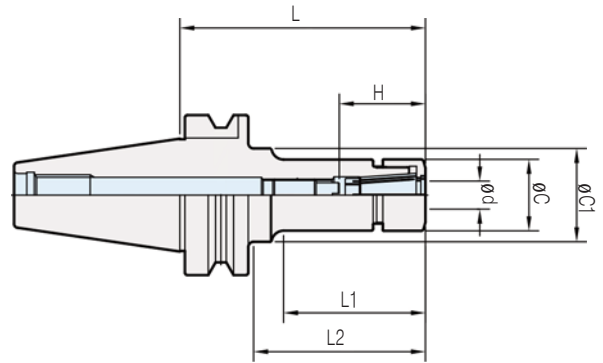
Coolant-through hole

Clamping Range : $\phi 1.0 \sim \phi 25.4$

CODE No.



MAX
40,000
min⁻¹



Code No.	ϕD	L	ϕC	$\phi C1$	H		L1	L2	Collet	MAX rpm	Weight (kg)
					Min	Max					
BT50 - GSK 6 - 105P	0.9~6.0	105	19.5	32	21	35	55	64	SC6P	20,000	3.8
- 135P		135									4.0
- 165P		165									4.2
GSK10 - 105P	1.75~10.0	105	27.5	27.5	30	50	57	57	SC10P	20,000	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	20,000	4.5
- 135P		135		45			92	122			4.7
- 165P		165		45			92	122			4.9
GSK16 - 105P	2.75~16.0	105	40	40	40	70	62	62	SC16P	20,000	4.7
- 135P		135		50			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		122			122	4.6			
- 165P		165		122			122	5.0			
GSK25 - 105P	15.6~25.4	105	55	55	50	85	62	62	SC25P	15,000	5.2
- 135P		135		92			92	5.4			
- 165P		165		122			122	5.6			

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

- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 스패너는 별매입니다. **P157**
- ▶ GSK척 콜렛은 **P144~P145**
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. **P157**
- ▶ P CLASS SC COLLET for GSK CHUCK is refered. **P144 ~ P145**
- ▶ It can be destoried nut or shank of chuck if you too strongly clamp nut and holder.

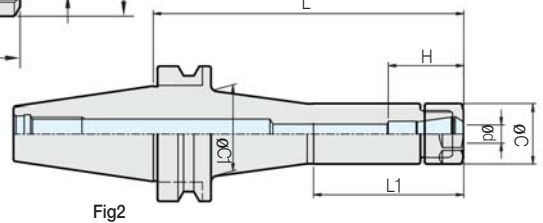
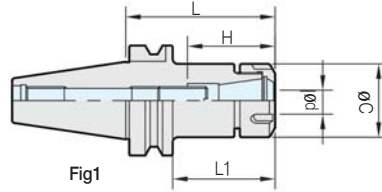
ER COLLET CHUCK

Coolant-through hole

Clamping Range : $\varnothing 0.5 \sim \varnothing 26.0$

CODE No.

BT50 **ER16** **105**
 Shank ER Collet Size Length



PRODUCT INFORMATION



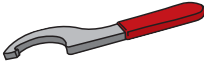

- 안정적인 정밀도와 파지력
- 쉽고빠른 공구교환
- 드릴, 엔드밀, 탭 다양한 사용범위
- Reliable accuracy and Powerful clamping force.
- Easy and quick tool exchange.
- ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	$\varnothing d$	L	L1	$\varnothing C$	C1	H		Collet	Fig	Weight (kg)
						Min	Max			
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	1	0.5
- 75		75	50							0.5
- 90		90	65							0.6
ER20 - 60	1.0~13.0	60	35	35	-	25	48	ER20	1	0.5
- 75		75	50							0.6
- 90		90	65							0.7
ER25 - 60	1.0~16.0	60	35	42	-	34	54	ER25	1	0.6
- 75		75	50							0.7
- 90		90	65							0.8
ER32 - 60	2.0~20.0	60	35	50	-	40	60	ER32	1	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		26				1.1	
- 120		120	65		26				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				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		46				1.8	
- 180		180	86		46				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	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	1	2.4
- 120		120	90		2.8					
- 150		150	120		3.2					

ER COLLET CHUCK

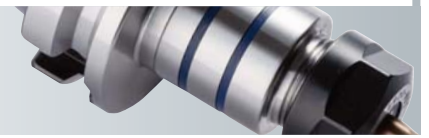


Code No.	ød	L	L1	øC	C1	H		Collet	Fig	Weight (kg)					
						Min	Max								
BT50 - ER11 - 75	0.5~7.0	75	34	19	-	19	34	ER11	1	3.6					
- 105		105	62							3.7					
- 135		135	61							3.8					
- 165		165								32	4.0				
										35					
ER16 - 75	0.5~10.0	75	34	28	-	28	43	ER16	1	3.8					
- 105		105	62							4.0					
- 135		135	70							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	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	4.4				
- 180		180								50	4.6				
- 200		200	162						-	-	-	-	-	2	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				
Type	Option			
	NUT	Adjust Screw	Spanner	ER Collet
				
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 방수형콜릿이나 방수형 너트를 사용 해주십시오. ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER콜릿은 P146 ▶ ER COLLET is referred. P16
- ▶ 스패너는 별매입니다. P157 ▶ Spanner is ordered separately. P157
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다. ▶ Extra charge for high speed balance.
- ▶ ER척 스페어 파트는 P56 ▶ The spare parts for ER CHCUK are referred. P56

ENDMILL COLLET CHUCK



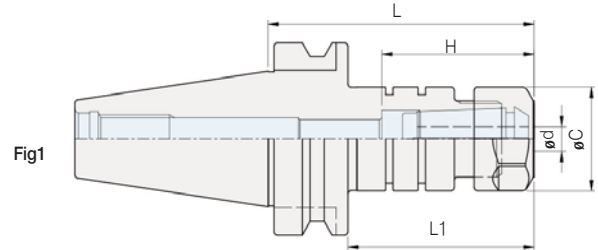
Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 20.0$

CODE No.

BT50	SE25	105
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 Shank SE collet Size Length



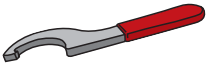

BT SHANK
ENDMILL COLLET CHUCK



PRODUCT INFORMATION

- SE척 전용 콜릿 사용
- ENDMILL 전용 COLLET CHUCK
- 4도 TAPER의 강력한 파지력
- 5 μ m at 4D (T.I.R) (Max G2.5 at 20,000 rpm)
- Please use dedicated collet for SE COLLET CHUCK
- SE COLLET CHUCK for dedicated ENDMILL
- Strong Clamping Power of 4 degree TAPER
- 5 μ m at 4D (T.I.R) (Max G2.5 at 20,000 rpm)

CODE NO.	ϕd	ϕC	H	L	L1	Collet	Weight (kg)	Fig
BT40 - SE20 - 90	6,8,10,12	34	40,5	90	63	SE20	1	1
SE25 - 90	6,8,10,12,16	42	48			SE25	1.4	
SE32 - 90	6,8,10,12,16,20	50	58			SE32	1.5	
BT50 - SE20 - 105	6,8,10,12	34	40,5	105	67	SE20	1.6	
- 135				135	97		2	
- 165				165	127		2.4	
SE25 - 105	6,8,10,12,16	42	48	105	67	SE25	4.4	
- 135				135	97		4.8	
- 165				165	127		4.9	
SE32 - 105	6,8,10,12,16,20	50	58	105	67	SE32	5.7	
- 135				135	97		6.5	
- 165				165	127		5.5	

Spare Parts				
Type	Option			
	NUT	Adjust Screw	Spanner	SE Collet
SE20				
SE20	UM/SE20(HEXA)	BTD1325-C	SE20-SP	SE20- ϕ
SE25	UX/SE25	BTD1830-C	SE25-SP	SE25- ϕ
SE32	UX/SE32	BTD2230-C	SE32-SP	SE32- ϕ

- ▶ SE NUT와 ER NUT은 호환성이 있으나 SEL너트로 별도 구매 바랍니다. (ER NUT를 SE CHUCK에 사용을 금지합니다.)
- ▶ 스패너는 별도 구매 입니다.
- ▶ SE콜릿은 P147
- ▶ Nut has compatible with SE NUT and ER NUT. But Please order separately when you need NUT. (Prohibit that SE CHUCK use ER NUT)
- ▶ Spanner is ordered separately
- ▶ SE COLLET is referred. P147

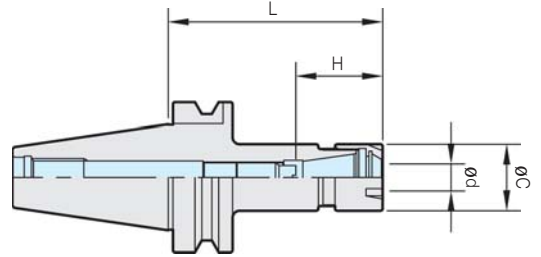
ER SLIM COLLET CHUCK



Coolant-through hole
Clamping Range : $\phi 0.5 \sim \phi 16.0$

CODE No.

BT50 **ER25** **M** **105**
Shank ER Collet Size Slim Length

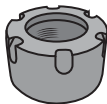

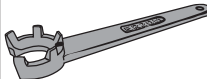



PRODUCT INFORMATION

- 좁고 깊은 곳에 적합
- 뛰어난 정밀도와 파지력
- 척킹 범위 $\phi 0.5\text{mm} \sim \phi 16.0\text{mm}$
- Narrow and depth place.
- High accuracy and Powerful clamping force.
- Chucking Dia $\phi 0.5\text{mm} \sim \phi 16.0\text{mm}$

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

Spare Parts

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

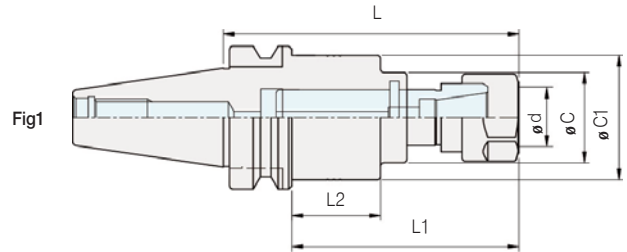
▶ ER콜릿은 P146
▶ 스페너는 별매입니다. P157

▶ ER COLLET is referred. P146
▶ Spanner is ordered separately. P157

SYNCHRO TAPPING CHUCK

Coolant-through hole
Clamping Range : M2.0 ~ M22.0


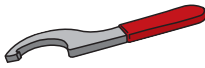

CODE No.
BT50 **STC10** **115**
 Shank Chucking Dia Length



PRODUCT INFORMATION

- 고속 가공용 TAPPING CHUCK (Max. G6.3 at 10,000 rpm)
- 4D x 25µm(T.I.R)
- 특수 설계로 인한 TAP 파손 방지
- ER TAP COLLET 사용 권장 (STC3 은 일반 ER11 COLLET)
- TAPPING CHUCK for high speed. (Max. G6.3 at 10,000 rpm)
- 4D x 25µm(T.I.R)
- Special designed Tapping chuck for Tapping
- recommend ER TAP COLLET When you use Synchro tapping chuck (STC3 use ER11 collet)

CODE NO.	ød	øC	øC1	L	L1	L2	Collet	Weight (kg)	Fig
BT30 - STC 3 - 80	M1~M3	36	25	80	58	22,5	ER11	0,6	1
STC 10 - 95	M2~M10	40	29	95	73	28,5	TER16	0,9	
BT40 - STC 10 - 100	M2~M10	40	29	100	73	28,5	TER16	1,3	
STC 22 - 115	M4~M22	54	42	115	88	28	TER32	1,4	
BT50 - STC 10 - 115	M2~M10	40	29	115	77	32,5	TER16	1,5	
STC 22 - 120	M4~M22	65	48	120	82	21	TER32	1,6	

Spare Parts			
Type	Option		
	NUT	Spanner	TER Collet
STC 3	 UM/ER11(HEXA)	 ER11-SP	 ER11-ø
STC 10	UM/ER16(HEXA)	ER16-SP	TER16-ø
STC 22	UX/ER32	ER32-SP	TER32-ø

- ▶ 스페너는 별매입니다.
- ▶ 동기화 가능(리지드)이 있는 장비에서 사용 가능합니다.
- ▶ ER콜릿은 P146
- ▶ TER콜릿은 P148

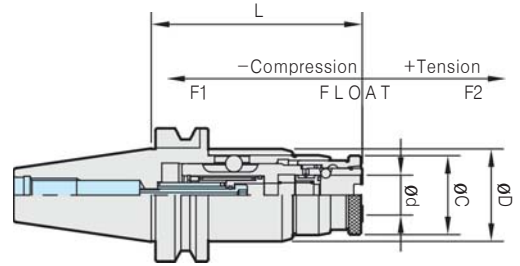
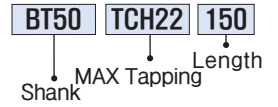
- ▶ Spanner is ordered separately.
- ▶ The machining Center has Synchro function (RIGID TAP) to use STC CHUCK
- ▶ ER COLLET is refered. P146
- ▶ TER COLLET is refered. P148

TAPPING CHUCK HOLDER



Tapping Range : M3 ~ M36

CODE No.



PRODUCT INFORMATION

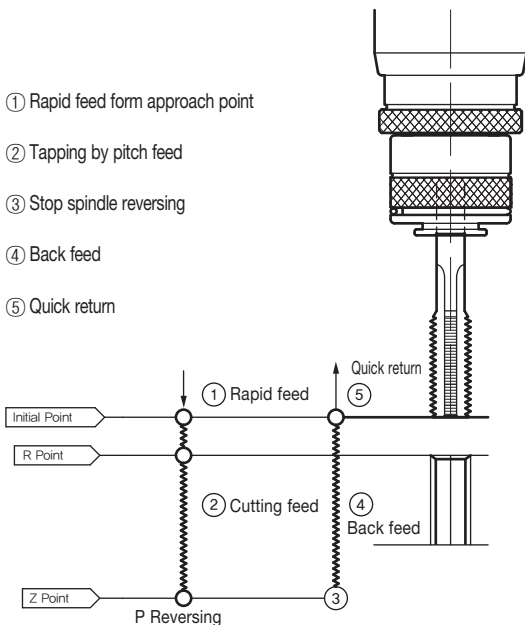
- 플로팅 타입으로 인장수축 장치 내장
- 공구교환이 빠르고 편리함
- 관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능
- The tapping chuck is equipped with tension system by floating type.
- Easy and quick tool exchange.
- It is possible for tapping operation of blind hole and through hole.

Code No.	ød	øD	L	øC	L1		Weight (kg)
					F1	F2	
BT30 - TCH12 - 125	19	44	100	35	6	12	1.2
BT40 - TCH12 - 120			95		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 탭콜릿은 P149

▶ Private tap collets are referred. P149

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



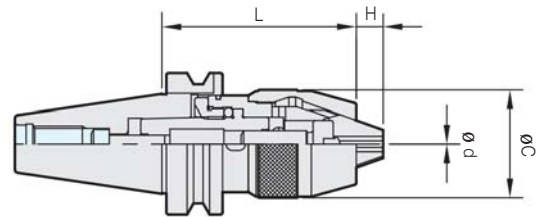
NC DRILL CHUCK

Clamping Range : $\varnothing 0.5 \sim \varnothing 13.0$

CODE No.

BT40 **NPU13** **90**

Shank Chucking Dia Length

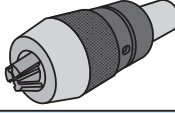
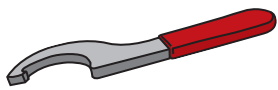


PRODUCT INFORMATION

머시닝 센터의 일반적인 드릴링 공구입니다. **General Drillings for Machining Centers**

- 척과 샤프트가 일체형 구조로 길이가 짧음 ■ Unified body of chuck and shank reduces the length of tool.
- 가공정도 향상과 우수한 내구성 ■ Improved operation accuracy and excellent rigidity
- 척의 탈락이 없고 주축 정지시 풀리지 않음 ■ The drillchuck is never detached from holder and is not released when the operation is stop.

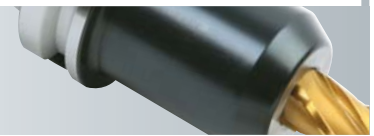
Code No.	$\varnothing d$	L	$\varnothing C$	H	Weight (kg)
BT30 - NPU 8 - 80	0,3~8,0	80	38	8,5	0,8
NPU 13 - 105	1,0~13,0	105	50	11,5	1,5
BT40 - NPU 8 - 75	0,3~8,0	75	38	8,5	1,3
- 105		105			1,6
- 150		150			2,0
NPU13 - 90	1,0~13,0	90	50	11,5	1,7
- 130		130			2,0
- 175		175			2,4
BT50 - NPU 8 - 85	0,3~8,0	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		
Type	Basic	
	Chuck	Spanner
		
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. **P157**

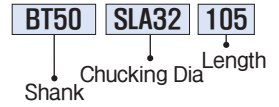
- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum length of cutting tools.
NPU8 : more 20mm
NPU13 : more 30mm
- ▶ Spanner is ordered separately. **P157**

SIDE LOCK HOLDER

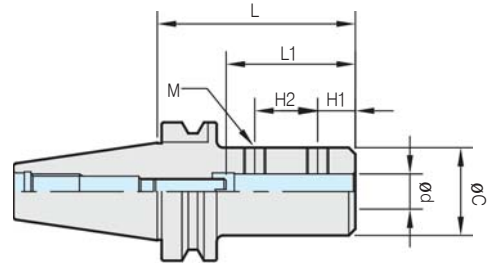


Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 42.0$

CODE No.



TAPER 접촉을 80% 이상 진동없음.



PRODUCT INFORMATION

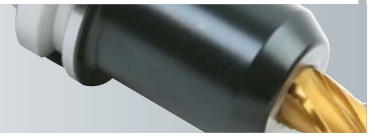
- 드릴, 엔드밀 기타(Small chuck, Special tool)를 사용 할 수 있습니다.
- SIDE LOCK HOLDER can use tool holder for drill, endmill, etc.

Code No.	ϕd	L	ϕC	H		H1	H2	M	Weight (kg)
				Min	Max				
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	58	65	80	20	24	M14	1.3
SLA32 - 105	32	105					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	M12	1.5	
SLA20 - 90	20		50	55	70	25		20	M14
SLA25 - 90	25	52	65				80	25	M16
SLA32 - 90	32	62		2.2					
SLA40 - 105	40	105	72	65	80	25	25	M16	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	14	16	M10	4.2
SLA16 - 90	16	105	45	50	65	20	20	M12	4.2
- 105									4.4
SLA20 - 105	20	135	50	60	75	25	20	M14	4.4
- 135									4.6
SLA25 - 105	25	105	52	60	75	25	25	M14	4.4
- 135		135							4.7
- 165		165							5.1
SLA32 - 105	32	105	62	65	80	25	25	M16	4.8
- 135		135							5.4
- 165		165							6.2
SLA40 - 105	40	105	72	65	80	25	25	M16	5.2
- 135		135							5.5
SLA42 - 105	42	105	76	65	80	25	25	M16	5.8
- 135		135							6.0

▶ 사이드락홀더 스페어 파트는 P64

▶ The spare parts for SIDE LOCK HOLDER are referred. P64

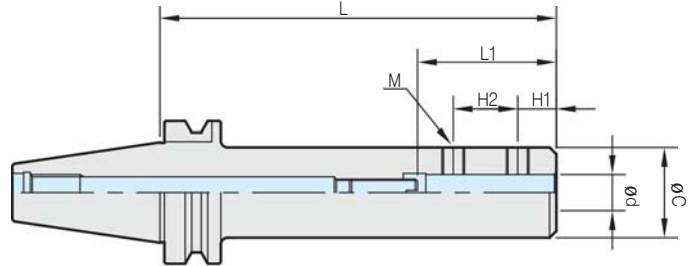
LONG TYPE SIDE LOCK HOLDER



Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 63.0$

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.

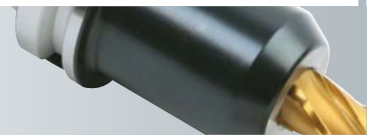
■ SIDE LOCK HOLDER can use tool holder for drill, endmill, etc.
○ Saddle pin type(DIN1835C) endmill type.

Code No.	ød	L	øC	H		H1	H2	M	Weight (kg)
				Min	Max				
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	20	M 6	4.4	
- 150		150						5.3	
- 200		200						5.8	
- 250		250						6.5	
- 300		300						7.3	
※ - 350		350						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
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 P64
▶ ※ 표시된 제품은 센터홀이 없습니다.

▶ The spare parts for SIDE LOCK HOLDER are referred. P64
▶ "※" indicate that it does not have centre through hole.

LONG TYPE SIDE LOCK HOLDER

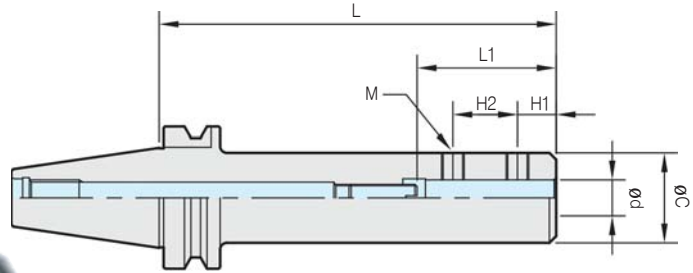


Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 63.0$

CODE No.

BT50	SLA32	200
------	-------	-----

 ↓ Shank ↓ Chucking Dia ↓ Length



BT SHANK
LONG TYPE SIDE LOCK HOLDER

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.

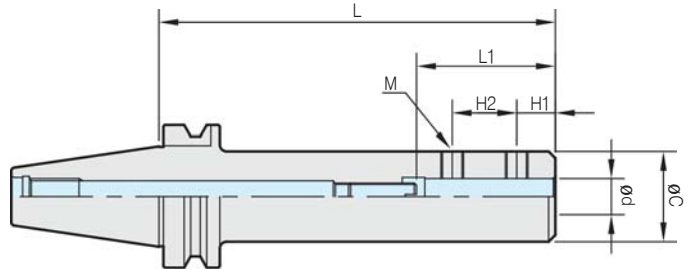
Code No.	ϕd	L	ϕC	H		H1	H2	M	Weight (kg)
				Min	Max				
BT50 - SLA25 - 150	25	150	52	60	75	25	20	M14	4.8
- 200		200							5.6
- 250		250							6.8
* - 300		300							7.9
* - 350		350							8.9
* - 400		400							10.8
SLA32 - 150	32	150	62	65	82	25	25	M16	5.6
- 200		200							6.8
- 250		250							7.9
* - 300		300							8.9
* - 350		350							11.0
* - 400		400							14.0
SLA40 - 150	40	150	76	65	82	25	25	M16	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	65	80	25	25	M16	6.0
- 200		200							7.2
- 250		250							8.9
* - 300		300							9.8
* - 350		350							13.0
* - 400		400							17.0
SLA50 - 105	50	105	88	50	82	25	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 **P64**
- ▶ * 표시된 제품은 센터홀이 없습니다.
- ▶ The spare parts for SIDE LOCK HOLDER are refered, **P64**
- ▶ " * " indicate that it does not have centre through hole.

LONG TYPE SIDE LOCK HOLDER

Coolant-through hole
Clamping Range : $\varnothing 6.0 \sim \varnothing 63.0$



CODE No.
BT50 **SLA32** **200**
 ↓ ↓ ↓
 Shank Chucking Dia Length



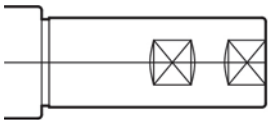
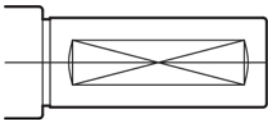
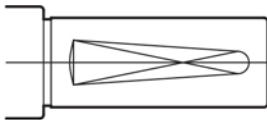

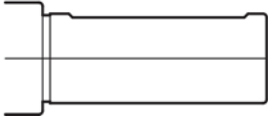
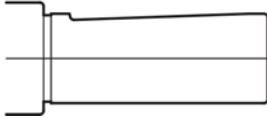
PRODUCT INFORMATION

■ 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		
Type	Basic	
	Set Screw	Adjust Screw
		
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	BT2020	BN1240-C
SLA50,8	BT2020	-

Purpose

Weldon Shank	Flst Shank	Whistel Notch Shank
		
		

BT SHANK LONG TYPE SIDE LOCK HOLDER

MOLD SIDE LOCK HOLDER

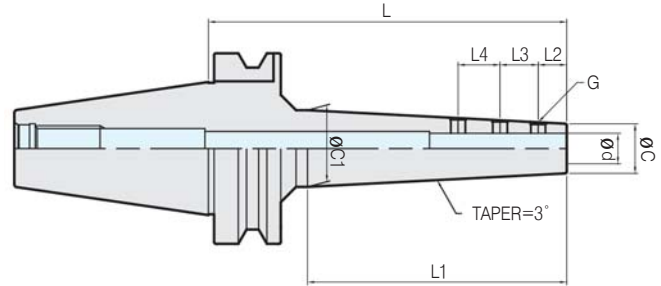
Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



CODE No.

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

MAX
20,000
min⁻¹



PRODUCT INFORMATION

- 쉽고 빠른 공구교환
- 높은 정밀도
- 슬림한 디자인으로 간섭부위 최소화
- Easy and quick tool exchange.
- Excellent accuracy.
- Minimize interference area by slim design.

Code No.	ϕd	ϕC	$\phi C1$	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		1.4
MSL 8 - 135	8	15	25				13.5		18		1.4
MSL10 - 150	10	17	29	150	109	15	20	M6	15,000	1.6	
MSL12 - 150	12	22	34				16			16	M8
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	15	20	22	M8	15,000	4.6
- 200S			46	238	186					12,000	5.1
- 250S			51	288	236					10,000	5.9
MSL20 - 150S			45	188	136					15,000	4.7
- 200S	20	30	50	238	186	15	20	22	M8	12,000	5.3
- 250S			55	288	236					10,000	6.0
MSL25 - 150S			50	188	136					15,000	4.8
- 200S	25	35	55	238	186	15	20	22	M10	12,000	5.4
- 250S			60	288	236					10,000	6.2
MSL32 - 150S			55	188	136					15,000	5.0
- 200S	32	42	60	238	186	15	20	22	M10	12,000	5.6
- 250S			65	288	236					10,000	6.4

- ▶ MSL홀더 볼트는 SELUX 전용 볼트를 사용하시기 바랍니다.
- ▶ 육각렌치는 별도 판매입니다.
- ▶ 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

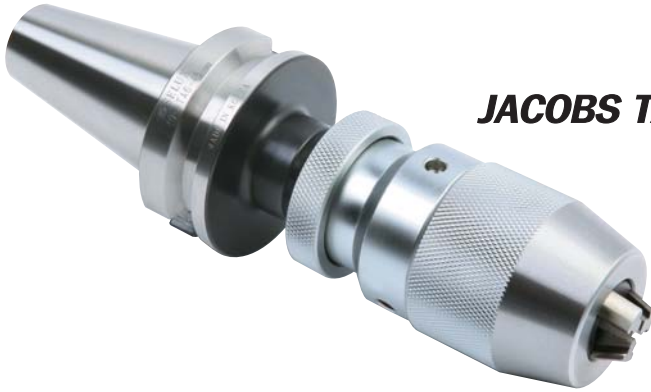
Item	Size	Length/pcs	chuck
MSL3 - BS	M3*0.5P	5mm / 2pcs.	MSL3
MSL4 - BS	M4*0.5P	5mm / 2pcs.	MSL4
MSL6 - BS	M6*0.75P	5, 6mm / 1pcs. Each	MSL6
MSL8 - BS		5, 6mm / 1pcs. Each	MSL8
MSL10 - BS	M8*0.75P	7mm / 1pcs, 8mm / 1pcs, 9mm / pcs.	MSL10
MSL12 - BS		7mm / 1pcs, 8mm / 1pcs, 9mm / pcs.	MSL12
MSL16 - BS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

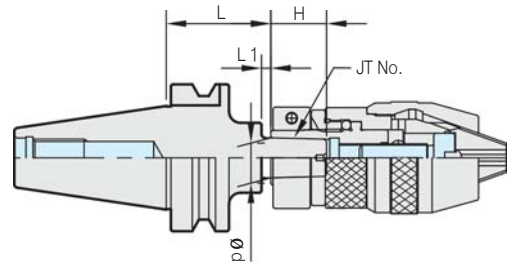
CODE No.

BT50 **JTA6** **45**

↓ Jacobs No. Length
Shank



JACOBS TAPER 접촉을 80% 이상 진동없음.



PRODUCT INFORMATION

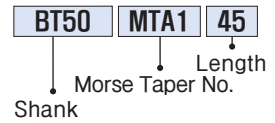
- Drill chuck은 포함되어 있지 않습니다. ■ Drill chuck is not included.

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

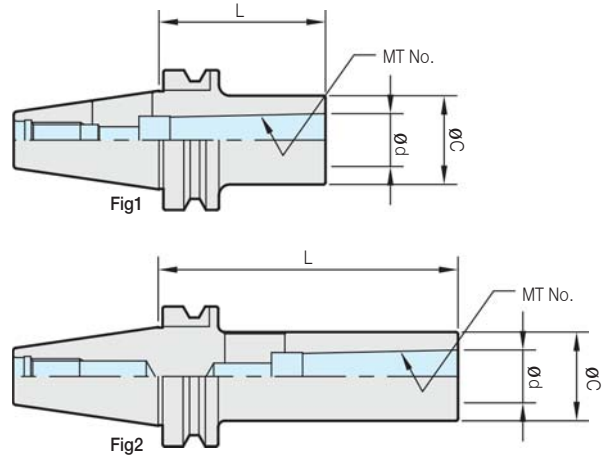
MORSE TAPER HOLDER

■ for Morse taper shank with tang.

CODE No.



TAPER 접촉을 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
- 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.

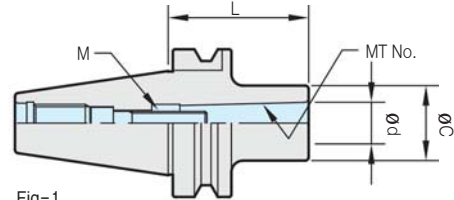
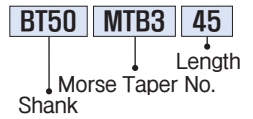


Fig-1

Draw BOLT Type

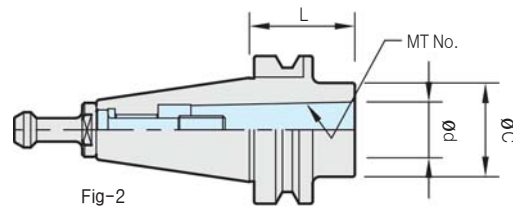


Fig-2

Pull - Stud Draw BOLT Type(별매)

PRODUCT INFORMATION

- Fig 1의 경우 Draw Bolt가 포함되어 있습니다.
- Draw-in Bolt is supplied with Fig 1 type arbor.
- Fig 2의 경우 전용 pull stud bolt가 필요합니다.
- for Fig2, it is necessary for special pull stud bolt as exclusive use.

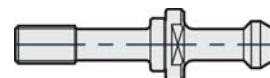
Code No.	ød	MT No.	L	øC	M	Fig	Weight (kg)
BT30 - MTB1 - 45	12,065	1	45	25	M 6	1	0,8
MTB2 - 60	17,780	2	60	32	M10	2	0,8
MTB3 - 80	23,825	3	80	40	M12	2	1,0
BT40 - MTB1 - 45	12,065	1	45	25	M 6	1	1,0
MTB2 - 45	17,780	2	45	32	M10	1	1,1
MTB3 - 45	23,825	3	45	40	M12	1	1,1
MTB4 - 85	31,267	4	85	50	M16	2	1,3
BT50 - MTB1 - 45	12,065	1	45	25	M 6	1	3,9
MTB2 - 45	17,780	2	45	32	M10	1	3,9
MTB3 - 60	23,825	3	60	40	M12	1	3,9
MTB4 - 70	31,267	4	70	50	M16	1	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.

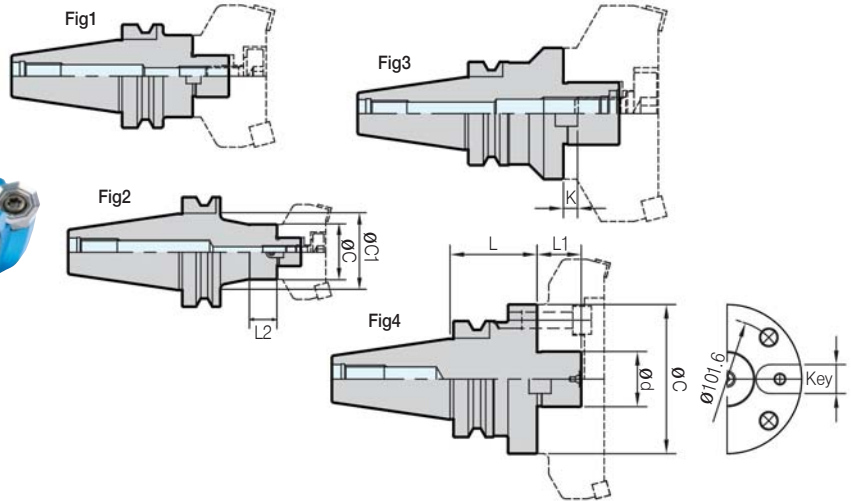
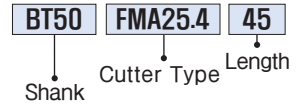
PSB Code No.	MTB2	MTB3	MTB4	MTB5
BT30 - MPS - 16	MPS - 16-2	MPS - 16-3		
- 17	MPS - 17-2	MPS - 17-3		
BT40 - MPS - 1		MPS - 1-3	MPS - 1-4	
- 2		MPS - 2-3	MPS - 2-4	
- 806		MPS - 806-3	MPS - 806-4	
- G51		MPS - G51-3	MPS - G51-3	
BT50 - MPS - 5				MPS- 5-5
- 6				MPS- 6-5
- 0				MPS- 0-5



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.



BT SHANK
FACE MILL ARBOR

PRODUCT INFORMATION

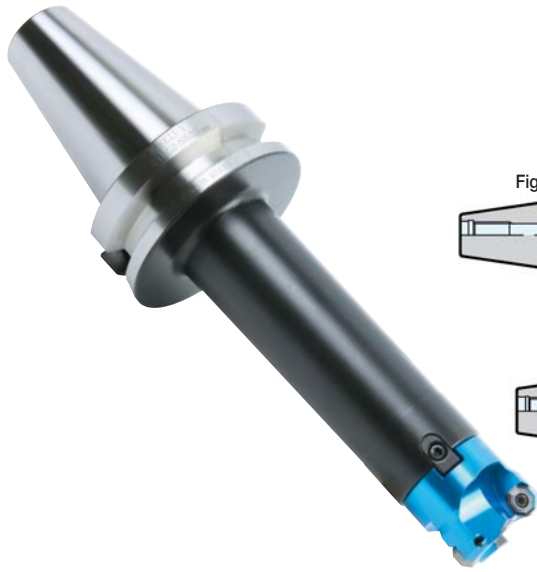
- JIS B4113 face milling용 입니다.
- For face-milling cutter conforming to JIS B4113.

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			7	3,0		
FMA31,75 - 45	31,75	100	45	60		30		K12,7 - S	7	1	2,0			
- 75			75					K12,7 - S			7	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	60	22	25	K9,5 - S	5	1	3,8			
- 90			90					70			K9,5 - L	7	2	4,5
-150			150									7	2	5,5
FMA31,75 - 45	31,75	100	45	60	-	30	-	K12,7 - S	7	1	4,6			
- 75			75									7	5,2	
-105			105					70		K12,7 - L	7	2	5,5	
-150			150								7	2	7,0	
FMA38,1 - 45	38,1	125	45	80	-	34	-	K15,85 - S	9	1	4,3			
- 75			75									9	5,0	
-105			105									9	5,5	
-150			150									9	8,5	
FMA50,8 - 45	50,8	160	45	100	-	36	-	K19 - S	10	1	4,8			
- 75			75									10	6,8	
-105			105									10	7,8	
FMA47,625 - 75	47,625	200	75	128,5		38		K25,4	12,5	4	7,6			

▶ 페이스밀아바 스페어 파트는 P75

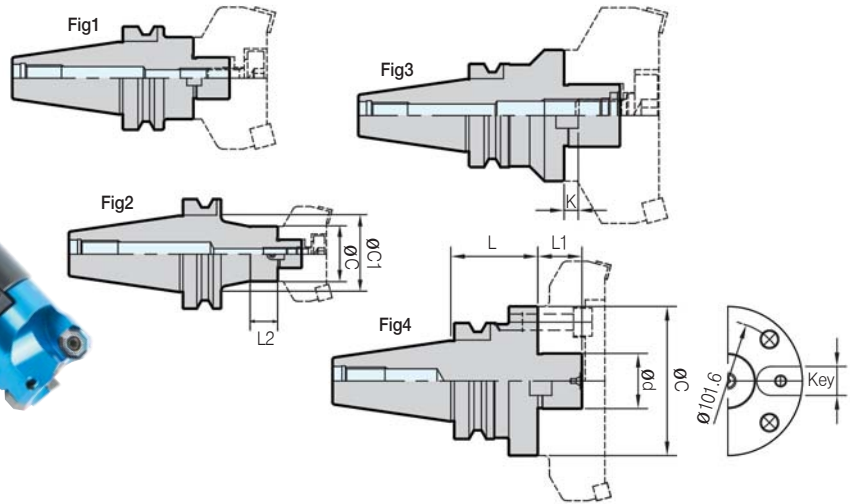
▶ The spare parts for FACE MILL ARBOR are refered. P75

LONG TYPE FACE MILL ARBOR



CODE No.

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



PRODUCT INFORMATION

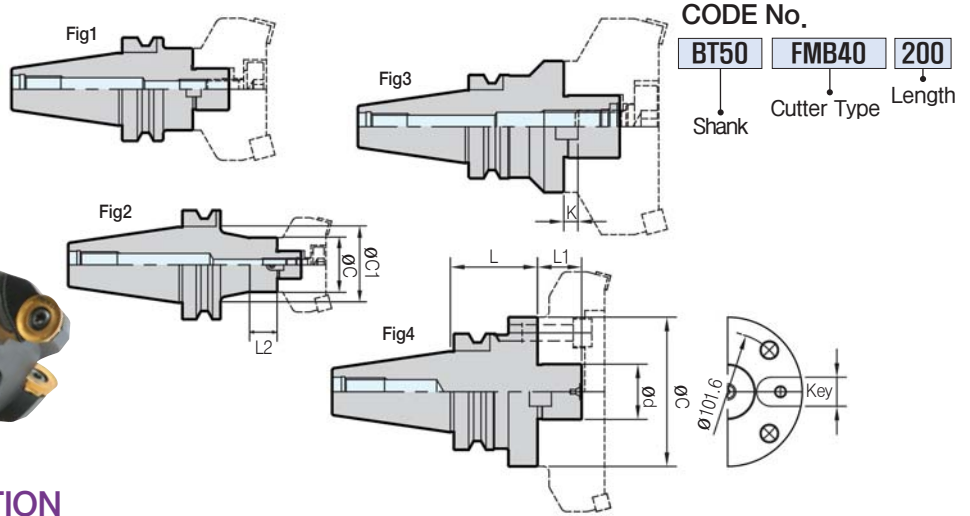
- JIS B4113 face milling용 입니다.
- (S)Type은 표준길이(+38mm)
- For face-milling cutter conforming to JIS B4113.
- S type is extended by 38mm compare to standard type.

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		74						10,3
			300		75						11,8
			350		79						13,5
			400								15,8
BT50-FMA31,75 - 200	31,75	100	200	60	70	30	25	K12,7-L	7	2	9,7
			250								11,6
			300								13,4
			350								15,7
			400								18,4
			188	75	-	-	K12,7-L	7	1	9,4	
			238							10,8	
			288							13,0	
			338							15,3	
			388							18,5	
438	21,5										
BT50-FMA38,1 - 200	38,1	125	200	80	-	34	-	K15,85-L	9	1	14,5
			250								17,5
			300								20,5
			350								23,5
			400								26,6
BT50-FMA50,8 - 150	50,8	160	150	100	-	36	-	K19-L	10	1	8,7
			200								11,5
			250								14,5
			300								18,5
			350								25,5
			400								28,9
BT50-FMA47,625 - 105	47,625	200	105	128,5	-	38	-	K25,4	12,5	4	8,9
			150								12,5
			200								15,8
			250								20,5
			300								26,5

▶ 페이스밀아바 스페어 파트는 P75

▶ The spare parts for FACE MILL ARBOR are referred. P75

FACE MILL ARBOR



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	26	K15.85-S	9	3	3.6
BT40-FMB27 - 60	27	80	60	80		K12-L	6		3.6
- 90			90	80	4.8				
BT40-FMB40 - 60	40	100	60	85	26	K15.85-S	8.5	1	3.8
BT50-FMB25.4 - 45	25.4	80	45	80		26	K9.5-L	5	1
- 90			90		5.8				
-150			150		8.0				
BT50-FMB38.1 - 45	38.1	100	45	85	26	K15.85-S	9	4	4.6
- 75			75			6.0			
-105			105			8.8			
BT50-FMB38.1F - 75	38.1	160	75	110	26	K12-S	6	4	5.0
BT50-FMB27 - 45	27	80	45	80		K12-L			6
- 90			90	80	5.8				
-150			150	80	9.2				
BT50-FMB40 - 45	40	100	45	85	26	K15.85-S	8.5	1	4.6
- 75			75						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						110
-105	105	8.9							
-150	150	11.8							
-200	200	14.9							
-250	250	18.2							
BT50-FMB60 - 75	60	200	75	25	K25.4	12.5	4	7.9	
-105			105					9.8	
-150			150					12.5	
-200			200					15.8	
-250			250					20.0	

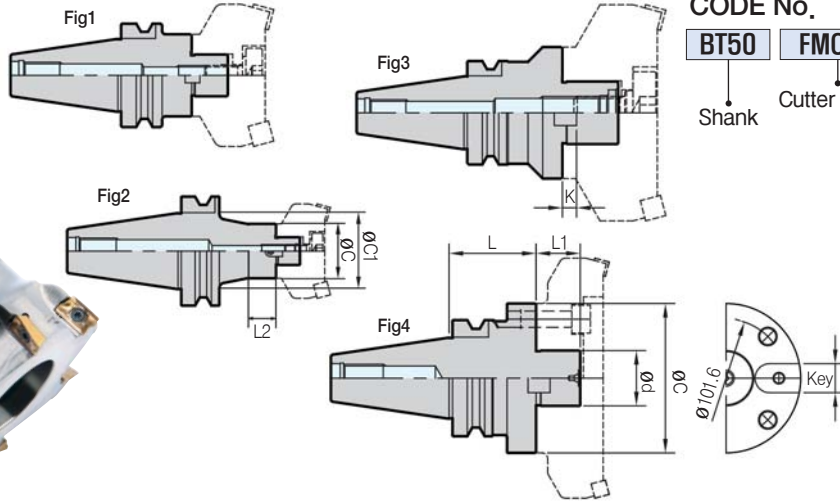
▶ 페이스밀아바 스페어 파트는 P75

▶ The spare parts for FACE MILL ARBOR are referred. P75

FACE MILL ARBOR

CODE No.

BT50 **FMC22** **105**
 Shank Cutter Type Length



PRODUCT INFORMATION

- JIS B4113 face milling용입니다.
- (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	45	-	18	-	K10-S	5.5		1.5	
- 90	22	50/63	90	45	-	18	-	K10-S	5.5	1	1.5	
FMC27 - 45	27	63/80	45	60	-	20	-	K12-S	6	3	1.5	
FMC32 - 45	32	100	45	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	45	-	18	-	K10-S	5.5		2.0	
- 90	22	50/63	90	45	-	18	-	K10-L	5.5	1	2.2	
FMC25.4 - 60	25.4	63/80	60	70	-	20	-	K9.5-S	6	3	2.5	
- 90	90		70	-	K9.5-L			2.7				
FMC27 - 60	27		60	60	-			K12-S		1	2.5	
- 90	27	90	60	-	K12-L	3.4						
FMC32 - 60	32	100	60	80	-	22	-	K14-S	7	3	3.4	
- 90			90	80	-			K14-L			3.8	
FMC38.1 - 60			60	85	-			K15.85-S			3	4.7
- 90	90	85	-	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	60	45	-	18	-	K10-S	5.5		1	3.6
- 105			105	45	-			K10-L		5.5	5.5	
- 150(50)			150	58	63	-	25	-	K10-L	5.5	2	7.3
- 150(63)	150	58	63	-	25	-	K10-L	5.5	2	7.3		
FMC25.4 - 45	25.4	63/80	45	70	-	20	-	K9.5-S	6	1	4.1	
- 90			90	70	-			K9.5-L			6.0	
- 150			150	70	-			K9.5-L			7.9	
FMC27 - 45	27	63/80	45	60	-	20	-	K12-S	6		5.0	
- 90			90	60	-			K12-L			6.0	
- 150(63)			150	68	-			K12-L			7.5	
- 150(80)	150	68	-	K12-L	7.5							
FMC32 - 45	32	100	45	80	-	22	-	K14-S	7		1	5.0
- 75			75	80	-			K14-L				6.0
- 105			105	80	-			K14-L				6.8
- 150			150	80	-			K14-L		9.8		
FMC38.1 - 45			38.1	100	45			85		-		22
- 75	75	85			-	K15.85-L	6.0					
- 105	105	85			-	K15.85-L	7.0					
FMC40 - 45	40	125/160	45	90	-	26	-	K15.85-S	8	4		6.2
- 75			75	90	-			K15.85-L				6.8

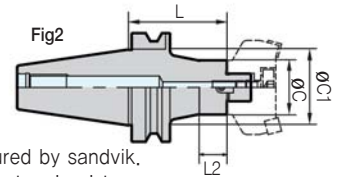
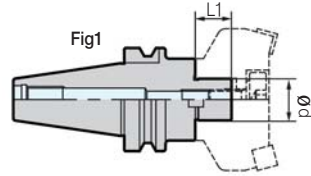
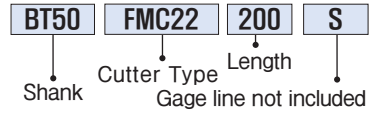
▶ 페이스밀아바 스페어 파트는 P75

▶ The spare parts for FACE MILL ARBOR are referred. P75

LONG TYPE FACE MILL ARBOR



CODE No.



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.

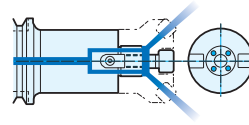
Code No.	ød	Cutter Dia	L	øC	C1	L1	L2	Key	K	Fig	Weight (kg)										
BT50-FMC22- 100S(ø50)	22	50	138	47	50	18	25	K10-L	5.5	2	8.0										
- 150S(ø50)			188								8.7										
- 200S(ø50)			238								10.3										
- 250S(ø50)			288								11.8										
- 300S(ø50)			338								13.5										
- 350S(ø50)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

▶ 페이스밀아바 스페어 파트는 P75

▶ The spare parts for FACE MILL ARBOR are referred. P75

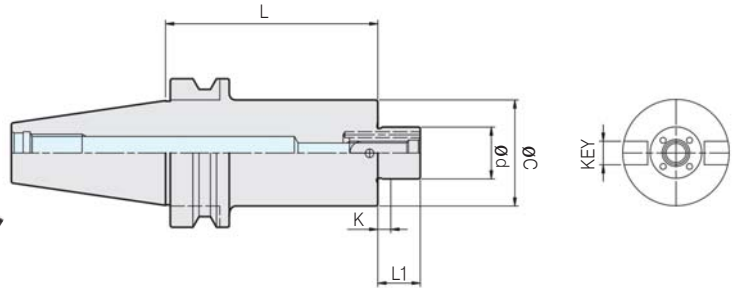
FACE MILL ARBOR

BT SHANK
FACE MILL ARBOR



CODE No.

BT50 **FMH22** **105**
Shank Cutter Type Length



PRODUCT INFORMATION

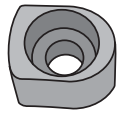
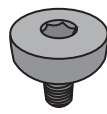


- 콜러트 �터 전용
- Only use coolant cutter.
- �터 가공성 향상 공구사용시간 증가
- Improve tool life and cutting operation

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
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
BT50 - FMH22 - 60	22	45	60	18	5.5	K10-S	3.6		
- 105			105						5.5
- 150			150						7.3
FMH27 - 90	27	60	90	20	6	K12-L	6.0		
- 150			150						
FMH32 - 90	32	80	90	22	7	K14-L	6.5		
- 150			150						
FMH25.4 - 90	25.4	70	90	20	6	K9.5-L	6.0		
- 150			150						
FMH31.75 - 90	31.75	76	90	30	7	K12.7-L	6.2		
- 150			150						
FMH38.1 - 90	38.1	85	90	34	9	K15.85-L	7.0		
- 150			150						

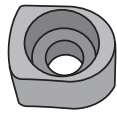
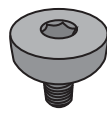


- ▶ FMH 클램프볼트 및 부품은 일반 FMA, FMC 아바와 호환합니다.
- ▶ FMH clamp bolt and other parts is compatible with FACE MILL ARBOR FMA, FMC.
- ▶ 페이스밀아바 스페어 파트는 P75
- ▶ The spare parts for FACE MILL ARBOR are referred. P75

FACE MILL ARBOR SPARE PARTS

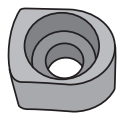
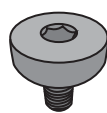


FMA Type

Type	Spare Parts			
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
				
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

Type	Spare Parts			
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
				
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

Type	SpareParts			
	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
				
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)

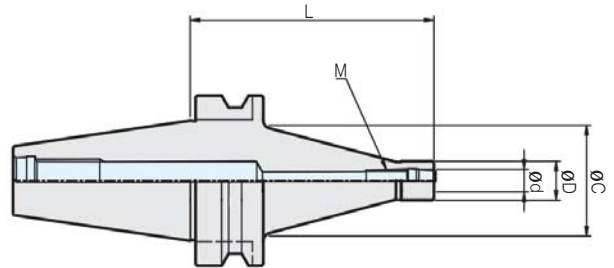
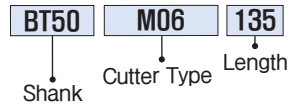
▶스페어 파트 주문시에는 반드시 품명의 정확한 확인이 필요합니다.
▶Key 주문시에는 제품상세표에서 LONG/SHORT Key를 확인해주시시오.

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

PRO MILL ARBOR



CODE No.

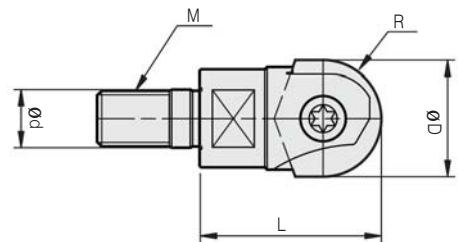


PRODUCT INFORMATION

- 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	
- 165		165			2.2	
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 인서트 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	35	10.5	M10	ZPFG160, ZCFW160	TNS-5844	
R10M1035	10	20				ZPFG200, ZCFW200	TNS-5845	
R12M1240	12.5	25	40	12.5	M12	ZPFG250, ZCFW250	TNS-5846	TXT-30

▶ 다양한 Type의 컷터 제작가능합니다.
▶ 전용 스패너는 별매입니다.

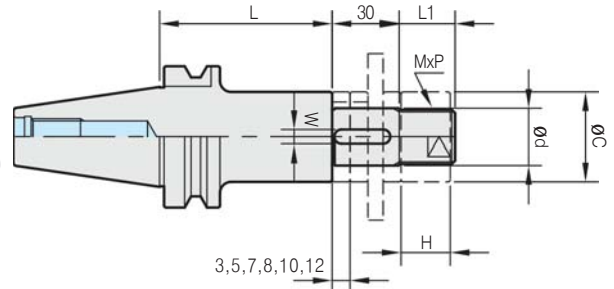
▶ Cutters can be made of a variety of Type.
▶ Spanner is orderd seperately.

SIDE CUTTER ARBOR



CODE No.

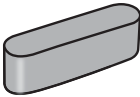


BT50 **SCA25.4** **90**
 Shank Cutter Type Length



PRODUCT INFORMATION

- JIS B4219,4109,4107 side cutter type 입니다. ■ For side cutters conforming to JIS B4219, 4019, and 4107.
- Key, collar 및 nut는 부착되어 있습니다. ■ 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						2.5
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	2.6
		120						2.9
BT50 - SCA25.4 - 90	25.4	90	40	25	6.35	21	M24X1.5	4.7
		135						5.0
SCA31.75 - 90	31.75	90	46	30	7.93	26	M30X1.5	5.1
		135						5.7
SCA38.1 - 90	38.1	90	55	36	9.53	31	M36X1.5	5.8
		135						6.8

Spare Parts			
Type	Parallel Key	Coller	Lock Nut
SCA25.4			
SCA31.75	6,35 x 6,35 x 25	SCA25,4 -Set	SCA-M24
SCA38.1	7,92 x 7 x 25	SCA31,75 -Set	SCA-M30
	9,52 x 8 x 25	SCA38,1 -Set	SCA-M36

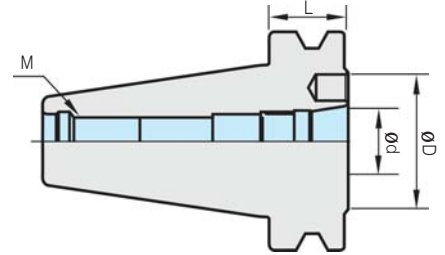
BT SHANK SIDE CUTTER ARBOR

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

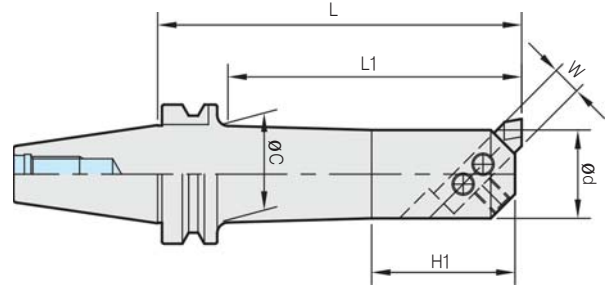
SQUARE BORING BAR

Boring Range : $\phi 25.0 \sim \phi 190.0$



CODE No.

BT50 BSA50 180
 Shank 45° Length



PRODUCT INFORMATION

- 황삭용 Boring 및 중간정삭 Boring. ■ Rough boring and semi finish boring.
- 막힌 구멍과 관통된 구멍 Boring. ■ Both blind and through hole boring.

Code No.	ϕd	Boring Range		L	ϕC	L1	H1	W	Weight (kg)
		min	max						
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	165	22	105	35	8	1,2
BSA30 - 165	24	30	42		26		40		1,3
BSA38 - 165	30	38	52		33	50	1,8		
BSA42 - 165	34	42	56		37	60	1,9		
BSA50 - 165	40	50	65	210	44	178	65	13	2,2
- 210					65		2,6		
BSA62 - 165	50	62	90	165	50	133	80	16	3,3
- 225				225	56				193
BSA72 - 165	60	72	110	165	60	-	95	19	3,6
- 225				225					4,5
BSA90 - 165	75	90	125	165	62	-	60	19	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	19	8,5
- 300				300		257			9,4
BSA105 - 195	90	105	160	195	90	-	130	25	11,0
- 285				285					94
BSA130 - 255	110	130	190	255	99	-	85	25	15,0

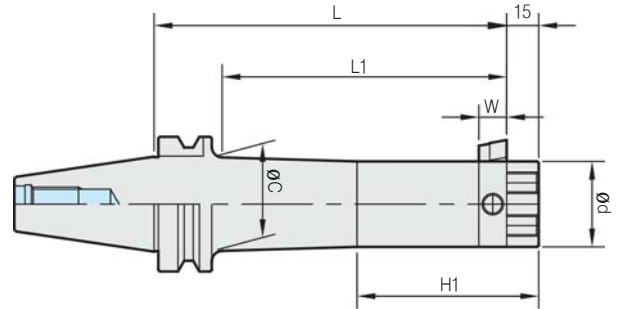
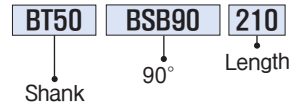
▶ 보링바이트는 별도 구매입니다.

▶ BORING BITE is ordered separately.

SQUARE BORING BAR

Boring Range : $\phi 25.0 \sim \phi 260.0$

CODE No.



PRODUCT INFORMATION

- 황삭용 Boring 및 중간정삭 Boring. ■ Rough boring and semi finish boring.
- 막힌 구멍과 관통된 구멍 Boring. ■ Both blind and through hole boring.

Code No.	ød	Boring Range		L	øC	L1	H1	W	Weight (kg)
		min	max						
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	19	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
- 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	19	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
ENDMILL COLLET CHUCK
SYNCRO TAPPING CHUCK
TAPPING CHUCK HOLDER
NC DRILL CHUCK
SIDE LOCK HOLDER
MORSE TAPER HOLDER
FACE MILL ARBOR



HYDRAULIC CHUCK

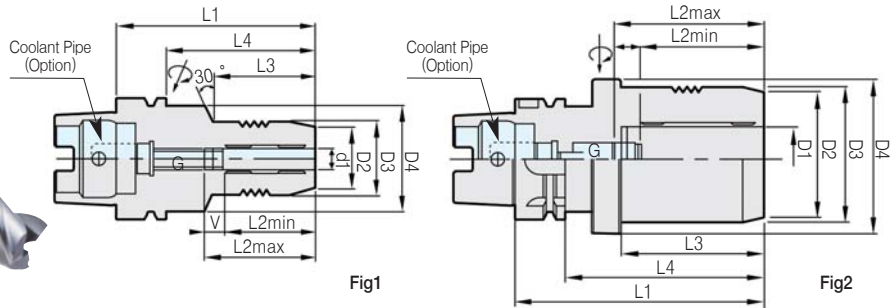
Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 32.0$

CODE No.

HSK63A | SHC20 | 90
Shank | Chucking Dia | Length

MAX
25,000
min⁻¹



PRODUCT INFORMATION

- 4D 선단에서 3 μ m이내의 흔들림정도
- 높은 정밀도와 고속가공에 최적화
- 유압방식의 강력한 파지력
- 렌치 하나로 쉽게 공구고정
- 3 μ m(T.I.R) Run-out at 4D away from shank nose.
- The optimal chck 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		75	32.5	42.5		34	55	M6X1.0		0.5
SHC 10 - 75	10	29	32		85	37.5	47.5		-	65	M6X1.0	0.6	
SHC 12 - 85	12	31	34									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		80	32.5	42.5		34	54	M6X1.0		0.65
SHC 10 - 80	10	29	32		85	37.5	47.5		44	59	M6X1.0	0.7	
SHC 12 - 85	12	31	34									0.75	
SHC 14 - 85	14	33	36	60	90	42.5	52.5	30	64			Fig2	0.9
SHC 16 - 90	16	35	38										
SHC 18 - 90	18	38	41	-								Fig1	1.0
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		80	32.5	42.5		35	54	M6X1.0		0.55
SHC 10 - 80	10	29	32		85	37.5	47.5		40	59	M6X1.0	1.08	
SHC 12 - 85	12	31	34									1.0	
SHC 14 - 85	14	33	36	90	42.5	52.5	46	64	M8X1.0			Fig1	1.05
SHC 16 - 90	16	35	38										
SHC 18 - 90	18	38	41										1.15
SHC 20 - 90	20	40	43										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	M16X1.0			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		90	32.5	42.5		42	61	M6X1.0		3.2
SHC 10 - 90	10	29	32		95	37.5	47.5		47	66	M6X1.0	3.4	
SHC 12 - 95	12	31	34									3.4	
SHC 14 - 95	14	33	36	50	100	42.5	52.5	53	71	M8X1.0		Fig1	3.5
SHC 16 - 100	16	35	38										
SHC 18 - 100	18	38	41										4.0
SHC 20 - 105	20	40	43										4.2
SHC 25 - 110	25	53	57	63	110	51	61	62	81	M16X1.0			4.2
SHC 32 - 110	32	58	63	75									4.3

- 유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
- 유압척 SHC12, SHC20, SHC32는 D또는 OD콜릿을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
- 유압척 전용 콜릿은 P138~P139
- 척킹시 필요한 렌치는 부속되어 있습니다.
- 항삭작업에는 권장하지 않습니다.
- 내부급유 콜릿트파이프는 P100
- Tolerance of cutting tool shank should be configured within h6.
- HYDRAURIC CHCUK SHC12, SHC20, SHC32는 possible. to use various shank cutting tool with D or OD COLLET.
- HYDRAURIC COLLET are refered. P138~P139
- Wrench is included.
- We do not recommend to use hydraulic chuck for roughing operation.
- The Coolant pipe are refered. P100

HYDRAULIC CHUCK



Coolant-through hole

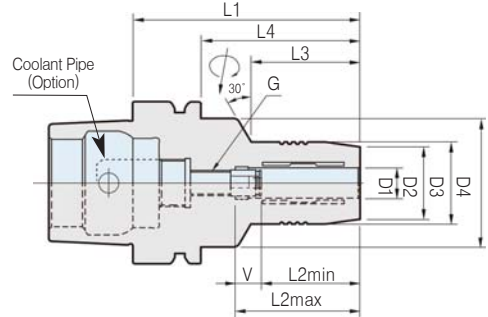
Clamping Range : $\varnothing 3.0 \sim \varnothing 20.0$



CODE No.

HSK40E | **SHC10** | **75**
 Shank | Chucking Dia | Length

MAX
40,000
 min⁻¹



PRODUCT INFORMATION

- 4D 선단에서 3 μ m이내의 흔들림정도
- 높은 정밀도와 고속가공에 최적화
- 유압방식의 강력한 파지력
- 렌치 하나로 쉽게 공구고정
- 3 μ m(T.I.R) Run-out at 4D away from shank nose.
- The optimal chckuk 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	M6X1.0	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					35	M6X1.0	0.65
SHC 10 - 65	10	29	32	65	32.5	42.5		44	M6X1.0	0.7
SHC 12 - 75	12	31	34	75	37.5	47.5		46	M6X1.0	0.75
SHC 14 - 75	14	33	36	80	42.5	52.5	10	51	M8X1.0	0.9
SHC 16 - 80	16	35	38					51	M8X1.0	0.9
SHC 18 - 80	18	38	41	80	42.5	52.5		52	M8X1.0	0.9
SHC 20 - 80	20	40	43	80	42.5	52.5		52	M8X1.0	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	M6X1.0	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							44	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	10	30	64	M6X1.0	0.9
SHC 20 - 90	20	40	42	-					30			64

- ▶ 유압척 사용시 절삭공구 Shank공차는 h6 안에 들어오는 절삭공구 사용을 권장합니다.
- ▶ 유압척 SHC12, SHC20, SHC32는 D또는 OD콜릿을 사용하여 다양하게 공구를 척킹 할 수 있습니다.
- ▶ 유압척 전용 콜릿은 **P138~P139**
- ▶ 척킹시 필요한 렌치는 부속되어 있습니다.
- ▶ 황삭작업에는 권장하지 않습니다.
- ▶ 내부급유 콜린트파이프는 **P100**
- ▶ 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. **P138~P139**
- ▶ Wrench is included.
- ▶ We do not recommend to use hydraulic chuck for roughing operation.
- ▶ The Coolant pipe are refered. **P100**

MILLING CHUCK

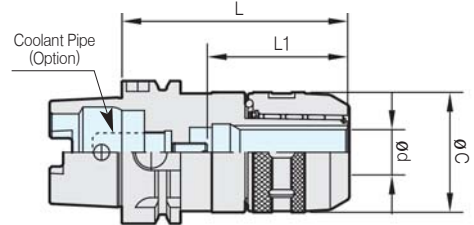
Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 42.0$



CODE No.

HSK63A **MC32** **110**
 Shank Chucking Dia Length



PRODUCT INFORMATION

- 높은 정밀도
- 간편한 척킹 시스템
- Taper 접촉 80%이상 Taper공차 AT3로 보증
- 안전한 단면 밀착으로 강력 절삭
- 4배열 Roller System 방식으로 강력한 파지력
- Excellent Run-out Accuracy.
- 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.

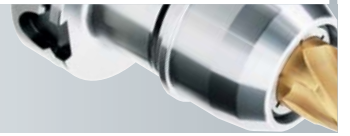
Code No.	ϕd	L	ϕC	L1	Collet	Weight (kg)
HSK40A - MC20 - 100	20	100	53	57	K20	1.2
HSK50A - MC20 - 95	20	95	53	57	K20	1.2
HSK63A - MC20 - 105	20	105	53	76	K20	1.7
MC25 - 105	25	105	62	77	K25	2.0
MC32 - 110	32	110	72	80	K32	2.2
- 130		130		100		2.6
HSK100A - MC20 - 105		105		53		77
MC20 - 135	20	135	53	77	K20	3.6
MC25 - 105	25	105	62	80	K25	3.3
- 135		135				3.6
MC32 - 115		32				120
- 135	135		102	4.0		
- 165	165		105	4.8		
- 200	200		105	5.7		
- 250	250		105	7.0		
MC42 - 115	42	115	94	87	4.8	
- 135		135		112	5.5	
- 165		165		120	7.0	
- 200		200		120	8.5	
- 250		250		120	10.8	

Spare Parts		
Type	Option	
	Collet	Spanner
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 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶ 밀링척 전용 콜릿은 P140~P143
- ▶ 밀링척 스패너는 별도 판매품 입니다. P157
- ▶ 내부급유 콜릿트파이프는 P100
- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are referred. P140~P143
- ▶ Spanner is ordered separately. P157
- ▶ The Coolant pipe are referred. P100

HSK SHANK MILLING CHUCK

HIGH SPEED MILLING CHUCK



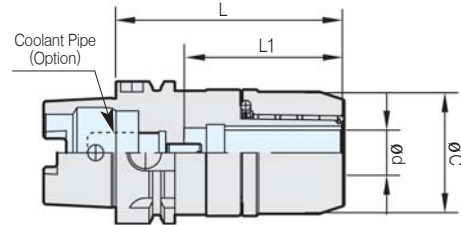
Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



CODE No.

HSK63A **MC32** **110** **G**
Shank Chucking Dia Length High Speed

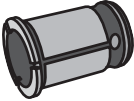

MAX
30,000
min⁻¹



PRODUCT INFORMATION

- 고속 가공에서 높은 정도
- 강력한 파지력
- 스패너는 GH 스패너 사용(별매)
- G6.3 max 30,000RPM
- 원형너트로 고속 절삭시 소음 감소
- Excellent Run-out Accuracy.
- Powerful clamping force.
- GH spanner is orderd seperately.
- G6.3 max 25,000 RPM.
- The operation noise is reduced by assembled circle style nut.

Code No.	ϕd	L	ϕC	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	48	25,000	76	1.7
MC25 - 105G	25		55		77	2.0
MC32 - 110G	32	110	68	20,000	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		
Type	Option	
	Collet	Spanner
		
MC20-G	K20 - NC20	MC20-GH
MC25-G	K25 - NC25	MC25-GH
MC32-G	K32 - NC32	MC32-GH

- ▶ 고속형밀링척은 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶ 밀링척 전용 콜릿은 P140 ~ P143
- ▶ 고속형밀링척 GH스패너는 별도 판매품 입니다. P157
- ▶ 내부급유 쿨런트파이프는 P100
- ▶ High speed MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET is refered. P140~P143
- ▶ GH SPANNER for high speed milling chuck is ordered seperately. P157
- ▶ The Coolant pipe are refered. P100

SHRINK FIT HOLDER

Coolant-through hole

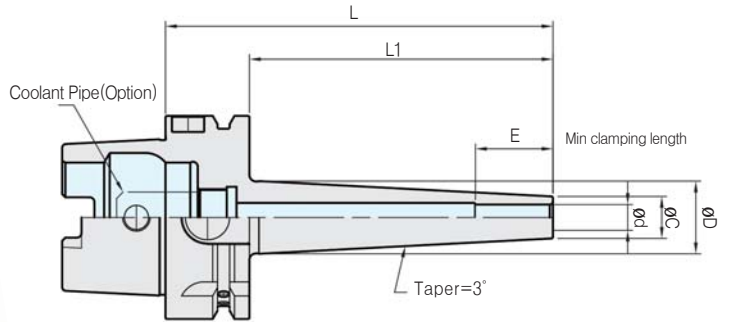
Clamping Range : $\phi 4.0 \sim \phi 12.0$



CODE No.

HSK63A **SSF10** **S** **120**
 Shank Chucking Dia Shim Length

MAX
25,000
 min⁻¹



PRODUCT INFORMATION

- 4D선단에서 3 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적, 슬림한 디자인으로 가공최적화
- 전제품 내부공유 (Coolant Through Hole)
- 3 μ m(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.	ϕd	ϕC	ϕD	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 **P153**
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. **P153**
- ▶ 내부공유 쿨런트파이프는 **P100**
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

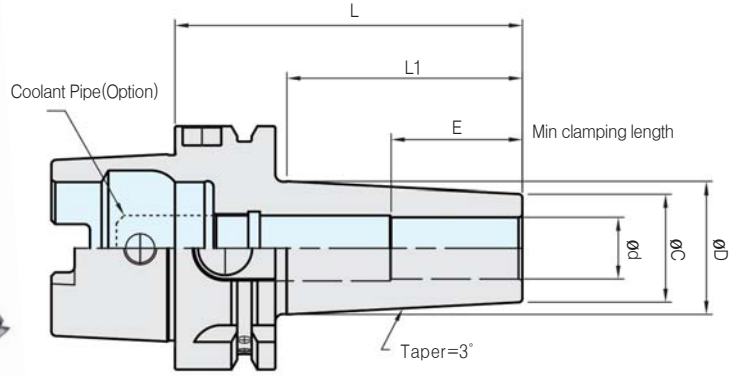
- ▶ Please use only carbide cutting tools of a shank tolerance within H6.
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is referred. **P153**
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. **P153**
- ▶ The Coolant pipe are referred. **P100**
- ▶ 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 tool life.

SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : $\phi 4.0 \sim \phi 20.0$

CODE No.
HSK63A **SSF10** **120**
 Shank Chucking Dia Length

MAX
25,000
 min⁻¹



Code No.	ϕd	ϕC	ϕD	L	L1	E	Weight (kg)
HSK40A - SSF 4 - 60	4	10	14.0	60		12	0.27
SSF 6 - 75	6	14	19.5			18	0.31
SSF 8 - 75	8	18	23.5			24	0.34
SSF10 - 75	10	22	27.5		52		0.42
SSF12 - 75	12	24	29.5			30	0.43
HSK50A - SSF 4 - 75	4	10	15.0			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		46		0.67
SSF12 - 75	12	24	29.0			30	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			20.4		61		0.9
- 150	6	14	26.7	150	121	18	1.04
SSF 8 - 90			24.4	90	61		0.9
- 150	8	18	30.7	150	121	24	1.15
SSF10 - 90			38.4	90	61		1.0
- 150	10	22	34.7	150	121		1.29
SSF12 - 90			30.4	90	61	30	1.0
- 150	12	24	36.7	150	121		1.33
SSF16 - 90			34.4	90	61		1.0
- 165	16	28	42.3	165	136	34	1.7
SSF20 - 90			40.4	90	61		1.1
- 165	20	34	48.3	165	136	40	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			25.7	105	73		2.5
- 165	8	18	31.9	165	133	24	2.8
SSF10 - 105			29.7	105	73		2.6
- 165	10	22	35.9	165	133		2.9
SSF12 - 105			31.7	105	73	30	2.6
- 165	12	24	37.9	165	133		3.0
SSF16 - 105			35.7	105	73		2.7
- 165	16	28	41.9	165	133	34	3.1
SSF20 - 105			41.7	105	73		2.8
- 165	20	34	47.9	165	133	40	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 **P153**
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. **P153**
- ▶ 내부급유 콜린트파이프는 **P100**
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- ▶ Please use only carbide cutting tools of a shank tolerance within H6.
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is referred. **P153**
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. **P153**
- ▶ The Coolant pipe are referred. **P100**
- ▶ 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

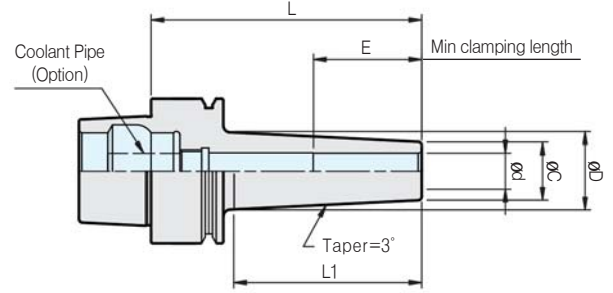
Clamping Range : $\phi 4.0 \sim \phi 12.0$



CODE No.

HSK40E | SSF10 | S | 75
 Shank | Chucking Dia | Shim Length

MAX
40,000
 min⁻¹



PRODUCT INFORMATION

- 4D선단에서 3 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적, 슬림한 디자인으로 가공최적화
- 전제품 내부급유 (Coolant Through Hole)
- 3 μ m(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.	ϕd	ϕC	ϕD	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	75	52	12	0.22
SSF 6S - 75	6	11	15.0			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			24	0.46
SSF10S - 75	10	16	20.5			30	0.48
SSF12S - 75	12	19	23.5				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 P153
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P153
- ▶ 내부급유 쿨런트파이프는 P100
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- ▶ Please use only carbide cutting tools of a shank tolerance within H6.
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is referred. P153
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. P153
- ▶ The Coolant pipe are referred. P100
- ▶ 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 tool life.

HSK SHANK SHRINK FIT HOLDER

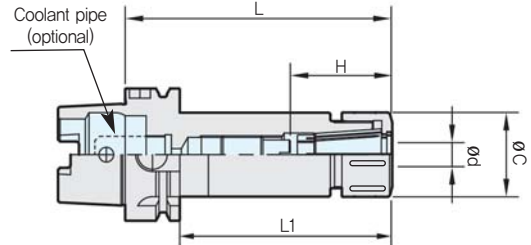
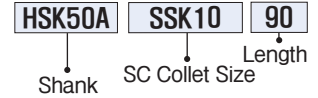
SSK COLLET CHUCK

Coolant-through hole

Clamping Range : $\phi 1.0 \sim \phi 25.4$



CODE No.

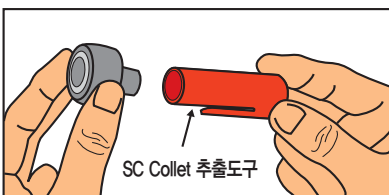


PRODUCT INFORMATION

- $\phi 8$ Taper 의 강력한 파지력
- 높은 정밀도와 빠른 가공에 적합
- 드릴, 센터드릴, 엔드밀, 텡, 리머용으로 사용
- Powerful clamping force of $\phi 8$ taper.
- Excellent Run-out Accuracy.
- SSK COLLET CHUCK is suitable for a various operation using drill, endmill, tap and reamer.

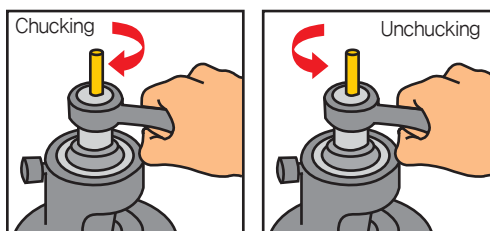
Code No.	ϕd	L	C	H		L1	Weight (kg)
				Min	Max		
HSK40A - SSK 6 - 60	0.9~6.0	60	19.5	40		40	0.3
SSK10 - 60	1.75~10.0			27.5	29		36
- 75		75	33		55		55
SSK13 - 75	2.75~13.0			55		0.5	
SSK16 - 90	2.75~16.0			60		70	
HSK50A - SSK 6 - 60	0.9~6.0	60	19.5	37		34	0.4
SSK10 - 60	1.75~10.0			27.5	35		0.5
- 90		90	33		36	41	64
SSK13 - 90	2.75~13.0			31	47	1.0	
SSK16 - 90	2.75~16.0			40	50	58	
HSK63A - SSK 6 - 90	0.9~6.0	90	19.5	26	31	64	0.9
SSK10 - 105	1.75~10.0			33	41		79
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 콜릿추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. P157
- ▶ Synchronized Tap 사용시 SSK10을 사용하십시오.
Aluminum MAX Tapping M12
Steel MAX Tapping M10
Stainless Steel MAX Tapping M8
위 사양 이상인 경우는 Milling Chuck에 K-Collet을 사용하시길 바랍니다.
- ▶ SSK척 콜릿은 P144~P145
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트 및 홀더가 파손 될 수 있습니다.
- ▶ 고속 바란스 작업시 추가 비용이 청구됩니다.
- ▶ 내부급유 콜릿파이프는 P100
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. P157
- ▶ 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 referred. P144~P145
- ▶ 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 referred. P100



SSK Chuck NUT에 SC Collet 체결시에는 전용 콜릿 추출 도구를 사용하시기 바랍니다.

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



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

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

GSK COLLET CHUCK



Coolant-through hole

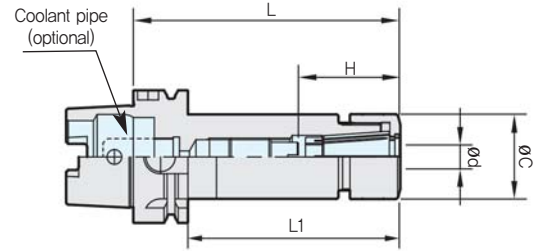
Clamping Range : $\phi 1.0 \sim \phi 25.4$



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
- 스페너는 PH스패너 사용(별매)
- G2.5X max 40,000 RPM
- 고속형GSK척에는 P CLASS 콜릿 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.	ϕd	L	C	H		L1	Weight (kg)
				Min	Max		
HSK40A - GSK 6 - 60P	0.9 ~ 6.0	60	19.5	40		40	0.3
GSK10 - 60P	1.75 ~ 10.0		27.5	40			40
- 75P		75	33	29	36	55	
GSK13 - 75P	2.75 ~ 13.0			55	55		70
GSK16 - 90P	2.75 ~ 16.0	90	40	60		34	
HSK50A - GSK 6 - 60P	0.9 ~ 6.0	60	19.5	37			34
GSK10 - 60P	1.75 ~ 10.0		27.5	35		64	
- 90P		90	33	36	41		64
GSK13 - 90P	2.75 ~ 13.0			31	47		
GSK16 - 90P	2.75 ~ 16.0	90	40	50	58	79	1.2
HSK63A - GSK 6 - 90P	0.9 ~ 6.0		105	19.5	26		31
GSK10 - 105P	1.75 ~ 10.0	27.5		33	41	99	1.1
GSK13 - 105P	2.75 ~ 13.0	120	33	31	47		99
GSK16 - 105P	2.75 ~ 16.0		40	50	58	121	
GSK20 - 120P	3.5 ~ 20.0	120	48.5	50	55		121
GSK25 - 125P	15.5 ~ 25.4	125	55	60	65	126	
HSK100A - GSK 6 - 120P	0.9 ~ 6.0	120	19.5	26	31		111
GSK10 - 125P	1.75 ~ 10.0	125	27.5	33	41	111	
GSK13 - 135P	2.75 ~ 13.0	135	33	39	40		121
GSK16 - 140P	2.75 ~ 16.0	140	40	46	51	126	
GSK20 - 150P	3.5 ~ 20.0	150	48.5	48	63		126
GSK25 - 155P	15.5 ~ 25.4	155	55	60	65	126	

- ▶ 너트, 조절나사 및 콜릿추출도구는 부속되어 있습니다.
- ▶ 스페너는 별매입니다. P157
- ▶ GSK척 콜릿은 P144~P145
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트 및 홀더가 파손 될 수 있습니다.
- ▶ 내부급유 콜릿트파이프는 P100
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. P157
- ▶ P CLASS SC COLLET for GSK CHUCK is refered. P144 ~ P145
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder
- ▶ The Coolant pipe are refered. P100

HSK SHANK GSK COLLET CHUCK

GSK COLLET CHUCK



Coolant-through hole

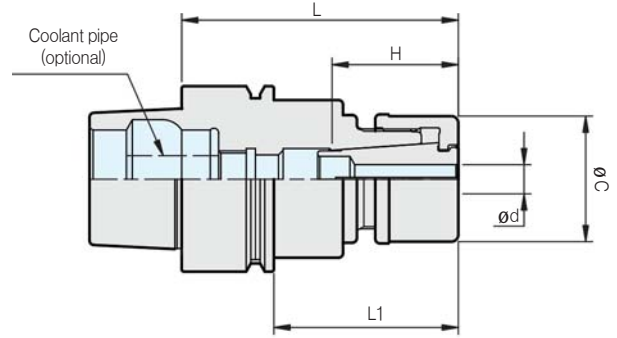
Clamping Range : $\phi 1.0 \sim \phi 16.0$



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 콜릿 사용을 권장
- Excellent Run-out Accuracy.
- Powerful clamping force of 8&aper.
- 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.	ϕd	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
HSK32E - 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
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 콜릿추출도구는 부속되어 있습니다.
- ▶ 스패너는 별매입니다. P157
- ▶ GSK척 콜릿은 P144~P145
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ 내부급유 콜린트파이프는 P100
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. P157
- ▶ P CLASS SC COLLET for GSK CHUCK is refered. P144 ~ P145
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder
- ▶ The Coolant pipe are refered. P100

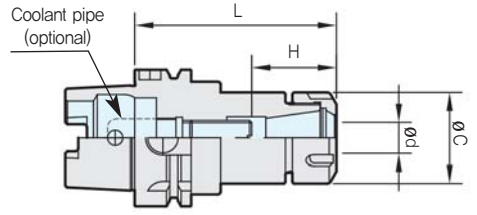
ER COLLET CHUCK



Coolant-through hole
Clamping Range : $\phi 0.5 \sim \phi 26.0$



CODE No.
HSK63A **ER16** **95**
 Shank 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.	ϕd	L	ϕC	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				
Type	Option			
	NUT	Adjust Screw	Spanner	ER Collet
ER11	UM/ER11(HEXA)	BTD0716-C	ER11-SP	ER11- ϕ
ER16	UM/ER16(HEXA)	BTD1025-C	ER16-SP	ER16- ϕ
ER20	UM/ER20(HEXA)	BTD1325-C	ER20-SP	ER20- ϕ
ER25	UX/ER25	BTD1830-C	ER25-SP	ER25- ϕ
ER32	UX/ER32	BTD2230-C	ER32-SP	ER32- ϕ
ER40	UX/ER40	BTD2838-C	ER40-SP	ER40- ϕ

- ▶ 내부급유 사용시에는 방수형콜릿이나 방수형 너트를 사용 해주시십시오.
- ▶ ER콜릿은 **P146**
- ▶ 스패너는 별매입니다. **P157**
- ▶ 고속 밸런스 작업시 추가 비용이 청구됩니다.
- ▶ ER척 스페어 파트는 **P56**
- ▶ 내부급유 콜릿트 파이프는 **P100**
- ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER COLLET is referred. **P46**
- ▶ Spanner is ordered separately. **P157**
- ▶ Extra charge for high speed balance.
- ▶ The spare parts for ER CHCUK are referred. **P56**
- ▶ The Coolant pipe are referred. **P100**

HSK SHANK ER COLLET CHUCK

ENDMILL COLLET CHUCK



Coolant-through hole

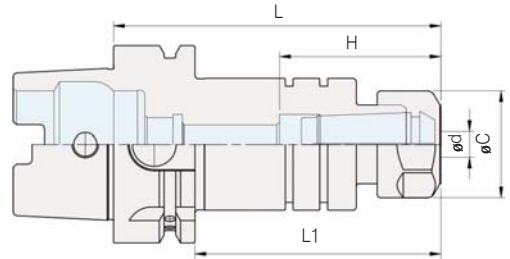
Clamping Range : $\phi 6.0 \sim \phi 20.0$

CODE No.

HSK63A **SE25** **105**
 Shank SE collet Size Length



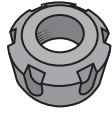
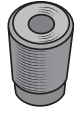
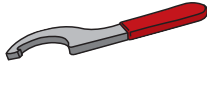

Fig1



PRODUCT INFORMATION

- SE척 전용 콜릿 사용
- ENDMILL 전용 COLLET CHUCK
- 4도 TAPER의 강력한 파지력
- 5 μ m at 4D (T.I.R) (Max G2.5 at 20,000 rpm)
- Please use dedicated collet for SE COLLET CHUCK
- SE COLLET CHUCK for dedicated ENDMILL
- Strong Clamping Power of 4 degree TAPER
- 5 μ m at 4D (T.I.R) (Max G2.5 at 20,000 rpm)

CODE NO.	ϕd	ϕC	H	L	L1	Collet	Weight (kg)	Fig
HSK63A - SE20 - 100	6,8,10,12	34	40,5	100	74	SE20	1,2	1
HSK63A - SE25 - 105	6,8,10,12,16	42	48	105	79	SE25	1,4	
HSK63A - SE32 - 110	6,8,10,12,16,20	50	58	110	84	SE32	1,6	
HSK100A - SE20 - 105	6,8,10,12	34	40,5	100	74	SE20	2,3	
HSK100A - SE25 - 110	6,8,10,12,16	42	48	105	79	SE25	2,5	
HSK100A - SE32 - 120	6,8,10,12,16,20	50	58	110	84	SE32	2,7	

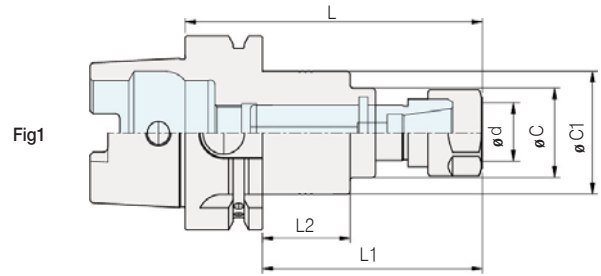
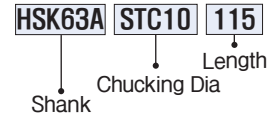
Spare Parts				
Type	Option			
	NUT	Adjust Screw	Spanner	SE Collet
SE20				
SE25	UM/SE20(HEXA)	BTD1325-C	SE20-SP	SE20- ϕ
SE25	UX/SE25	BTD1830-C	SE25-SP	SE25- ϕ
SE32	UX/SE32	BTD2230-C	SE32-SP	SE32- ϕ

- ▶ SE NUT와 ER NUT은 호환성이 있으나 SE너트로 별도 구매 바랍니다. (ER NUT를 SE CHUCK에 사용을 금지합니다.)
- ▶ 스패너는 별도 구매 입니다.
- ▶ SE콜릿은 P147
- ▶ Nut has compatible with SE NUT and ER NUT. But Please order separately when you need NUT. (Prohibit that SE CHUCK use ER NUT)
- ▶ Spanner is ordered separately
- ▶ SE COLLET is referred. P147

SYNCHRO TAPPING CHUCK

Coolant-through hole
Clamping Range : M2.0 ~ M22.0




CODE No.



PRODUCT INFORMATION

- 고속 가공용 TAPPING CHUCK (Max. G6.3 at 10,000 rpm)
- 4D x 25µm(T.I.R)
- 특수 설계로 인한 TAP 파손 방지
- ER TAP COLLET 사용 권장 (STC3 은 일반 ER11 COLLET)
- TAPPING CHUCK for high speed. (Max. G6.3 at 10,000 rpm)
- 4D x 25µm(T.I.R)
- Special designed Tapping chuck for Tapping
- recommend ER TAP COLLET When you use Synchro tapping chuck (STC3 use ER11 collet)

CODE NO.	ød	øC	øC1	L	L1	L2	Collet	Weight (kg)	Fig
HSK63A - STC 10 - 100	M2-M10	29	40	100	74	29,5	TER16	1,2	1
- STC 22 - 115	M4-M22	42	53	115	89	29	TER32	1,6	
HSK100A - STC 10 - 105	M2-M10	29	40	105	76	31,5	TER16	2,7	
- STC 22 - 140	M4-M22	42	54	140	111	50	TER32	3,9	

Spare Parts			
Type	Option		
	NUT	Spanner	TER Collet
STC 3	 UM/ER11(HEXA)	 ER11-SP	 ER11-ø
STC 10	UM/ER16(HEXA)	ER16-SP	TER16-ø
STC 22	UX/ER32	ER32-SP	TER32-ø

- ▶ 스패너는 별매입니다.
- ▶ 동기화 기능(리지드)이 있는 장비에서 사용 가능합니다.
- ▶ ER콜릿은 P146
- ▶ TER콜릿은 P148

- ▶ Spanner is ordered separately.
- ▶ The machining Center has Syncro function (RIGID TAP) to use STC CHUCK
- ▶ ER COLLET is referred. P146
- ▶ TER COLLET is referred. P148

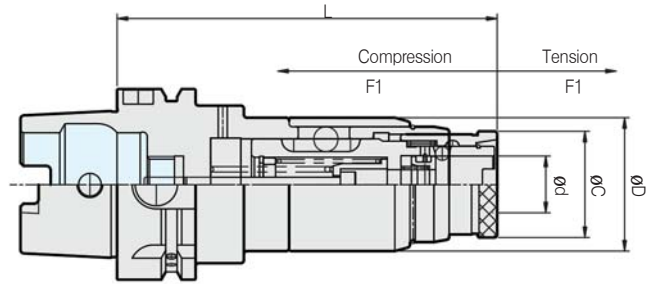
TAPPING CHUCK HOLDER



Tapping Range : M3 ~ M36

CODE No.

HSK63A **TCH22** **190**
 Shank MAX Tapping Length



HSK SHANK
TAPPING CHUCK HOLDER

PRODUCT INFORMATION

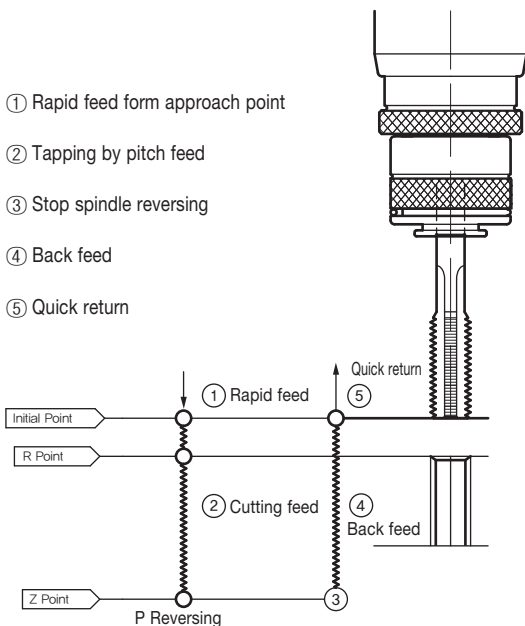
- 플로팅 타입으로 인장수축 장치 내장
- 공구교환이 빠르고 편리함
- 관통구멍과 막힌구멍의 tapping 및 모든 tap 작업 가능
- The tapping chuck is equipped with tension system by floating type.
- Easy and quick tool exchange.
- It is possible for tapping operation of blind hole and through hole.

Code No.	ϕd	ϕD	L	ϕC	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 탭콜릿은 P149

▶ Private tap collets are referred. P149

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



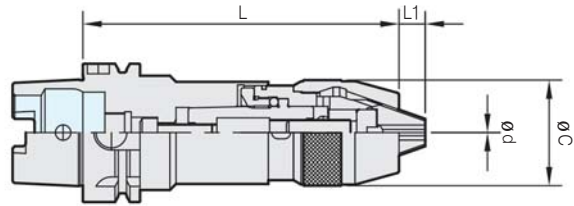
NC DRILL CHUCK



Clamping Range : $\phi 0.5 \sim \phi 13.0$

CODE No.

HSK63A **NPU13** **150**
 ↓ ↓ ↓
 Shank Chucking Dia Length



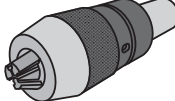

PRODUCT INFORMATION

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.	ϕd	L	ϕC	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

Type	Basic	
	Chuck	Spanner
NPU 8		
NPU13	NPU13	NPU13-SP

- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
 NPU8-20mm이상
 NPU13-30mm이상
- ▶ 스페너는 별매입니다. **P157**

- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum length of cutting tools.
 NPU8 : more 20mm
 NPU13 : more 30mm
- ▶ Spanner is ordered separately. **P157**

SIDE LOCK HOLDER

Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 42.0$

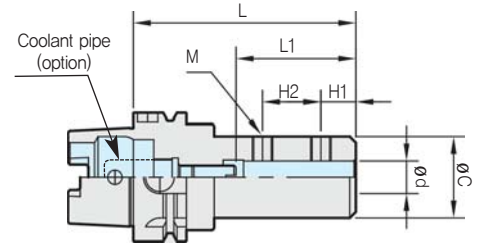
CODE No.

HSK63A SLA32 125

Shank Chucking Dia Length



TAPER 접촉을 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.	ϕd	L	ϕC	H		H1	H2	M	Weight (kg)
				Min	Max				
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		
SLA14 - 105	14	105	42	50	65	20	20	M12	1.4
SLA16 - 105	16		44						
SLA20 - 115	20	115	50	55	68	25	25	M14	1.7
SLA25 - 115	25		52						
SLA32 - 120	32	120	63	65	80	25	25	M16	2.2
SLA40 - 125	40								
SLA42 - 125	42	125	73					M16	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		
SLA14 - 110	14	110	42	50	65	20	20	M12	3.5
SLA16 - 110	16		44						
SLA20 - 120	20	120	50	60	75	25	25	M14	3.8
SLA25 - 120	25		52						
SLA32 - 125	32	125	63	65	80	25	25	M16	4.0
SLA40 - 135	40								
SLA42 - 135	42	135	75					M16	4.5

▶ 사이드락홀더 스페어 파트는 P64
▶ 내부급유 쿨런트 파이프는 P100

▶ The spare parts for SIDE LOCK HOLDER are referred. P64
▶ The Coolant pipe are referred. P100

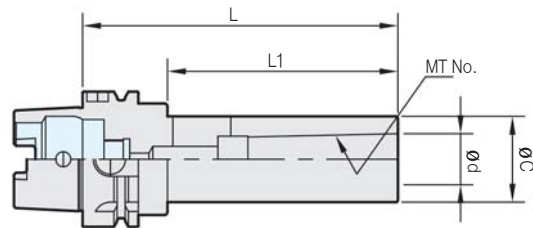
MORSE TAPER HOLDER

■ for Morse taper shank with tang.



CODE No.
HSK63A | **MTA1** | **120**
 ↓ Morse Taper No. ↓ Length
 Shank

TAPER 접촉을 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

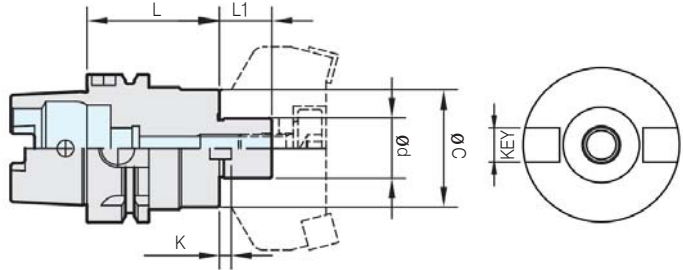
Drill Dia and Shank

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 milling용입니다.
- 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

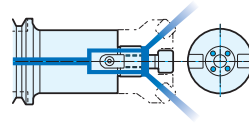
FMC Type

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 P75

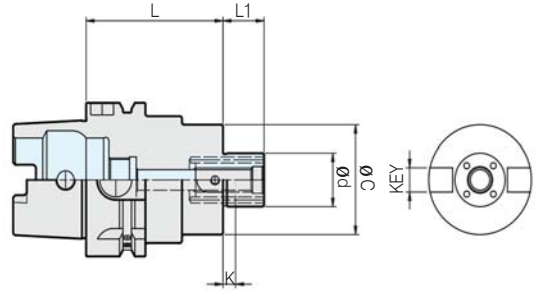
▶ The spare parts for FACE MILL ARBOR are referred. P75

FACE MILL ARBOR



CODE No.

HSK63A **FMH22** **60**
 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)
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 클램프볼트 및 부품은 일반 FMA, FMC 아바와 호환합니다.
- ▶ 페이스밀아바 스페어 파트는 **P75**
- ▶ 내부급유 쿨런트 파이프는 **P100**

- ▶ FMH clamp bolt and other parts is compatible with FACE MILL ARBOR FMA, FMC.
- ▶ The spare parts for FACE MILL ARBOR are referred. **P75**
- ▶ The Coolant pipe are referred. **P100**

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

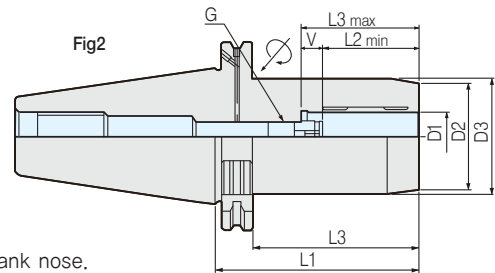
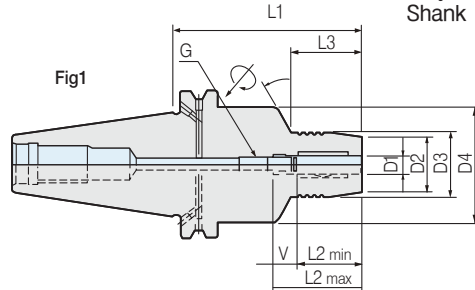


Coolant-through hole
Clamping Range : $\varnothing 3.0 \sim \varnothing 32.0$



CODE No.

SK40 **SHC20** **110**
Shank Chucking Dia Length



PRODUCT INFORMATION

- 4D 선단에서 3 μ m이내의 흔들림정도
- 높은 정밀도와 고속가공에 최적화
- 유압방식의 강력한 파지력
- 렌치 하나로 쉽게 공구고정
- 3 μ m(T.I.R) Run-out at 4D away from shank nose.
- The optimal chckuk 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	32,5	42,5			44		M6X1,0	1,4
- 110					110								2,0
SHC 10 - 80,5	10	29	32		80,5	37,5	47,5			44		M6X1,0	1,5
- 110					110								2,1
SHC 12 - 80,5	12	31	34		80,5	42,5	52,5			44		M8X1,0	1,5
- 110					110								2,1
SHC 14 - 80,5	14	33	36		80,5	48	52,5			44		M8X1,0	1,5
- 110					110								2,1
SHC 16 - 80,5	16	35	38	80,5	48	52,5	44	M8X1,0	1,5				
- 110				110					2,1				
SHC 18 - 80,5	18	38	41	80,5	26	61,0	44	M16X1,0	1,5				
- 110				110					2,1				
SHC 20 - 80,5	20	40	43	80,5	26	65,0	44	M16X1,0	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	80,5	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	32,5	42,5			44		M6X1,0	3,9
- 140					140								4,5
SHC 10 - 90	10	29	32		90	37,5	47,5			44		M6X1,0	3,9
- 140					140								4,5
SHC 12 - 90	12	31	34		90	42,5	52,5			44		M8X1,0	4,0
- 140					140								4,6
SHC 14 - 90	14	33	36		90	48	52,5			44		M8X1,0	4,0
- 140					140								4,6
SHC 16 - 90	16	35	38	90	48	52,5	44	M8X1,0	4,1				
- 140				140					4,7				
SHC 18 - 90	18	38	41	90	44	52,5	44	M8X1,0	4,1				
- 140				140					4,7				
SHC 20 - 80,5	20	40	43	80,5	44	52,5	44	M8X1,0	4,1				
- 90				90					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	M16X1,0	Fig2	5,2		
- 140				140	120,9						6,4		

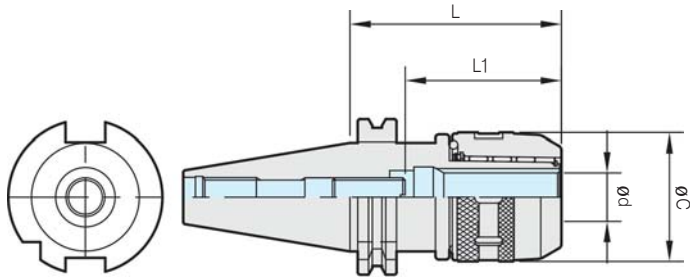
MILLING CHUCK



Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 42.0$

CODE No.

SK40	MC32	95
Shank	Chucking Dia	Length



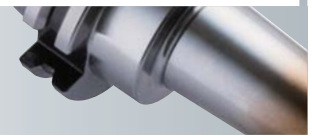
PRODUCT INFORMATION

- 높은 정밀도
- 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.
- 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.	ϕd	L	ϕC	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	74	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 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶ 밀링척 전용 콜릿은 P140~P143
- ▶ 밀링척 스페너는 별도 판매품 입니다. P157
- ▶ Extra charge for high speed balance.
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are refered. P140~P143
- ▶ Spanner is ordered separately. P157

SHRINK FIT HOLDER

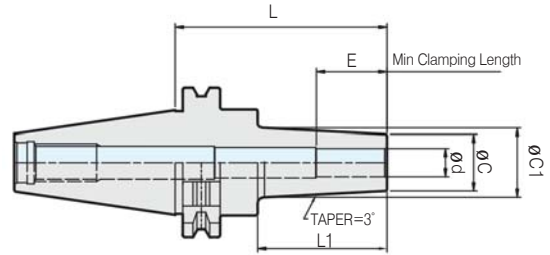


Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 20.0$

CODE No.

SK40 SSF10 120
Shank Chucking Dia Length

MAX
25,000
min⁻¹



PRODUCT INFORMATION

- 4D선단에서 3 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적, 슬림한 디자인으로 가공최적화
- 전제품 내부급유 (Coolant Through Hole)
- 3 μ m(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.	ϕd	ϕC	$\phi C1$	L	L1	E	Weight (kg)
SK40 - SSF 4 - 90	4	10	26	90	37	12	1.0
SSF 6 - 90			20		60		1.1
- 160			21	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			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			20	100	130		3.8
- 160	6	14	26	160	70	18	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			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 P153
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P153
- ▶ 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 tolerance within H6.
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is refered. P153
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. P153
- ▶ 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 toolife.

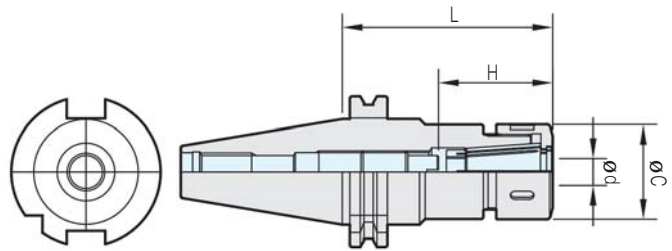
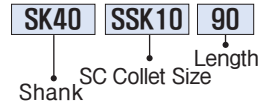
SK SHANK
SHRINK FIT HOLDER

SSK COLLET CHUCK



Coolant-through hole
Clamping Range : $\phi 1.0 \sim \phi 25.4$

CODE No.



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.

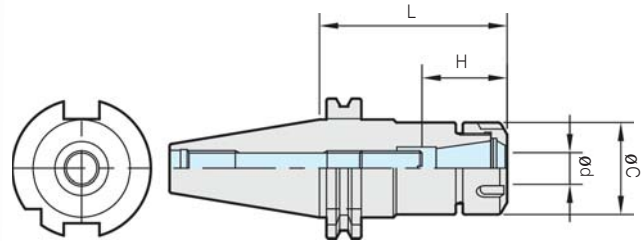
Code No.	ϕd	L	ϕC	H		Collet	Weight (kg)
				Min	Max		
SK40 - SSK 6 - 60	0,9~6,0	60	19,5	19	34	SC6	1,0
- 90		90					1,1
- 120		120					1,2
SSK10 - 60	1,75~10,0	60	27,5	30	50	SC10	1,2
- 90		90					1,5
- 120		120					1,8
- 150		150					2,0
SSK13 - 75	2,75~13,0	75	33	36	60	SC13	1,9
- 90		90					1,4
- 120		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
- 165		165					2,5
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 : $\phi 0.5 \sim \phi 26.0$

CODE No.
SK50 ER32 105
 ↓ ER Collet Size Length
 Shank



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

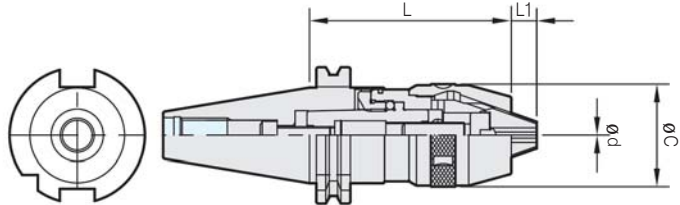
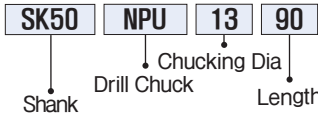
- Thread grinded.
- Convenient tool change.(chucking/unchucking)
- Balanced and balanceable type can be ordered.
- In case of using coolant through type.
 - 1.Must be using coolant through type collet and nut.
 - 2.Replacing coolant through type adjustable screw.

Code No.	φd	L	φC	H		Collet	Weight (kg)
				Min	Max		
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 : $\phi 0.5 \sim \phi 13.0$

CODE No.



PRODUCT INFORMATION

머시닝 센터의 일반적인 드릴링 공구입니다. **General Drillings for Machining Centers**

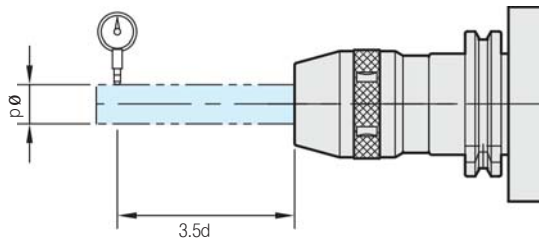
- 척과 샹크가 일체형 구조로 길이가 짧음
- 가공정도 향상과 우수한 내구성
- 척의 탈락이 없고 주축 정지시 풀리지 않음
- Unified body of chuck and shank reduces the length of tool.
- Improved operation accuracy and excellent rigidity
- The drillchuck is never detached from holder and is not released when the operation is stop.

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

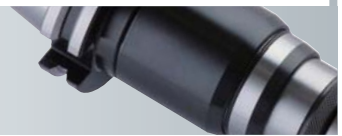
- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
NPU8-20mm이상
NPU13-30mm이상
- ▶ 스페너는 별매입니다. **P157**
- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum lengh of cutting tools.
NPU8 : more 20mm
NPU13 : more 30mm
- ▶ Spanner is ordered separately. **P157**

Runout Accuracy

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



TAPPING CHUCK HOLDER

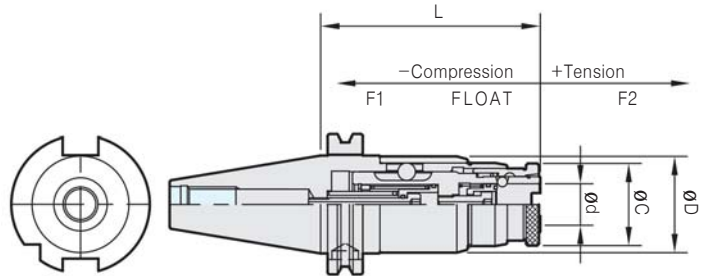


Tapping Range : M3 ~ M36

CODE No.

SK50 TCH22 165

MAX Tapping Length
Shank



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		Weight (kg)
					F1	F2	
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 탭콜릿은 P149 ▶ Private tap collets are referred. P149

SK SHANK

TAPPING CHUCK HOLDER / JACOBS TAPER ARBOR

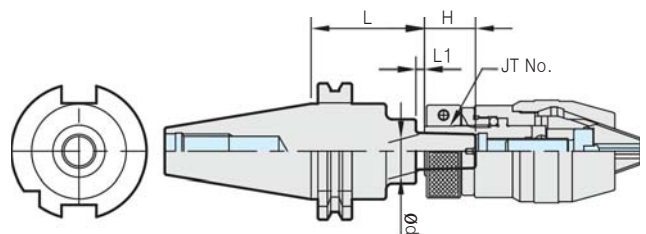
JACOBS TAPER ARBOR



CODE No.

SK50 JTA6 45

Jacobs No. Length
Shank



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	4	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	4	24	4.0
- 105			105			4.4

SIDE LOCK HOLDER



Coolant-through hole
Clamping Range : $\phi 6.0 \sim \phi 42.0$

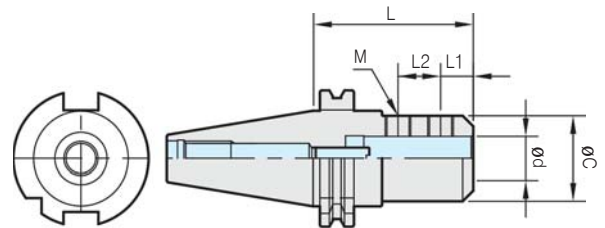
CODE No.

SK50	SLA32	105
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 ↓ Chucking Dia Length
 Shank



TAPER 접촉을 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-SCA 등
 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.	ϕd	L	ϕC	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			M10	1.2		
SLA12 - 75	12		42			M12	1.4		
SLA16 - 75	16		48			M14	1.5		
SLA20 - 75	20		52			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		M10	4.0				
SLA12 - 90	12	42		M12	4.1				
SLA16 - 90	16	48		M14	4.3				
SLA20 - 90	20	52		M16	4.5				
- 105		105		24	25	M18	4.8		
SLA25 - 105	25		65			4.8			
SLA32 - 105	32		72			4.8			
SLA40 - 105	40		80			4.9			
SLA42 - 105	42		82		28	M20	5.0		

▶ 사이드락홀더 스페어 파트는 P64

▶ The spare parts for SIDE LOCK HOLDER are referred. P64

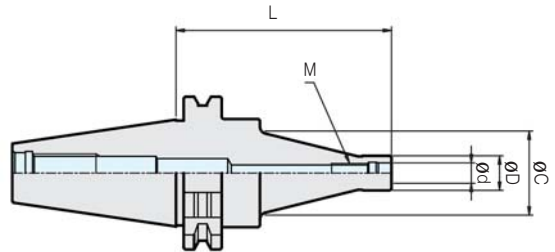
PRO MILL ARBOR



CODE No.

SK50 **M06** **135**

Shank Cutter Type Length

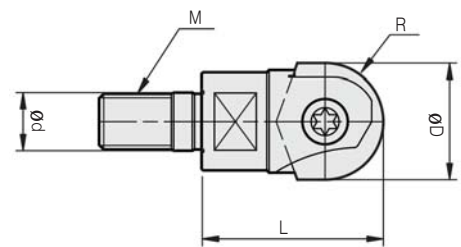


PRODUCT INFORMATION

- 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				1,5	
M08 - 90	8,5	90	14,4		M8	1,2	
		120				1,5	
M10 - 90	10,5	90	18		M10	1,3	
		120				1,5	
M12 - 120	12,5	120	22,5		M12	1,9	
		150				1,5	
SK50 - M06 - 135	6,5	135	10		65	M6	4,2
		165					4,9
M08 - 135	8,5	135	14,4			M8	4,2
		165					4,9
M10 - 135	10,5	135	18	M10		4,2	
		165				4,9	
M12 - 135	12,5	135	22,5	M12		4,2	
		165				4,9	

PRO MILL CUTTER(Ball Type)



PRODUCT INFORMATION

- HITACHI 인서트 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 ordered separately.

MORES TAPER HOLDER

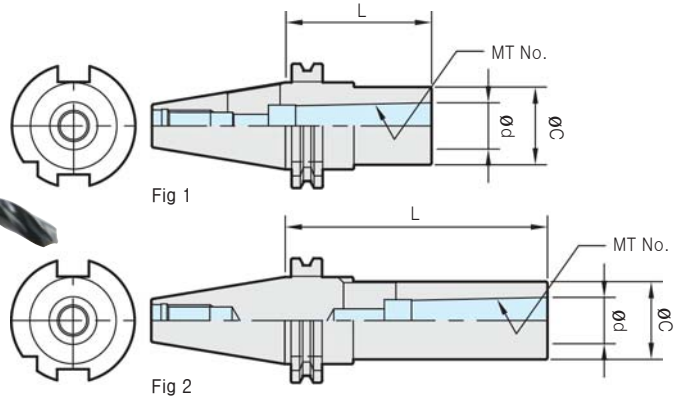
☐ For morse taper shank with tang



CODE No.

SK40 **MTA1** **45**

Shank Morse taper No. Length



TAPER 접촉을 80% 이상 진동없음.

PRODUCT INFORMATION

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

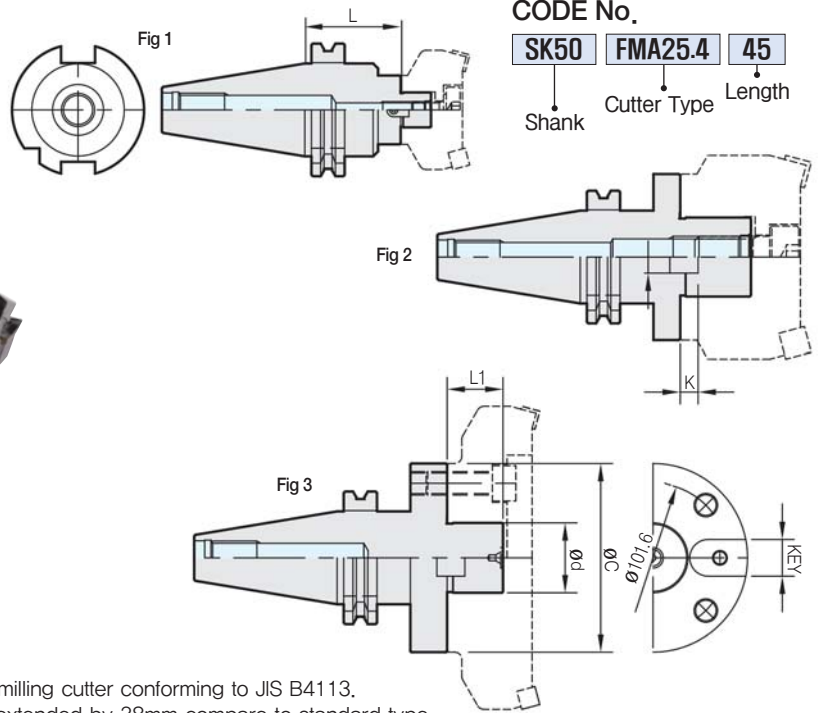
■ MORSE TAPER HOLDER can use tool holder for drill, reamer, etc.

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

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.

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	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	1	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	2	4.8
- 75			75						6.8
FMA47.625 - 75	47.625	200	75	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 P75

▶ The spare parts for FACE MILL ARBOR are referred. P75

**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

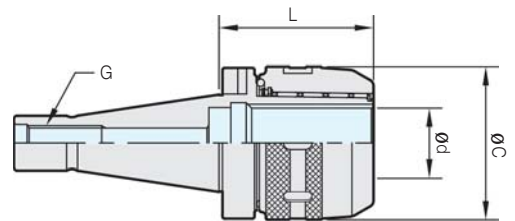
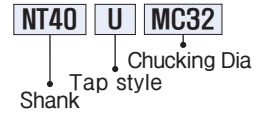


NT MILLING CHUCK



Clamping Range : $\phi 3.0 \sim \phi 42.0$

CODE No.



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.	ϕC	L	ϕd	G		Collet	Weight (kg)
				UNC	M		
NT30U(M) - MC20	53	70	20	U1/2-13	M12	K20	1.6
	62	75	25			K25	1.8
	72	95	32			K32	2.0
NT40U(M) - MC20	53	70	20	U5/8-11	M16	K20	2.2
	62	70	25			K25	2.4
	72	75	32			K32	2.9
NT50U(M) - MC25	62	70	25	U1"-8	M24	K25	5.0
	72	90	32			K32	5.5
	94	90	42			K42	6.0

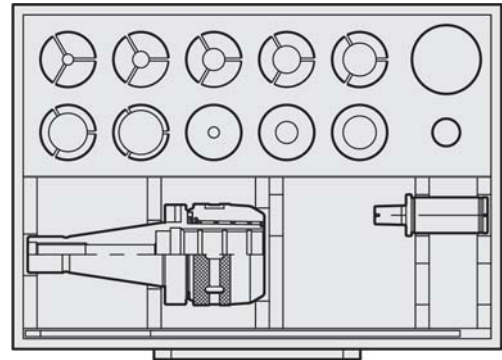
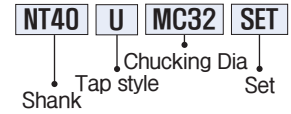
- ▶ 밀링척은 콜릿을 사용하여 다양한 Shank의 공구들을 체결할 수 있습니다.
- ▶ 밀링척 전용 콜릿은 P140~P143
- ▶ 밀링척 스패너는 별도 판매품 입니다. P157
- ▶ MILLING CHUCK is possible to use cutting tools of a various shank with COLLET.
- ▶ K-COLLET are referred. P140~P143
- ▶ Spanner is ordered separately. P157

NT/MT SHANK
NT MILLING CHUCK

MILLING CHUCK SET (NT TYPE)

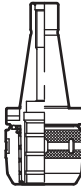




Clamping Range : $\phi 3.0 \sim \phi 42.0$

CODE No.



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.

MT MILLING CHUCK (TANG)

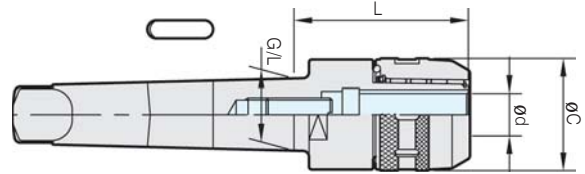


Clamping Range : $\phi 3.0 \sim \phi 42.0$

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.	ϕd	G/L	L	ϕC	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. P164

▶ Special size can be ordered.
▶ Cotter pin size check. P164

MT MILLING CHUCK (SCREW)

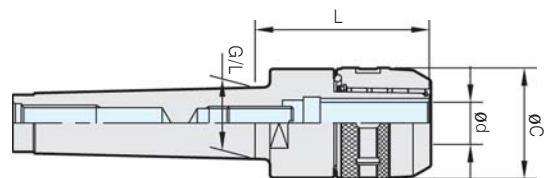


Clamping Range : $\phi 3.0 \sim \phi 32.0$

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.	ϕd	G/L	L	ϕC	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

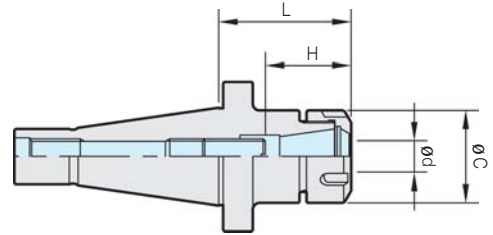
Clamping Range : $\phi 0.5 \sim \phi 26.0$

CODE No.

NT40 **ER32** **60**
 ↓ Length
 ↓ ER Collet Size
 Shank



레디알 밀링에서 작업가능!!



PRODUCT INFORMATION

- 안정적인 정밀도와 파지력
- Reliable accuracy and Powerful clamping force.
- 쉽고빠른 공구교환
- Easy and quick tool exchange.
- 드릴, 엔드밀, 탭 다양한 사용범위
- ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	φd	L	φC	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

- ▶ ER콜릿은 P146
- ▶ 스페너는 별매입니다. P157
- ▶ ER척 스페어 파트는 P56
- ▶ ER COLLET is refered. P16
- ▶ Spanner is ordered separately. P157
- ▶ The spare parts for ER CHCUK are refered. P56

MT ER COLLET CHUCK (TANG)

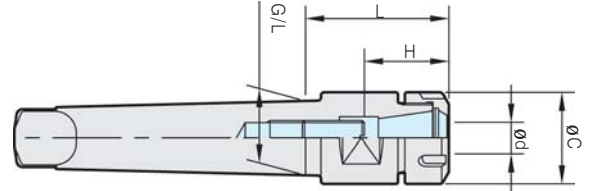


Clamping Range : $\phi 0.5 \sim \phi 26.0$



CODE No.

MT5	T	ER32	60
Shank	Tang	ER Collet Size	Length



PRODUCT INFORMATION

- 안정적인 정밀도와 파지력
- Reliable accuracy and Powerful clamping force.
- 쉽고빠른 공구교환
- Easy and quick tool exchange.
- 드릴, 엔드밀, 탭 다양한 사용범위
- 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

- ▶ ER콜릿은 P146
- ▶ 스페너는 별매입니다. P157
- ▶ ER척 스페어 파트는 P56
- ▶ ER COLLET is refered. P146
- ▶ Spanner is ordered separately. P157
- ▶ The spare parts for ER CHCUK are refered. P56

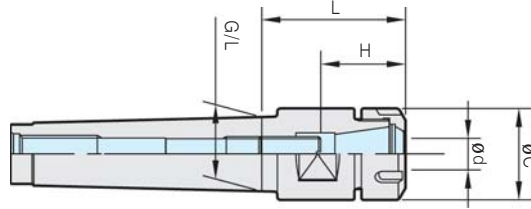
NT/MT SHANK MT ER COLLET CHUCK (TANG)

MT ER COLLET CHUCK (SCREW)

Clamping Range : $\varnothing 0.5 \sim \varnothing 26.0$

CODE No.

MT5	S	ER20	50
Shank	Screw	ER Collet Size	Length



PRODUCT INFORMATION

- 안정적인 정밀도와 파지력
- Reliable accuracy and Powerful clamping force.
- 쉽고빠른 공구교환
- Easy and quick tool exchange.
- 드릴, 엔드밀, 탭 다양한 사용범위
- ER COLLET CHUCK is suitable for a various operation using drill, endmill, tap.

Code No.	$\varnothing d$	L	$\varnothing C$	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	60	35	25	48	ER20	2.0
ER25 - 60	1.0 ~ 16.0		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

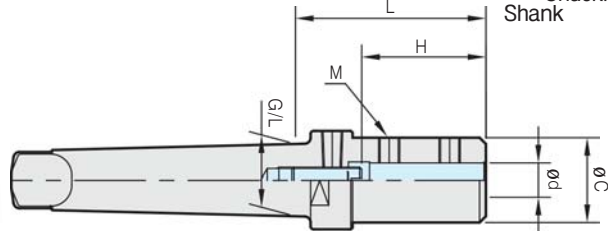
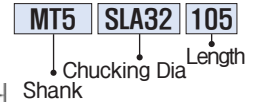
- ▶ ER콜릿은 P146
- ▶ 스페너는 별매입니다. P157
- ▶ ER척 스페어 파트는 P56
- ▶ ER COLLET is referred. P146
- ▶ Spanner is ordered separately. P157
- ▶ The spare parts for ER CHCUK are referred. P56

MT SIDE LOCK HOLDER (TANG)



Clamping Range : $\varnothing 20.0 \sim \varnothing 50.0$

CODE No.



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		M
					Min	Max	
MT4 - SLA20 - 90	20	31,267	90	50	60	75	M14
SLA25 - 90	25			52	65	80	
SLA32 - 105	32			65	65	80	
MT5 - SLA20 - 90	20	44,399	90	50	60	80	M14
SLA25 - 105	25			52	65	75	
SLA32 - 105	32			65	65	75	
SLA40 - 120	40	44,399	120	75	60	80	M18
SLA42 - 120	42			80	60	80	
MT6 - SLA25 - 105	25	63,348	105	52	65	75	M14
SLA32 - 105	32			65	65	75	
SLA40 - 120	40			75	50	80	M18
SLA42 - 120	42	63,348	120	80	50	80	
SLA50 - 120	50			90	50	80	

▶ 사이드락홀더 스페어 파트는 P64

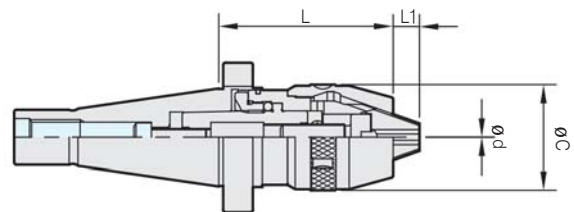
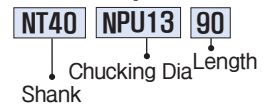
▶ The spare parts for SIDE LOCK HOLDER are referred, P64

NC DRILL CHUCK



Clamping Range : $\varnothing 0.5 \sim \varnothing 13.0$

CODE No.



Code No.	Ød	L	ØC	L1	Weight (kg)
NT40U - NPU 8 - 70	0.3~8.0	70	38	8.5	1.4
NPU13 - 90	1.0~13.0	90	50	11.5	2.3
NT50U - NPU13 - 90	1.0~13.0	90	50	11.5	4.3

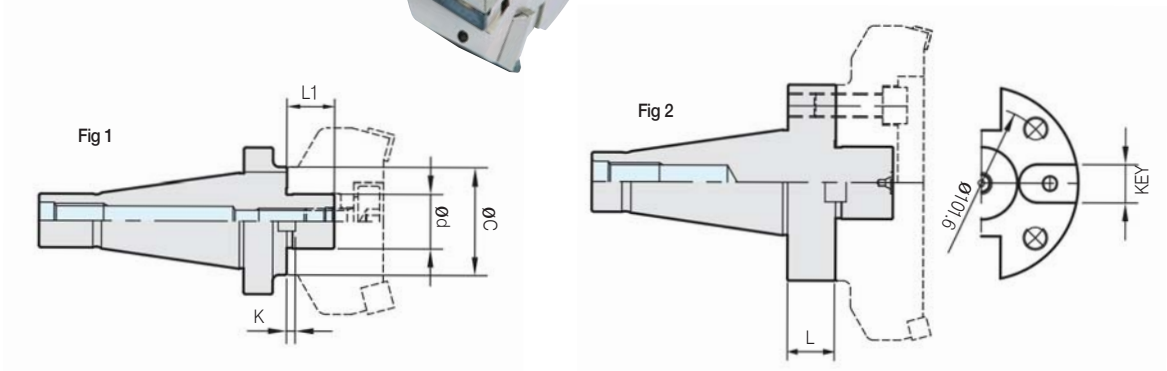
- ▶ 초경 드릴, 탭은 절대 사용을 금지해 주십시오.
- ▶ 절삭공구 최소 척킹 길이를 준수해 주시기 바랍니다.
NPU8-20mm이상
NPU13-30mm이상
- ▶ 스페너는 별매입니다. P157

- ▶ Please Prohibit use CARBIDE DRILL and CARBIDE TAP.
- ▶ Please follow minimum length of cutting tools.
NPU8 : more 20mm,
NPU13 : more 30mm.
- ▶ Spanner is ordered separately. P157

FACE MILL ARBOR

CODE No.

NT40	U	FMA25.4
Shank	Tap style	Cutter Type



PRODUCT INFORMATION

- JIS B4113 Face Milling용입니다. ■ 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
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 **P75**

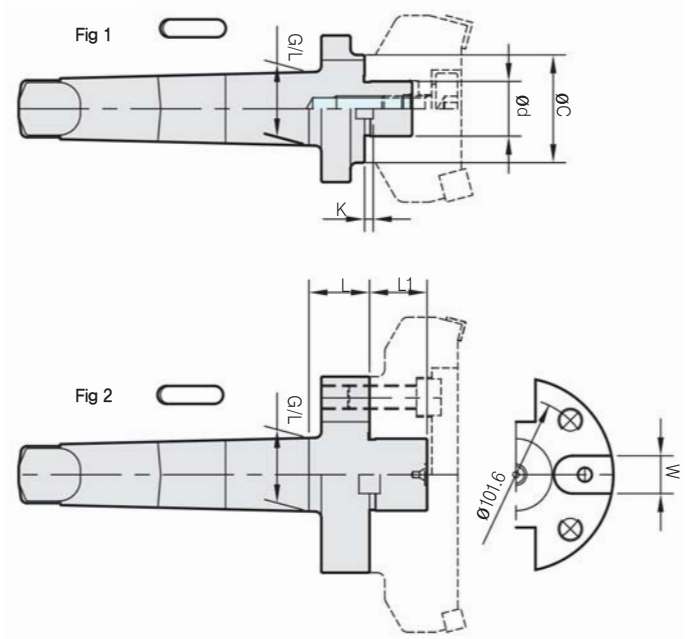
▶ The spare parts for FACE MILL ARBOR are referred. **P75**

MT FACE MILL ARBOR

CODE No.

MT5 **T** **FMA25.4**

Shank Tang Cutter Type



PRODUCT INFORMATION

- JIS B4113 Face Milling용입니다.
- 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" when you order.

Code No.	ød	Cutter Dia	L	øC	L1	Key	K	Fig
MT5T - FMA25.4 (3R)	25.4	80	30	50	22	K9.5 - L	5	1
FMA31.75 (4R)	31.75	100		60	30	K12.7 - L	7	
FMA38.1 (5R)	38.1	125		80	34	K15.87 - L	9	
FMA50.8 (6R)	50.8	160	45	98	36	K19 - L	10	1
MT6T - FMA25.4 (3R)	25.4	80	30	50	22	K9.5 - L	5	
FMA31.75 (4R)	31.75	100		60	30	K12.7 - L	7	
FMA38.1 (5R)	38.1	125		80	34	K15.87 - L	9	
FMA50.8 (6R)	50.8	160	45	98	36	K19 - L	10	2
FMA47.625(8R)	47.625	200		128	38	K25.4	12.5	

▶ 페이스밀아바 스페어 파트는 P75

▶ The spare parts for FACE MILL ARBOR are refered. P75

NT/MT SHANK
MT FACE MILL ARBOR

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)



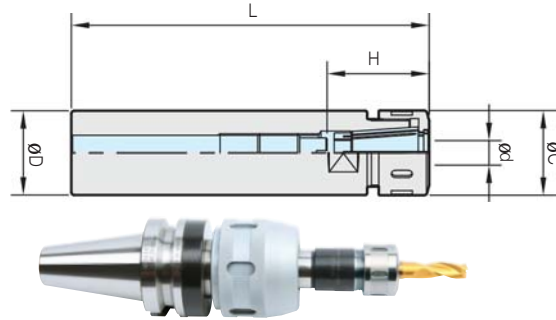
Coolant-through hole
Clamping Range : $\phi 1.0 \sim \phi 25.4$



CODE No.

ST42	SSK16	165
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 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.	ϕd	ϕD	L	ϕC	H		Collet	Weight (kg)
					Min	Max		
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	20	140	27.5	30	50	SC10	0.3
- 200			200					0.5
SSK13 - 150	2.75~13.0	20	150	33	36	60	SC13	0.5
- 180			180					0.6
- 250			250					0.9
ST25 - SSK10 - 150			1.75~10.0					25
- 210	2.75~13.0	25	210	33	36	60	SC13	0.9
SSK13 - 150			150					0.7
- 210	2.75~13.0	25	210	33	36	60	SC13	0.9
SSK16 - 150			150					0.8
- 200	2.75~16.0	25	200	40	45	70	SC16	1.0
ST32 - SSK10 - 150			1.75~10.0					32
- 200	2.75~13.0	32	200	33	36	60	SC13	1.1
SSK13 - 150			150					0.9
- 250			250					1.2
SSK16 - 150	2.75~16.0	32	150	40	45	70	SC16	1.2
- 220			220					1.5
- 280			280					1.8
SSK20 - 165			3.6~20.0					42
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	42	180	48	50	75	SC20	1.6
- 240			240					2.0
- 280			280					2.3
SSK25 - 200			15.6~25.4					42
- 250	250	2.1						
- 300	300	2.5						

- ▶ 너트, 조절나사 및 콜렛추출도구는 부속되어 있습니다.
- ▶ 스패너는 별매입니다. **P157**
- ▶ 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 **P144~P145**
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. **P157**
- ▶ 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 referred. **P144 ~ P145**
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder.

ST SHANK

STRAIGHT SSK COLLET CHUCK (MILLING)

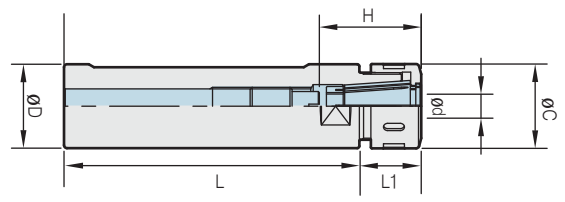
STRAIGHT SSK COLLET CHUCK (CNC)



Coolant-through hole
Clamping Range : $\phi 1.0 \sim \phi 16.0$



CODE No.
NC40 SSK16
 ↓ SC Collet Size
 Shank



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

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

- ▶ 너트, 조절나사 및 콜릿추출도구는 부속되어 있습니다.
- ▶ 스패너는 별매입니다. **P157**
- ▶ 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 콜릿은 **P144~P145**
- ▶ 절삭공구 체결시 무리한 힘이 가해질시 너트및 홀더가 파손 될 수 있습니다.
- ▶ NUT, ADJUST SCREW, COLLET REMOVER are included.
- ▶ Spanner is ordered separately. **P157**
- ▶ 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. **P144 ~ P145**
- ▶ The nut or shank of chuck can be destoried if you too strongly clamp nut and holder.

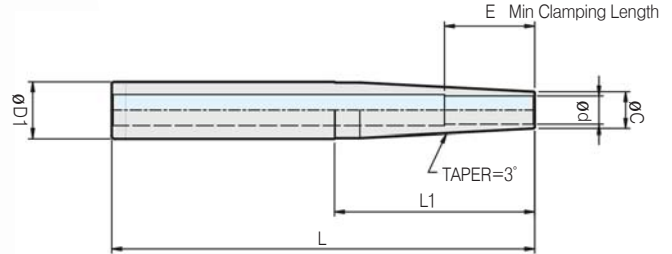
ST SHANK
STRAIGHT SSK COLLET CHUCK (CNC)

SHRINK FIT HOLDER

Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 12.0$

CODE No.

ST20 SSF10 S 150
Shank Chucking Dia Shim Length



PRODUCT INFORMATION

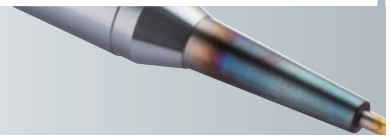
- 4D선단에서 3 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적, 슬림한 디자인으로 가공최적화
- 전제품 내부급유 Coolant Through Hole
- 3 μ m(T.I.R) Run-out at 4D away from shank nose.
- Excellent Run-out accuracy and powerful clamping.
- Optimal operation with slim and symmetrical design.
- All products can be used for center through coolant type.

Code No.	ϕd	ϕC	$\phi D1$	L	L1	E	Weight (kg)
ST12 - SSF 4S - 120	4	7	12	120	47.7	12	0.1
SSF 6S - 120	6	7			28.6	18	0.1
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
- 200				110	0.3		
- 250					0.4		
SSF 8S - 150	8	11		150	90	26	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 P153
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P153
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

- ▶ Please use only carbide cutting tools of a shank tolerance within H6 .
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is refered. P153
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. P153
- ▶ 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

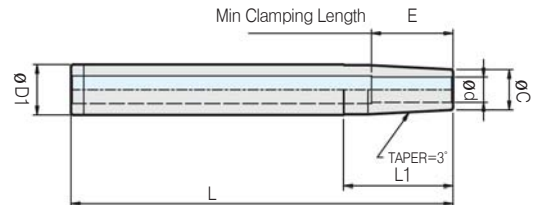


Coolant-through hole

Clamping Range : $\phi 3.0 \sim \phi 20.0$

CODE No.

ST32 SSF10 150
 Shank Chucking Dia Length



PRODUCT INFORMATION

- 4D선단에서 3 μ m이내의 흔들림 정도
- 높은 정밀도와 강력한 파지력
- 대칭적,슬림한 디자인으로 가공최적화
- 전제품 내부급유 Coolant Through Hole
- 3 μ m(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.	ϕd	ϕC	$\phi D1$	L	L1	E	Weight (kg)
ST20 - SSF 4 - 150	4	8	20	150	40	16	0.3
SSF 6 - 150					62		0.3
- 200					100		0.35
- 250							0.4
SSF 8 - 150	8	13		150	71	26	0.3
- 200				200			0.35
- 250				250			0.4
SSF10 - 150				10			16
- 200	200	0.5					
- 250	250	0.6					
ST32 - SSF10 - 150	10	16			150	70	
- 200				200	0.8		
- 300			250	1.2			
SSF12 - 150			12	19	150		129
- 200	200	0.8					
- 300	300	1.25					
SSF16 - 150	16	24			150	83	
- 200			200	0.9			
- 300			300	1.3			
SSF20 - 150			20	28	150		50
- 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 P153
- ▶ 절삭공구 최소 삽입길이를 준수해 주시기 바랍니다.
- ▶ 공구길이조정 Stopper는 별도 판매 입니다. P153
- ▶ 열박음척 사용시 척 내경에 있는 방청유를 제거후에 사용하셔야 합니다. 내구성 저하 원인이 됩니다.

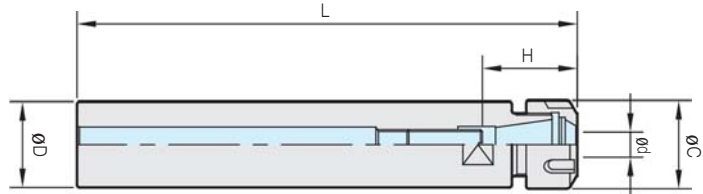
- ▶ Please use only carbide cutting tools of a shank tolerance within H6.
- ▶ Please use only carbide cutting tools for shrink fit holder. (Prohibit use HSS CUTTING TOOLS)
- ▶ We recommend shrink fit equipment when you use shrink fit holder.
- ▶ SELUX shrink fit equipment is referred. P153
- ▶ Please follow minimum insertion length of the cutting tools.
- ▶ Stopper for adjusting cutting tool length order separately. P153
- ▶ 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 tool life.

STRAIGHT ER COLLET CHUCK (MILLING)



Coolant-through hole
Clamping Range : $\phi 0.5 \sim \phi 20.0$

CODE No.
ST32 **ER20** **150**
 ↓ ↓ ↓
 Shank 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.	ϕd	ϕD	L	ϕC	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	

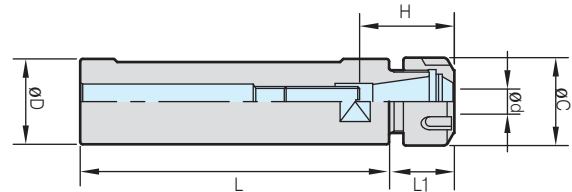
- ▶ 내부급유 사용시에는 방수형콜릿이나 방수형 너트를 사용 해주십시오.
- ▶ ER콜릿은 P146
- ▶ 스페너는 별매했습니다. P157
- ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER COLLET is referred. P146
- ▶ Spanner is ordered separately. P157

STRAIGHT ER COLLET CHUCK (CNC)



Coolant-through hole
Clamping Range : $\phi 0.5 \sim \phi 20.0$

CODE No.
NC32 **ER20**
ER Collet Size
Shank



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.	φd	φD	L	L1	φC	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

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

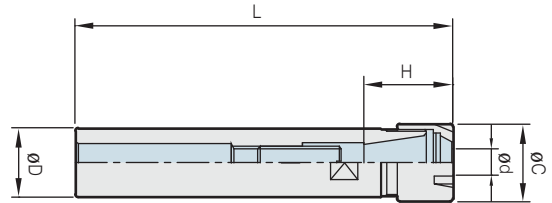
- ▶ 내부급유 사용시에는 방수형 콜릿이나 방수형 너트를 사용 해주십시오. ▶ Please use waterproof collet and waterproof nut for operating centre through coolant type.
- ▶ ER콜릿은 P146 ▶ ER COLLET is referred. P146
- ▶ 스페너는 별매품입니다. P157 ▶ Spnner is ordered separately. P157

ST SHANK
STRAIGHT ER COLLET CHUCK (CNC)

STRAIGHT SLIM ER COLLET CHUCK (MILLING)

Coolant-through hole
Clamping Range : $\phi 0.5 \sim \phi 16.0$

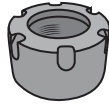

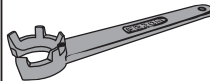

CODE No.
ST25 **ER16** **M** **105**
 Shank ER Collet Size Slim Length



PRODUCT INFORMATION

- 좁고 깊은 곳에 적합
- 뛰어난 정밀도와 파지력
- 척킹 범위 $\phi 0.5\text{mm} \sim \phi 16.0\text{mm}$
- Narrow and depth operation.
- High accuracy and powerful clamping force.
- Chucking Dia $\phi 0.5\text{mm} \sim \phi 16.0\text{mm}$.

Code No.	ϕd	ϕD	L	ϕC	H		Collet	Weight (kg)
					Min	Max		
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	20	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	25	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	32	200	35	34	54	ER25	1.0
- 300			300					1.3

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

▶ ER콜릿은 P146
▶ 스페너는 별매입니다.

▶ ER COLLET is referred. P146
▶ Spanner is ordered separately.

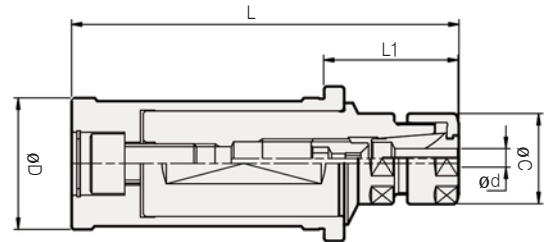
GYRO CHUCK



Clamping Range : $\phi 0.5 \sim \phi 16.0$

CODE No.

ST32 **GYRO** **ER127** **56**
 Shank ER Collet Size Length



PRODUCT INFORMATION

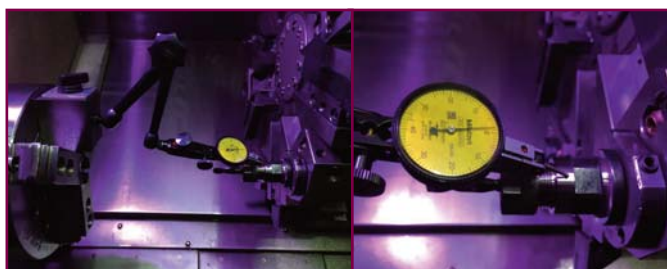
- CNC선반에서 드릴, 탭, 리머 작업시 장비의 공구편심으로 발생하는 문제를 단시간에 해결.
- GYRO척은 기존 X, Z축 터렛움직임에 Y축 미세조정을 할 수 있습니다.
- CNC선반 홀 가공에서 혁신적인 생산성 향상과 공구비용 절감효과
- 정밀한 가공으로 추가 보링작업 생략가능.
- GYRO CHUCK solve simply the chronic problems of the CnC Lathe about eccentric cutting tool when drilling, tapping, reamer.
- GYRO CHUCK allow sensitivity adjustment of Y (includ 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.	ϕd	ϕD	L	L1	ϕC	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



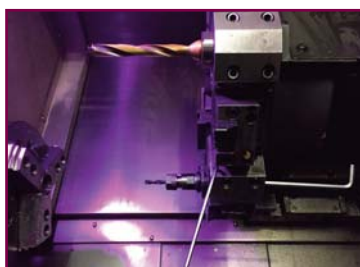
1.터렛에 있는 홀더고정 볼트와 GYRO척 뒤쪽에 있는 볼트를 풀어준다.
 Please release bolt in turret and bolt in GRYO chuck



2.선반척에 인디게이터 부착후 돌려가며 GYRO척의 상크부의 동심도를 체크한다.
 check RUN-OUT at shank of GYRO by turning the chuck of cnc lathe after fix the indicator 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

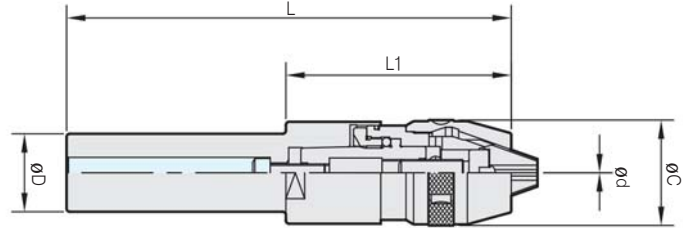


Clamping Range : $\phi 0.5 \sim \phi 13.0$

CODE No.

ST32 **NPU13**

Chucking Dia
Shank



PRODUCT INFORMATION

머시닝 센터의 일반적인 드릴링 공구입니다.

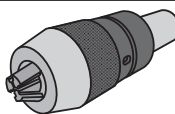
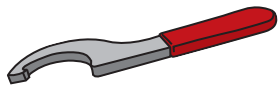
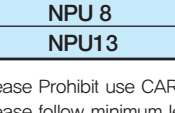
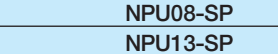
- 척과 샹크가 일체형 구조로 길이가 짧음
- 가공정도 향상과 우수한 내구성
- 척의 탈락이 없고 주축 정지시 풀리지 않음

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.	ϕd	ϕD	L	L1	ϕC	Weight (kg)
ST32 - NPU 8	0,3~0,8	32	150	80	38	1,0
	1,0~13,0		175	105		
ST42 - NPU 8	0,3~0,8	42	155	80	38	2,3
	1,0~13,0		180	105		

Spare Parts

Type	Basic	
	Chuck	Spanner
NPU 8		
NPU13		

- ▶ 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 length of cutting tools.
NPU8 : more 20mm
NPU13 : more 30mm
- ▶ Spanner is ordered separately.

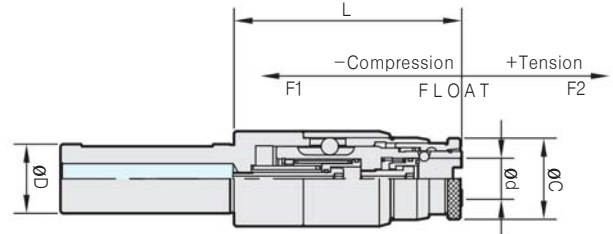
STRAIGHT TAPPING CHUCK



Tapping Range : M3 ~ M24

CODE No.

ST32 **TCH22** **165**
 ↓ ↓ ↓
 Shank MAX Tapping Length



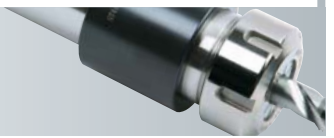
PRODUCT INFORMATION

- 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.	ϕd	L	ϕC	ϕD	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 탭콜릿은 P149 ▶ Private tap collets are referred. P149

FLOATING ER TAP CHUCK

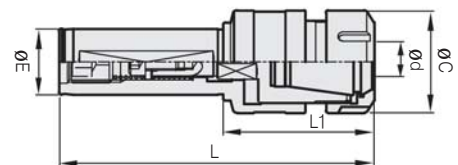


Clamping Range : $\phi 0.5 \sim \phi 20.0$

※ 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 frothing type.

Code No.	ϕd	ϕC	L	L1	Collet	ϕE	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, MC적에 사용사가는 합니다.
- ▶ ER콜릿은 P146
- ▶ 스페너는 별매입니다. P157
- ▶ It can do tapping operation at the CNC lathe.
- ▶ It can use with SIDE LOCK ARBOR and MILLING CHUCK.
- ▶ ER COLLET is referred. P146
- ▶ Spanner is ordered separately. P157

STRAIGHT FACE MILL ARBOR

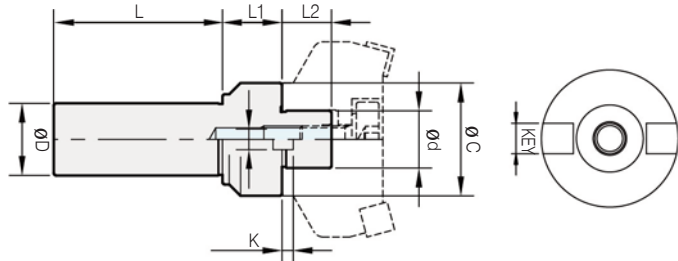


CODE No.

ST32 **FMA25.4**

Shank

Cutter Type


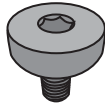




PRODUCT INFORMATION

- 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 (3R)	25.4	80	20	68	22	25	50	K9.5 - S	5
ST32 - FMA25.4 (3R)			32						
FMA31.75 (4R)	31.75	100	32	75	25	30	60	K12.7 - S	7
ST42 - FMA25.4 (3R)	25.4	80	42	80	22	25	50	K9.5 - S	5
FMA31.75 (4R)									

Spare Parts

Type	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
FMA25.4				
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 확인해주세요.

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

STRAIGHT FACE MILL ARBOR

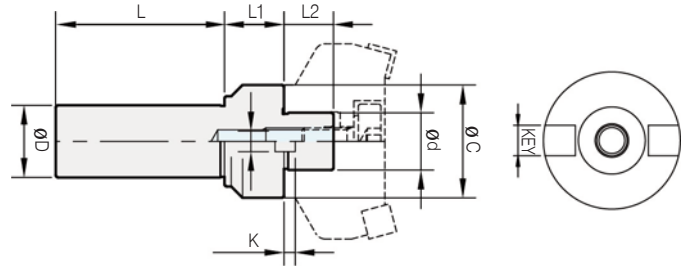


CODE No.

ST32 **FMC22**

Shank

Cutter Type

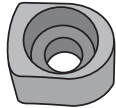


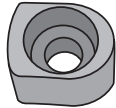


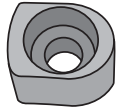
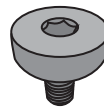


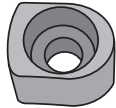
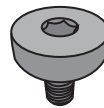


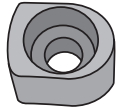
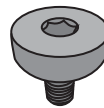


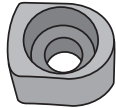
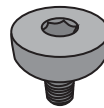


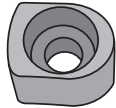
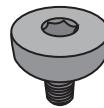




PRODUCT INFORMATION

- 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

Type	Basic			
	Key	Clamp Bolt	Key Bolt	Wrench Bolt
FMC16		-		
FMC22		-		
FMC25.4				
FMC27				
FMC32				
FMC38.1				
FMC40				

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

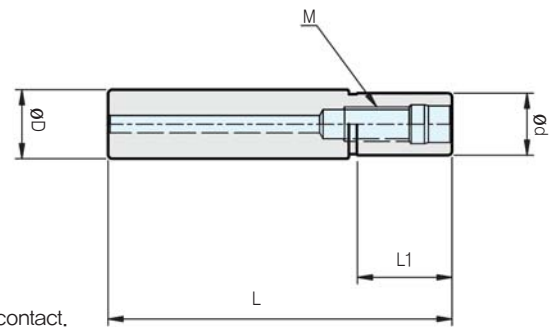
- ▶ Please pay attention to check spare parts list when you order.
- ▶ Please check long/short key when you order.

ST PRO MILL ARBOR (CARBIDE)



CODE No.

ST16 **M06** **150**
 Shank Cutter Type Length



PRODUCT INFORMATION

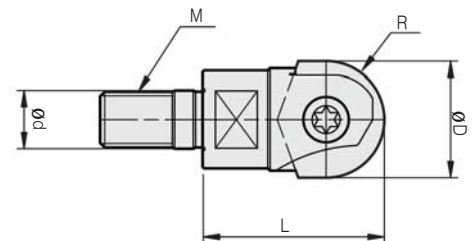
- 모듈라 방식으로 원가 절감
- 높은 정밀도
- 이면구속 체결로 흔들림 감소
- 헤드 교체로 다양한 작업가능
- Cost reduction effect with modular system.
- Excellent accuracy.
- Vibration damping effect due to dual face contact.
- A various operation with exchanging head.

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		
ST20 - M10 - 200	20	18	200	40	M10
			250		
ST25 - M12 - 250	25	22.5	250	48	M12
			300		

ST SHANK

ST PRO MILL ARBOR (CARBIDE) / ST PRO MILL CUTTER(Ball Type)

ST PRO MILL CUTTER(Ball Type)



PRODUCT INFORMATION

- HITACHI 인서트 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 ordered separately.

**Excellent Precision
Excellent Quality**

SELUX
NC TOOLING SYSTEM

ACCESSORY

CHUCK & Item

HYDRAULIC COLLET
K-COLLET (K TYPE)
K-COLLET (NC TYPE)
K-COLLET (COOLANT)
TAPER COLLET
DRILL CHUCK COLLET
SC COLLET
ER COLLET and SET
SE COLLET
TER COLLET
TAP ADAPTER
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



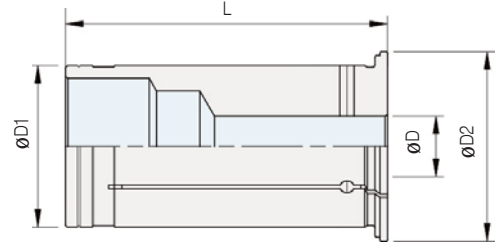
HYDRAULIC COLLET

Coolant-through hole
Clamping Range : $\varnothing 3.0 \sim \varnothing 25.0$

D-Collet

CODE No.

D32 **20**
Shank Chucking Dia



PRODUCT INFORMATION

- 스페셜 SIZE는 주문제작.
- 공구 체결시 COLLET에 공구를 먼저 삽입한후 유압척에 콜릿을 삽입하시길 바랍니다.
- 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 (g)
D8	8	12,5	37,5	25
D12	12	16,5	47	45
D20	20	24,6	52	90
D32	32	37,5	63,5	280

Style	HYDRAULIC COLLET
D8	2,3,4,5,6
D12	3,4,5,6,8,9,10
D20	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
D32	6,8,10,12,14,16,18,19,20,25

HYDRAULIC COLLET

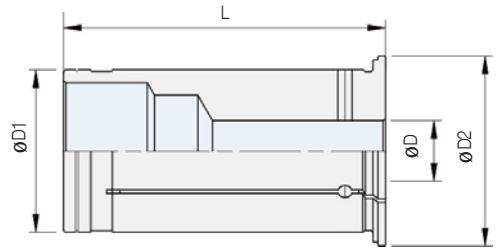
Coolant-through hole

Clamping Range : $\varnothing 3.0 \sim \varnothing 25.0$

OD-Collet

CODE No.

OD32 **20**
 ↓ ↓
 Shank Chucking Dia



PRODUCT INFORMATION

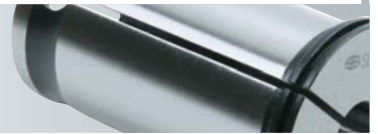
- 스페셜 SIZE는 주문제작.
- 공구 체결시 COLLET에 공구를 먼저 삽입한후 유압척에 콜릿을 삽입하시길 바랍니다.
- 방수타입콜릿은 정밀도를 보증하기 위해 정밀 커팅으로 작업되어 있습니다.

- 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 (g)
OD8	8	12,5	37,5	25
OD12	12	16,5	47	40
OD20	20	24,6	52	90
OD32	32	37,5	63,5	280

Style	HYDRAULIC COLLET
OD8	2,3,4,5,6
OD12	3,4,5,6,8,9,10
OD20	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
OD32	6,8,10,12,14,16,18,19,20,25

K-COLLET (K TYPE)

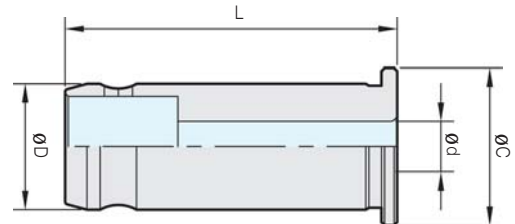


Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$

CODE No.

K32	8
-----	---

 ↓ Chucking Dia
 ↓ Shank



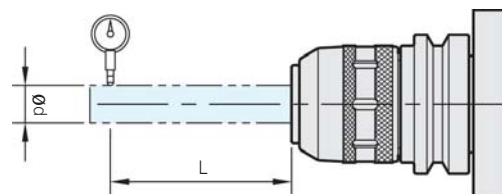
PRODUCT INFORMATION

- 밀링척용 collet
- 스페셜 size는 주문제작
- 인치 size 주문제작(K-32 제외)
- K-COLLET 전Size 재고관리
- ●표는 표준외 품목
- Straight Collet is for Milling Chuck.
- The speical 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	ϕD	L	ϕC	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

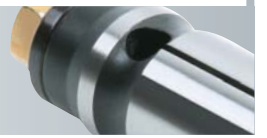
Style	K-COLLET
K20	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
K25	6, 8, 10, 12, 14, 15, 16, 18, 20
K32	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 21, 22, 23, 24, 25, 26, 27, 28 3.5, 4.5, 5.5, 6.5, 7.5, 8.5, 9.5, 10.5, 11.5, 12.5, 13.5, 14.5, 15.5, 16.5 17.5, 18.5, 19.5, 20.5, 21.5, 22.5, 23.5, 24.5, 25.5, 26.5, 27.5 1/4, 5/16, 3/8, 1/2, 3/4, 5/8, 1
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 & ϕd		L	T.I.R(μm)
K20	6,8,10	50	0.02
K25	12,16	75	
K32			
K42	20,25,32	100	



ACCESSORY STRAIGHT COLLET (K TYPE)

K-COLLET (NC TYPE)



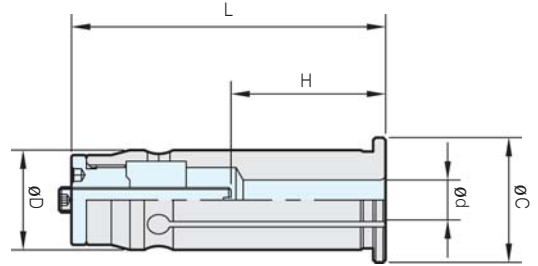
Clamping Range : $\phi 3.0 \sim \phi 32.0$

길이 조절형 타입

CODE No.

NC32 8

Chucking Dia
Shank



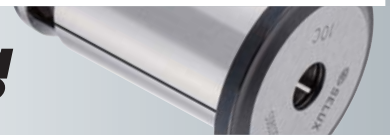
PRODUCT INFORMATION

- 조절나사에 의해 공구길이조정
- 스페셜 size 주문가능

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

Code No.	ϕd	ϕD	L	ϕC	H		Weight (kg)
					Min	Max	
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						
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					

K-COLLET (COOLANT TYPE) 방수형

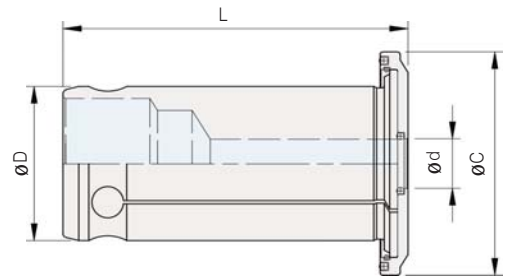


Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$

CODE No.

K32 8 C

Shank
Chucking Dia
Coolant Type



PRODUCT INFORMATION

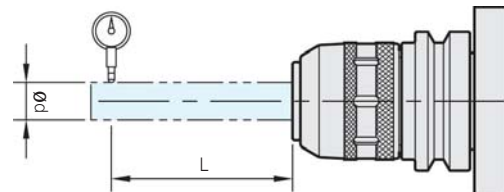
- 밀링척용 방수 collet
- 스페셜 size는 주문제작
- 인치 size 주문제작
- “●” 표는 표준외 품목
- Water-proof Collet is for Milling Chuck.
- The speical size is made by order.
- The inch size is made by order.
- The mark “●” indicates the special size.

ACCESSORY

Style	ϕD	L	ϕC	Weight (kg)
K20-C	20	54	34.4	0.1
K25-C	25	64.5	39.4	0.2
K32-C	32	65.5	46.4	0.3

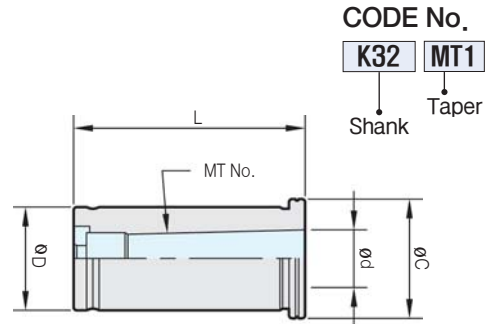
Style	KC-COLLET
K20-C	●3, ●4, ●5, 6, ●7, 8, ●9, 10, ●11, 12, ●13, ●14, ●15, 16, ●17, ●18
K25-C	●3, ●4, ●5, 6, ●7, 8, ●9, 10, ●11, 12, ●13, ●14, ●15, 16, ●17, ●18, ●19, 20
K32-C	●3, ●4, ●5, 6, ●7, 8, ●9, 10, ●11, 12, ●13, ●14, ●15, 16, ●17, ●18, ●19, 20, ●21, ●22, ●23, ●24, 25

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



STRAIGHT COLLET (C TYPE)

TAPER COLLET



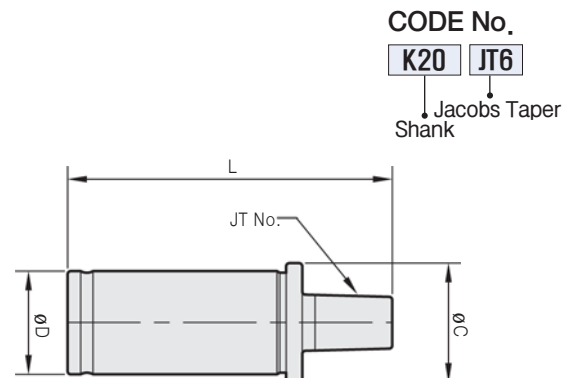
PRODUCT INFORMATION

■ MT샙크 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



PRODUCT INFORMATION

■ JT샙크 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

SC COLLET



Coolant-through hole
Clamping Range : $\varnothing 0.9 \sim \varnothing 25.4$

CODE No.

SC6 **6**

↓
Chucking Dia
SC Collet Size



P Class Collet은 전체 Series에 대응이 가능합니다.

PRODUCT INFORMATION

- 8aper 의 강력한 파지력
- 일반 타입 콜릿은 5 μ m 정도를 보증
- P Class 콜릿은 3 μ m 정도를 보증
- 전 제품 전수 검사, 품질 보증
- A타입은 End mill 정 size 사용
- C타입은 방수형 전용, 정 SIZE 사용
- Powerful clamping force of 8aper.
- The standard type is 5 μ m(T.I.R) RUN-OUT accuracy.
- The P CLASS is 3 μ m(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 - 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
3.175	3.175
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
3.175	3.175
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
3.175	3.175
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

ACCESSORY SC COLLET

SC COLLET



Coolant-through hole
Clamping Range : $\varnothing 0.9 \sim \varnothing 25.4$

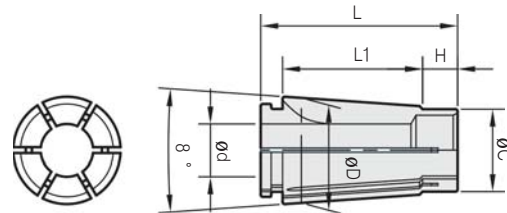
CODE No.

SC6 **6**

↓ Chucking Dia
SC Collet Size



Style	$\varnothing D$	L	$\varnothing C$	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

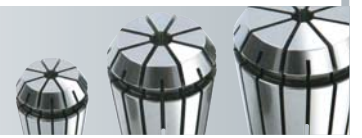
Code No.	Range
SC25 - 16.0	15.6 ~ 16.0
16.5	16.0 ~ 16.5
17.0	16.5 ~ 17.0
17.5	17.0 ~ 17.5
18.0	17.5 ~ 18.0
18.5	18.0 ~ 18.5
19.0	18.5 ~ 19.0
19.5	19.0 ~ 19.5
20.0	19.5 ~ 20.0
20.5	20.0 ~ 20.5
21.0	20.5 ~ 21.0
21.5	21.0 ~ 21.5
22.0	21.5 ~ 22.0
22.5	22.0 ~ 22.5
23.0	22.5 ~ 23.0
23.5	23.0 ~ 23.5
24.0	23.5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

- ▶ SC 콜릿 정밀급 주문시 SC10- $\varnothing P$ 로 주문하여 주십시오.
- ▶ SC 콜릿 방수형 주문시 SC10- $\varnothing C$ 로 주문하여 주십시오.
- ▶ 너트에서 콜릿 추출시 반드시 콜릿 추출도구를 사용하십시오.
SSK척에 부착되어 있습니다. 📎

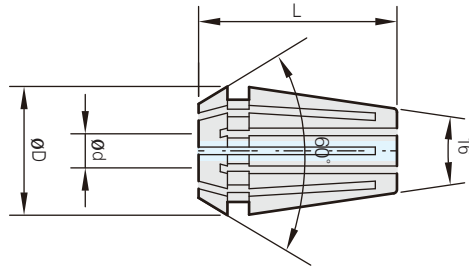
- ▶ Please order SC10- $\varnothing P$ for accuracy SC COLLET. (" P CLASS")
- ▶ Please order SC10- $\varnothing C$ for waterproof SC COLLET.
- ▶ Please use collet remover when you separate SK COLLET from NUT.
(Collet remover is included)

ACCESSORY SC COLLET

ER COLLET



Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



CODE No.

ER11 6

내경
ER Collet Type

PRODUCT INFORMATION

- 높은 정밀도와 다양한 규격
- 강력한 파지력
- $\phi 0.5 \sim \phi 26.0\text{mm}$ 척킹
- Excellent accuracy and various specification.
- Powerful gripping.
- Chucking diameter $\phi 0.5 \sim \phi 26.0\text{mm}$

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

▶ GER정밀급 콜릿은 당사에 문의 하여 주십시오

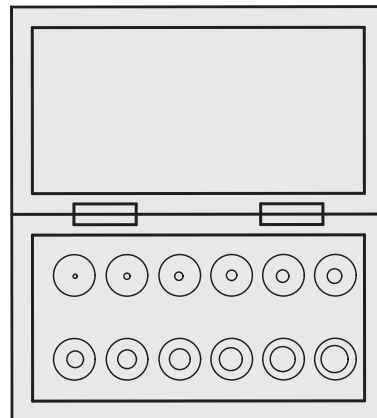
▶ Please contact us for accuracy collet "GER".

ACCESSORY

ER COLLET SET



Coolant-through hole
Clamping Range : $\phi 3.0 \sim \phi 32.0$



CODE No.

ER11 SET

셋트
ER Collet Type

ER COLLET & SET

SE COLLET

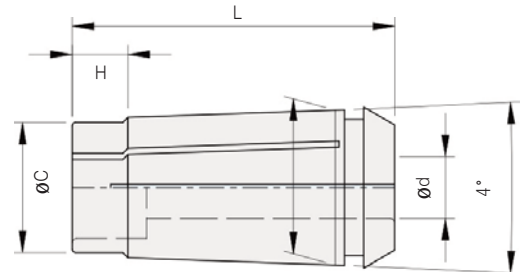


Coolant-through hole
Clamping Range : $\varnothing 6.0 \sim \varnothing 20.0$

CODE No.

SE20 **6**

↓
Chucking Dia
SE Collet Size



PRODUCT INFORMATION

- 4° Taper 의 강력한 파지력
- 5 μ m 정도를 보증
- 전 제품 전수 검사, 품질 보증
- 정 size End mill 사용
- 4° Taper's powerful wave grip.
- The standard type is 5 μ m(T.I.R) RUN-OUT accuracy.
- The quality guaranteed by inspection all products.
- A type is just for endmill of natural number.

CODE NO.	$\varnothing d$	$\varnothing C$	H	L	L1	Collet	Weight (kg)
SE20	6,8,10,12	17	7	44,6	30	SE20	60
SE25	6,8,10,12,16	21	9	52,1	35	SE25	110
SE32	6,8,10,12,16,20	28	10	64,1	45	SE32	240

ER COLLET SET



ACCESSORY

SE COLLET / ER COLLET SET

PRODUCT INFORMATION

- 높은 정밀도와 다양한 규격
- 강력한 파지력
- $\varnothing 0.5 \sim \varnothing 26.0$ mm 척킹
- Excellent accuracy and various specification.
- Powerful gripping.
- Chucking diameter $\varnothing 0.5 \sim \varnothing 26.0$ mm

Code No.	Range	Clamping Range	PCS
ER11-Set	0.5	0.5 ~ 7.0	13
ER16-Set	1.0	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

TER COLLET

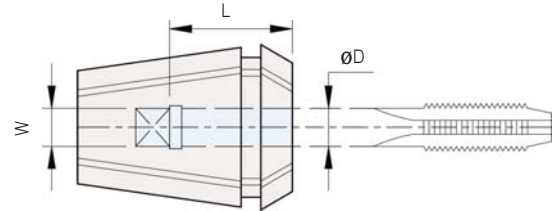


Coolant-through hole
Clamping Range : M2 ~ M24

CODE No.

TER16 **6**

↓ Chucking Dia
TER Collet Size



PRODUCT INFORMATION

- ER 탭콜릿 전용
- ER Tapcollet only.

ACCESSORY

TER COLLET

Code No.	øD	L	W
TER16 - M2	3,5	15	2,5
- M3	4	15	3,2
- M4	5	18	4
- M5	5,5	18	4,5
- M6	6	18	4,5
- M8	6,2	18	5
- M10	7	18	5,5

Code No.	øD	L	W
TER20 - M3	4	15	3,2
- M4	5	18	4
- M5	5,5	18	4,5
- M6	6	18	4,5
- M8	6,2	18	5
- M10	7	18	5,5

Code No.	øD	L	W
TER25 - M3	4	15	3,2
- M4	5	18	4
- M5	5,5	18	4,5
- M6	6	18	4,5
- M8	6,2	18	5
- M10	7	18	5,5
- M12	8,5	20	6,5
- M14	10,5	23,5	8

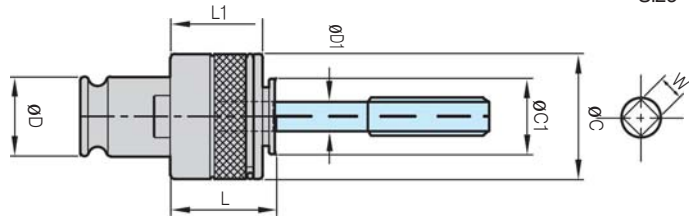
Code No.	øD	L	W
TER32 - M4	5	18	4
- M5	5,5	18	4,5
- M6	6	18	4,5
- M8	6,2	18	5
- M10	7	18	5,5
- M12	8,5	20	6,5
- M14	10,5	23,5	8
- M16	12,5	23,5	10
- M18	14	25	11
- M20	15	25	12
- M22	17	25	13

Code No.	øD	L	W
TER40 - M8	6,2	18	5
- M10	7	18	5,5
- M12	8,5	20	6,5
- M14	10,5	23,5	8
- M16	12,5	23,5	10
- M18	14	25	11
- M20	15	25	12
- M22	17	25	13
- M24	19	28	15

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	5/8~1 3/8	1/4~1 1/8	12~28	72	47	35~68	37

	M(Metric Thread)						U,W(Unify,Whitworth Thread)						PT,PF(Pipe Screw)						W	TCA1 Stock	TCA2 Stock	TCA3 Stock																								
	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																		
TCA1	M3	4				163																	3,2																							
	M4	5																						4																						
	M4,5																																													
	M5		5,5																																											
	M6	6							1/4U	6	24				173	-												4,5																		
	-	-	-						5/16U	6,1					180	-																														
	M7	6,2																														5														
	M8			38											25	38																														
	M9			38						3/8U	7	25				185	202																													
	M10	7		38	-	-	185	202	-	-	-	-	-	-	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,5														
M11	8	26	39						7/16U	8	26				189	206		PT1/8	PF1/8	8	26	28			164	192						6														
M12	8,5		39											40																			6,5													
-	-	-							1/2U	9	27	41			193	210																		7												
M14	10,5	28	41						9/16U	10,5	28				197	214																			8											
-	-	-												42				PT1/4	PF1/4	11	29	31	34	168	196	238									9											
									5/8U	12			34		218	217																														
M16	12,5		43	35										44																						10										
M18	14		44	36											226	279		PT3/8	PF3/8	14		33	36													11										
M20	15		45	37										46																							12									
M22	17		46	38											234	287																						13								
-	-	-																PT1/2	PF1/2	18		36	39															14								
M24	19			44																																		15								
M27	20			62	40										278	265	1U	20																					15							
-	-	-																11/8U	22																				17							
M30	23			62	42										281	303																								17						
-	-	-																																							19					
M33	25			66	44										289	311																									19					
M34	-	-																																								21				
M36	28			68	46										297	319																											21			

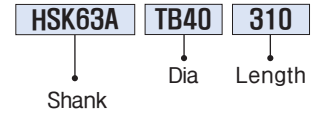
ACCESSORY TAP ADAPTER (TCA)

TEST BAR

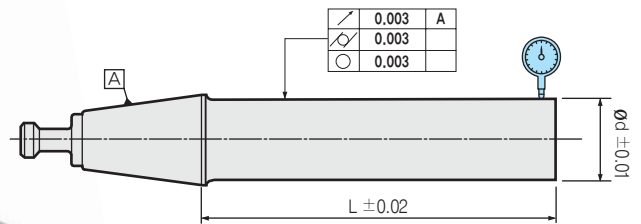
기계점검 정도 Check의 필수품

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

CODE No.



출하시 ϕd 와 L의 실측치수가
마킹되어 있습니다.

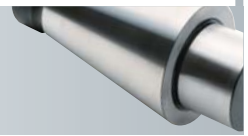


PRODUCT INFORMATION

- ϕd 에 대한 진원도, 직진도, 원통도 0.003mm이내
- 3mm(T.I.R) Runout Accuracy.
- 스페셜 Size 주문제작
- The speical size is made by order.

Code No.	ϕd	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





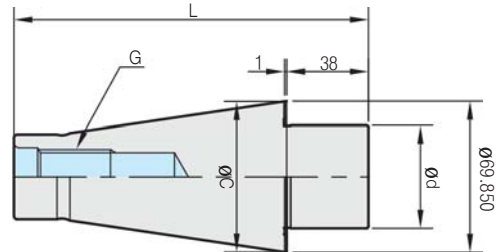
CENTERING PLUG



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



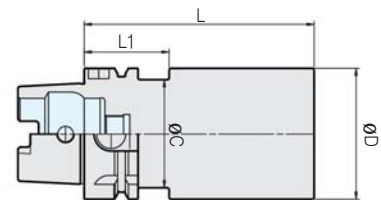
BLANK TOOL



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			200	
HSK100A - BLK 102 - 150	102	85	150	45
- 250			250	
BLK 126 - 200			200	
BT30 - BLK48 - 180	48	44	180	30
BT40 - BLK63 - 150	63	61	150	35
- 250			250	
BLK82 - 200			200	
BT50 - BLK102 - 150	102	98	150	48
- 250			250	
BLK126 - 200			200	

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

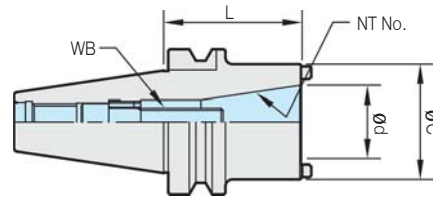
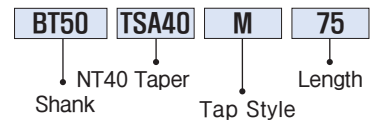
- ▶ The blank tool has a compatible hardness for use and feature of blank tool.
- ▶ The special size is order-made.

ACCESSORY CENTERING PLUG / BLANK TOOL

TAPER SLEEVE ADAPTER



CODE No.

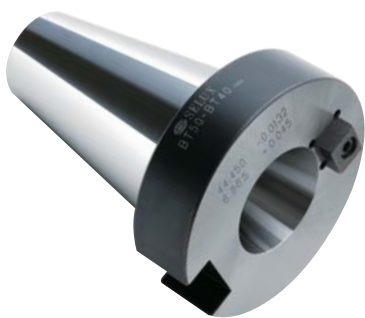


PRODUCT INFORMATION

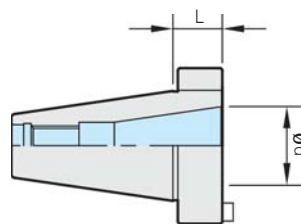
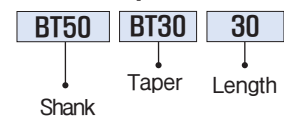
- NT Type 을 BT Type으로 변환 어댑터
- NT Type Change BT Type Adapter.

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.



PRODUCT INFORMATION

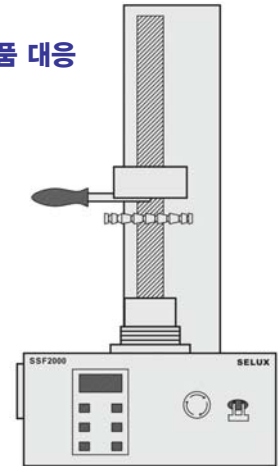
- 툴 프레셋터 전용 공구입니다.
- Tool presetter optional accessories.
- Special size도 제작합니다.
- Special size can be ordered.

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	초경	
		삽입	탈착
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

- ▶ 퓨즈 및 내열장갑은 부속되어 있습니다.
- ▶ 코일은 30mm 기본포함 사항입니다. 그외 사이즈는 별도 구매입니다.
- ▶ 자세한 사용법 및 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.



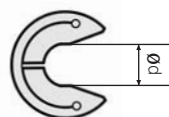
ACCESSORY

SHRINK FIT MACHINE

Stopper

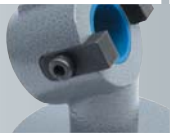


열박음시 공구길이 조정



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

TOOL SETTING STAND



CODE No.

BT50 **TSS**

↓ Tool setting stand
↓ Shank

PRODUCT INFORMATION

- 45형으로 편리한 사용
- HSK용 수직형 타입
- Easy to use by 45type.
- 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**

↓ Universal magnetic base
↓ Length

PRODUCT INFORMATION

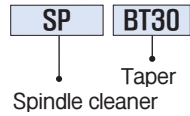
- 편리한 조작과 수평길이 340mm의 긴 측정범위
- 강력한 마그네틱 베이스로 완전고정
- 클램프 다이얼 하나로 관절부 완벽고정 흔들림 없음.
- 다이얼 인디케이터는 별도구매
- Easy to use and have a long measuring range that is 340mm.
- Complete fix by powerful magnetic base.
- It is possible to fix axial joint just only fastening the clamp dial.
- The dial indigeiter is not included.

Code No.	Holding Power	BASE SIZE			Arm Length	Weight (kg)
		L	W	H		
UMB-34	80KG	60	50	55	340mm	1.5

SPINDLE CLEANER



CODE No.



PRODUCT INFORMATION

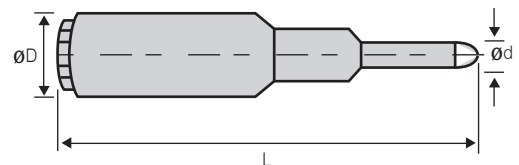
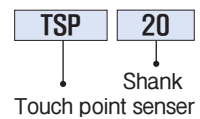
- 고급 양모지로 제작
- 장비 스피들내의 정전기 발생을 방지하며 스피들과 공구의 수명을 연장가능
- The cleaner is made of lambskin.
- It is for antistatic feature on the machine spindle and improve the tool life and the spindle

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.



PRODUCT INFORMATION

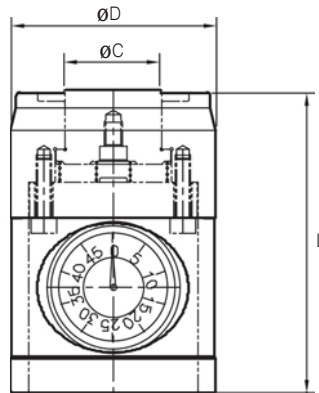
- 주의: 터치 포인트 센서는 회전시 사용을 금지합니다.
- Notice to optical edge finder that is not suitable used for rotatory.

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

ACCESSORY

SPINDLE CLEANER / TOUCH POINT SENSOR

HEIGHT PRESETER



CODE No.
HP **100**
 ↓ ↓
 Height preserter 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

ACCESSORY

HEIGHT PRESETER / ZOP-50

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. ■ GH spanner is for high speed nut and easy to use.
- 일반스페너의 50%힘만으로 체결이 가능 합니다. ■ It just need 50% power comparing to general spanner.

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		

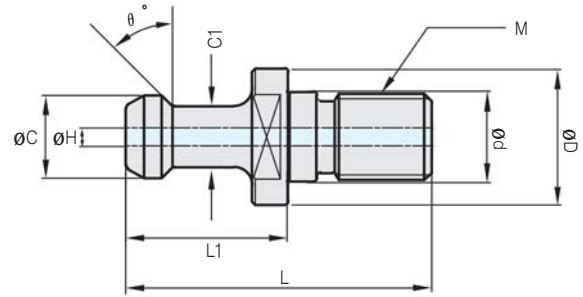
ACCESSORY SPANNER / GH SPANNER

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	2,5		
PS - 17	P30T - 2						30 °					
	P30T - 1(ø 2,5)						45 °					
PS - 1	P40T - 1	17	23	60	15	10	45 °	35	M16	3		
PS - 2	P40T - 2						30 °					
PS - 73	P40T - 1(ø 3)						45 °				3	
PS - H28	P40T - 1HS						30 °					
PS - 75	P40T - 2(ø 3)						0 °				29,6	
PS - 08	PS40 - 3F						45 °				7	
PS - G5	PS40 - 1F		19,11									
PS - G58	PS - G58		22	44,11	18,80	12,45	45 °	29	6			
PS - G51	PS - G51			54	19	14	15 °					
PS - 805	PS - 805		23	50	15	10	0 °	25	7			
PS - 806	PS - 806	54		19	14	15 °	26					
PS - P5	MP - 40	25	22,5	44,5	18,95	12,95	45 °	16,4	M24	7,35		
PS - 309	DIN69872 - A40						45 °					
PS - 302	DIN69872 - B40		30 °	7								
PS - A1	ISO7388/2 - A40		45 °									
PS - A4	ISO7388/2 - B40		30 °									
PS - 5	P50T - 1		38	85	23	17	45	45 °	45	M24	7	
PS - 6	P50T - 2							30 °				
PS - 5E	P50T - 1(ø 7)							45 °				7
	P50T - 1HS							30 °				
PS - 6E	P50T - 2(ø 7)							0 °				7(O-RING)
PS - 0	PS50 - 1F							7				
PS - H33	PS50 - 1FH		7(O-RING)									
	PS50 - 1F(ø 7)		7									
PS - G45	PS - G45		37	65,2	28,97	20,83	45 °	25,2	10			
PS - G41	PS - G41	38		74	28	21	15 °	34				
PS - 809	PS - 809	36	71	24	18	0 °	31	10				
PS - 810	PS - 810		38	110	22	16	30 °		72			
PS - P	MP - 50	36	74	28	21	15 °	34	11,5				
PS - B1	PS50 - 1L		37	65,5	29,1	19,6	45 °		25,55			
PS - 512	DIN69872 - A50	36	74	28	21	15 °	34	11,5				
PS - 581	DIN69872 - B50											
PS - A3	ISO7388/2 - A50											
PS - A6	ISO7388/2 - B50	37	65,5	29,1	19,6	45 °	25,55	11,5				

- ▶ 사용할 기계의 폴스터드볼트 사양을 꼭 확인후 주문해 주십시오.
- ▶ Center Through 기계에 오일홀이 없는 폴스터드 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.

ACCESSORY PULL STUD BOLT

PULL STUD BOLT SPEC

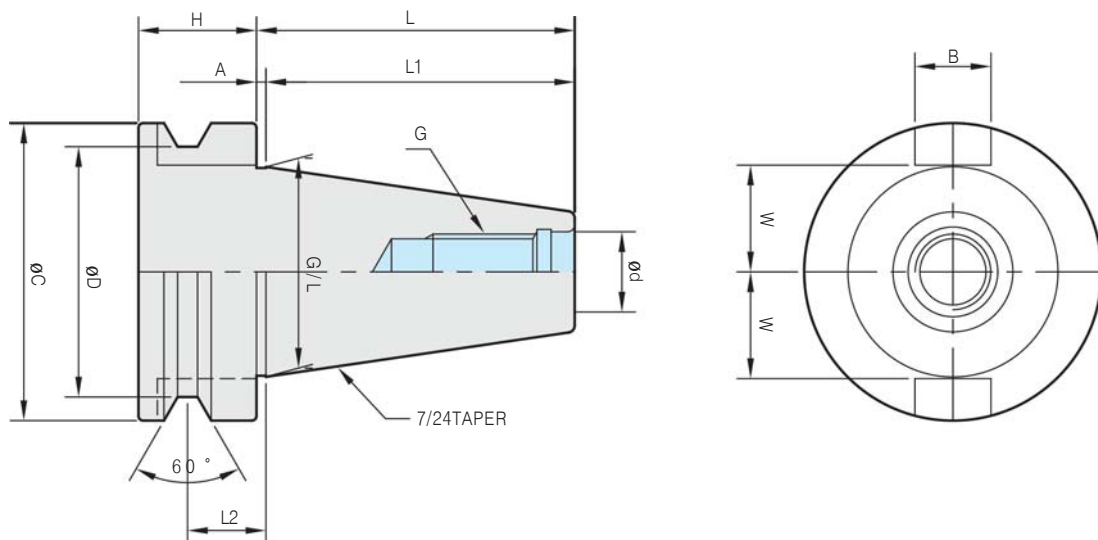


장비 회사명	모델명	공구 형식	PSB	Oil Hole Type	장비 회사명	모델명	공구 형식	PSB	Oil Hole Type
DOOSAN	ACE-TC3200D	BT30	P30T-1	P40T-1(3)	SMEC	Any Mill LCV30A/B	BT30	P30T-2	
	ACE-TC400					Any Mill LCV55S		BT50	P50T-2
	ACE-HC400/500	Any Mill LCV650S	P50T-1	P50T-1		P50T-1(7)			
	ACE-HP4000/5100	Any Mill LCV66							
	ACE-V430	Any Mill LCV80							
	ACE-VC500	DMC-3000	P50T-1F	PS50-1FH					
	ACE-VM5410/510	PCH40	BT40	P40T-1		P40T-1(3)			
	ACE-VM600	PCH50	BT50	P50T-1		P50T-1(7)			
	ACE-VMD450	HWACH EON	BT30	P30T-1		SIRIUS-1			
	Mynx 410					SIRIUS-550	BT40	P40T-1	P40T-1(3)
	Mynx NM410		SIRIUS-UL/ULG	BT50	PS50-1F	PS50-1FH			
	ACE-H100		SIRIUS-12580						
	ACE-HM500/630/800		SIRIUS-650/650N						
	ACE-HP500/630		SIRIUS-700						
	ACE-VM710		SIRIUS-7040						
	ACE-VM900/950		SIRIUS-850/850N						
	Mynx 500		HASS	BT40	P40T-1	P40T-1	P40T-1(3)		
	Mynx 650							TM-1/2	
	Mynx 750	VF-4SS/3SS/2SS		BT50	P50T-1	P50T-1	P50T-1(7)		
	NR 510M	VF-2TR							
NR 700	VF-5/50TR								
NR 5000	VF-9/50								
VM 70(H)	VF-8/50								
VM 84	MAZZAK	BT40			PS-G51				
VM 925L		BT50			PS-G41				
VM 560/50	MORI SEKI	BT40	PS40-3F						
WA		MX 380/420	BT30	P30T-1					
	VX 380T/420T								
	KV 45/45P	BT40	P40T-1	P40T-1	P40T-1(3)				
	VX 400/460								
	VX 500								
	VX 510M/660M								
	VX 700/40	BT50	P50T-1	P50T-1	P50T-1(7)				
	VX 700/50								
	KV 60N/90								
	VX 750								
	WA500/50								
	S&T (구 통일)					FX-500H	BT40	P40T-2	P40T-2(3)
						TCH-45			
TNV-40A		BT50	P50T-2	P50T-2(7)					
TNV-80A									
TCH-50									
TCH-80									
TCH80TS									
TNV-650V									

ACCESSORY PULL STUD BOLT STANDARD (SPEC)

NATIONAL TAPER SHANK

MAS 403(BT) JIS B6339

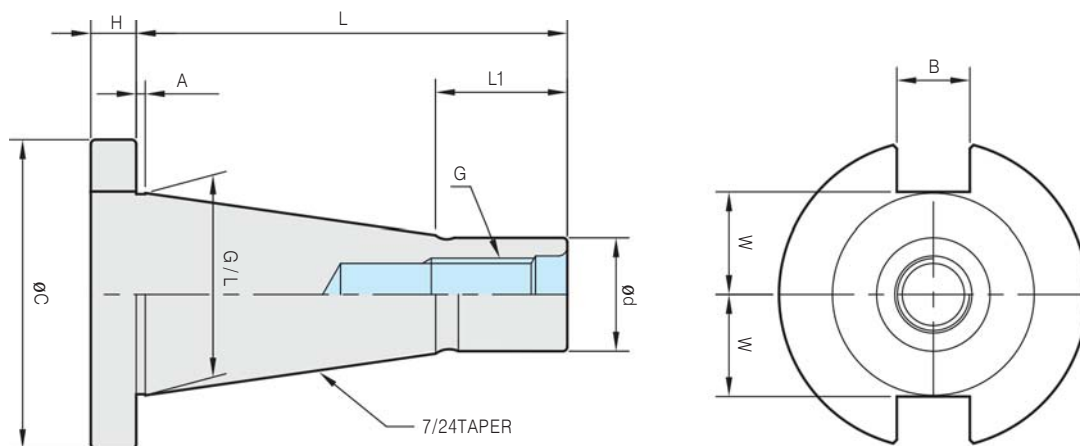


(mm)

Taper	ϕd	G/L	ϕD	L	ϕC	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



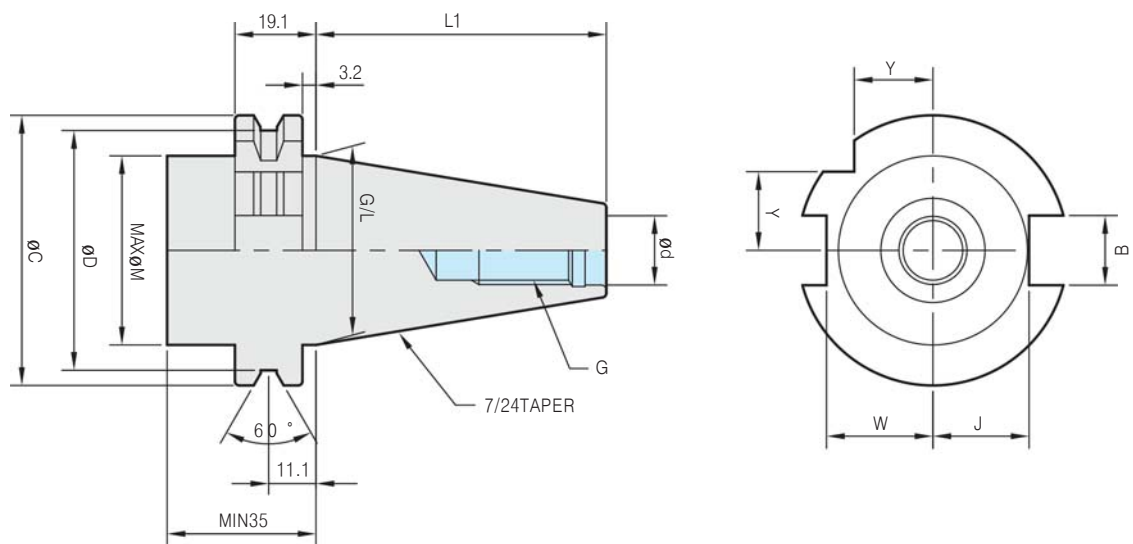
TECHNICAL

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



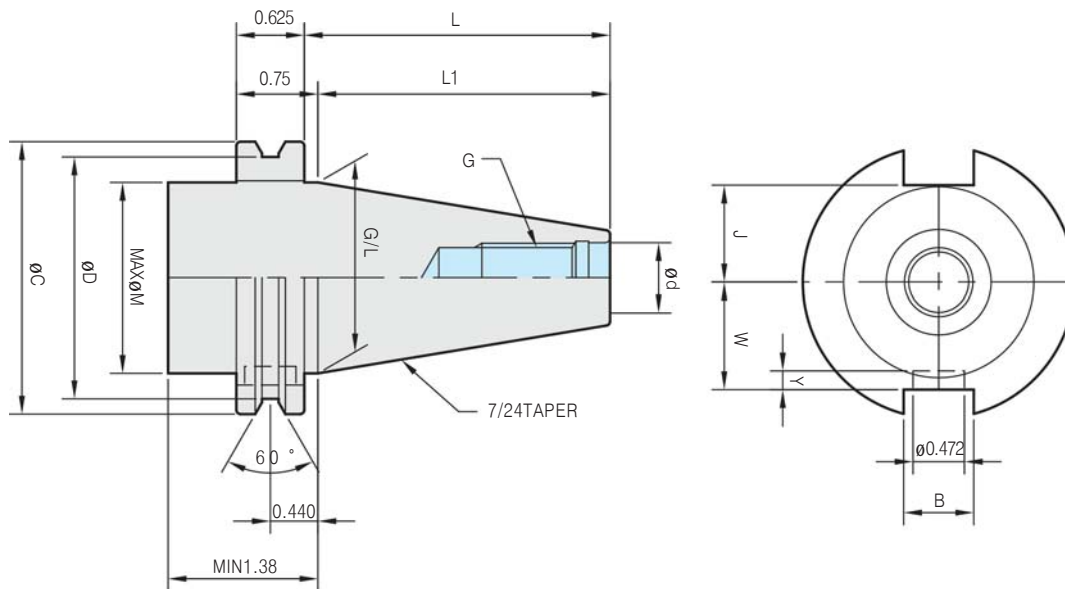
(mm)

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

TECHNICAL

NATIONAL TAPER SHANK

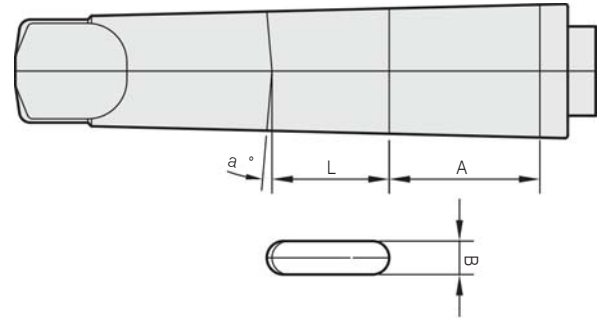
ANSI B5,50 CATERPILLAR



(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

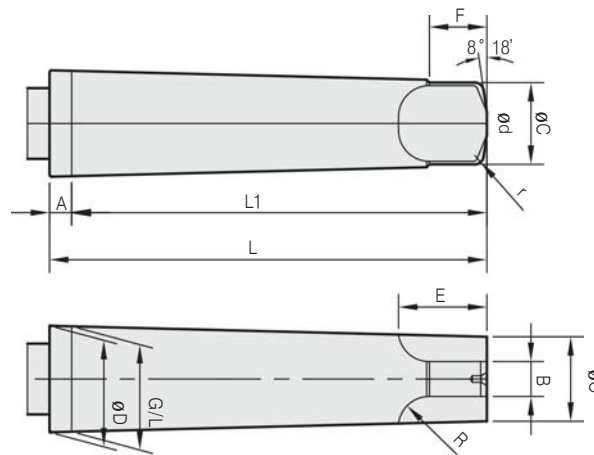
- 대형 Endmill이나 Tapping등의 중절삭 가공시 추력의 발생으로 툴의 빠짐을 Cotter pin을 박음으로 방지가능.
- 장비 업체에 따라 Cotter pin 구멍이 다르므로 기계 회사명 및 A, B, L 치수를 알려주십시오.

- 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
	Ooya	O	9	21	8,0	-	YD2, YD3
			5	18	8,2	-	R2000
			9	10	8,2	-	RA2-1300
	Okuma	B	26	30	8,2	-	RE-1250A
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	-		

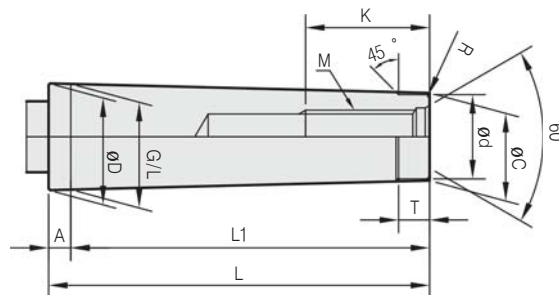
MORSE TAPER SHANK

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

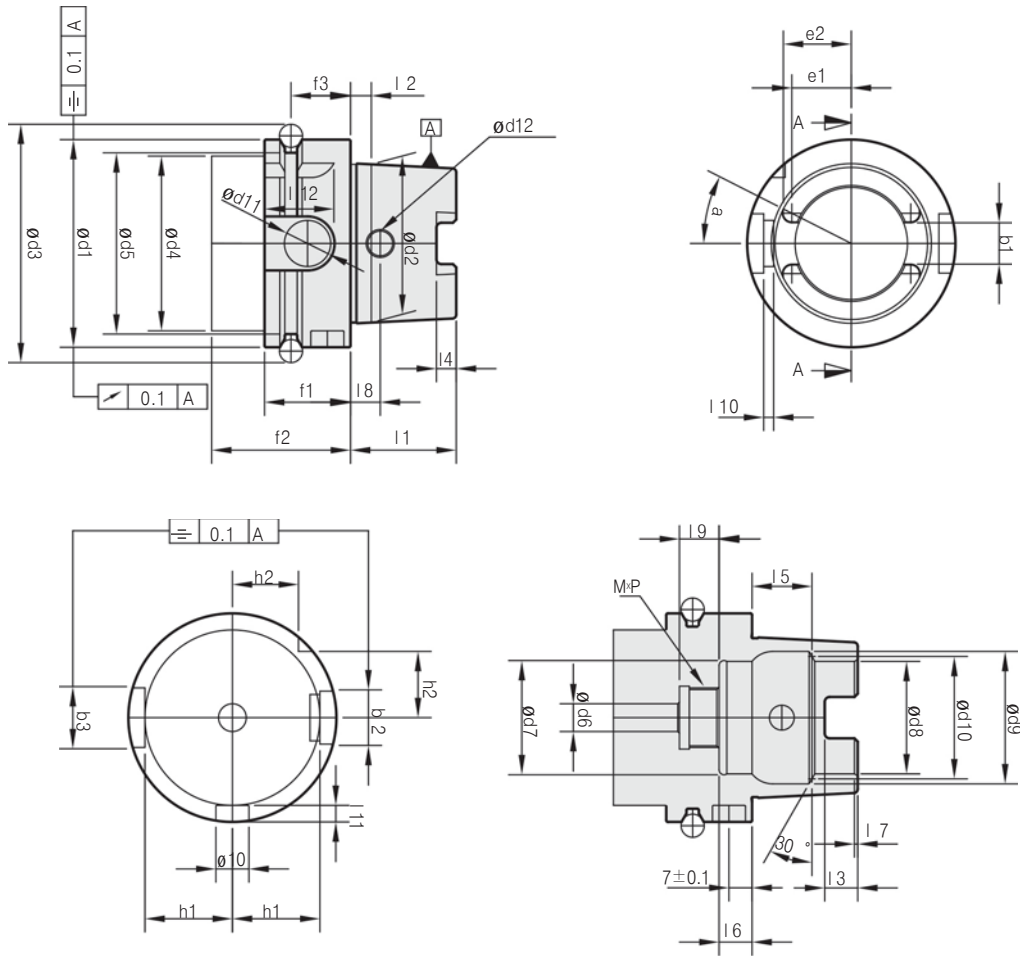


(mm)

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	$\varnothing d_1$	$\varnothing d_2$	$\varnothing d_3$	$\varnothing d_4$	$\varnothing d_5$	$\varnothing d_6$	$\varnothing d_7$	$\varnothing d_8$	$\varnothing d_9$	$\varnothing d_{10}$	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	$\varnothing d_3$	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	\varnothing_{11}	$\varnothing d_{12}$	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

TECHNICAL

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 잠귀 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 됩니다. 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 防清油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 取扱說明書を 읽어 주십시오. 그 밖에 詳細한 內容은 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