

# DOHRE



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网址：[www.dohrecnc.com](http://www.dohrecnc.com) 邮箱：[dohre@dohrecnc.com](mailto:dohre@dohrecnc.com)

2019~2021  
Indexable  
cutting tool  
catalog

舍弃式刀具产品画册



# Introduction



## DOHRE CNC TOOL CO.,LTD

DOHRE Tool Co.,Ltd is professional manufacturer and services provider of CNC cutting tools, mainly service for the users of cnc machines from different cities in the world, provide high quality, favourable price, earlier delivery and full technology supports.

DOHRE Tool Co.,Ltd always advocates "integrity, pragmatism, innovation, efficiency" operation principle, introduced the latest German cnc 5 axis grinding machines, cnc 5 axis automatic detection equipments and advanced grinding technology. Till now, we have 20 imported grinding machines, adopted the top quality carbide rods from home and abroad, thus developed high-class, high efficiency, advanced manufacturing system, the good quality products we produced-cnc tungsten carbide end mills, forming cutting tools, cnc high accuracy tool holder, high precision collets, and full range cutting tools design program has been well received in lots of users. DOHRE will be confident to meet your needs with good quality products, competitive prices and fast services.

哆乐数控工具有限公司是CNC切削刀具专业制造销售商和技术服务商，主要面向全世界各工业城市的数控机床使用企业，提供高品质，高性价比，短交货期的切削工具和全方位的技术支持。

哆乐数控工具有限公司一直倡导诚信、务实、创新、高效率的经营理念，引进德国最先进的CNC五轴磨床设备和CNC五轴全自动测量设备，CNC螺纹磨床领先磨刀技术，公司现有进口磨床20台，采用国内外最优质的棒材，从而形成了优质、高效、先进的生产制造系统，所生产的高品质CNC钨钢铣刀、钨钢丝攻、非标丝攻、成型刀具、CNC高精度刀柄、高精度筒夹和全方位切削刀具设计方案，在国内外受到众多使用者的好评。带着最优质的产品，最有竞争力的价格和最快捷的服务，哆乐将以完全的自信来满足您的需求。



銑削夾持具系列 Milling tool holder series

09-52



銑削攻牙夾持具系列 Tapping tool holder series

53-69



孔加工刀具系列 Boring tool series

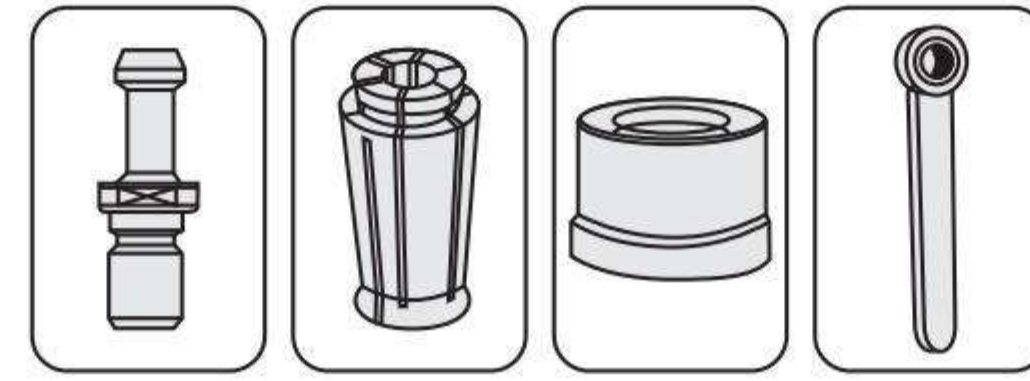
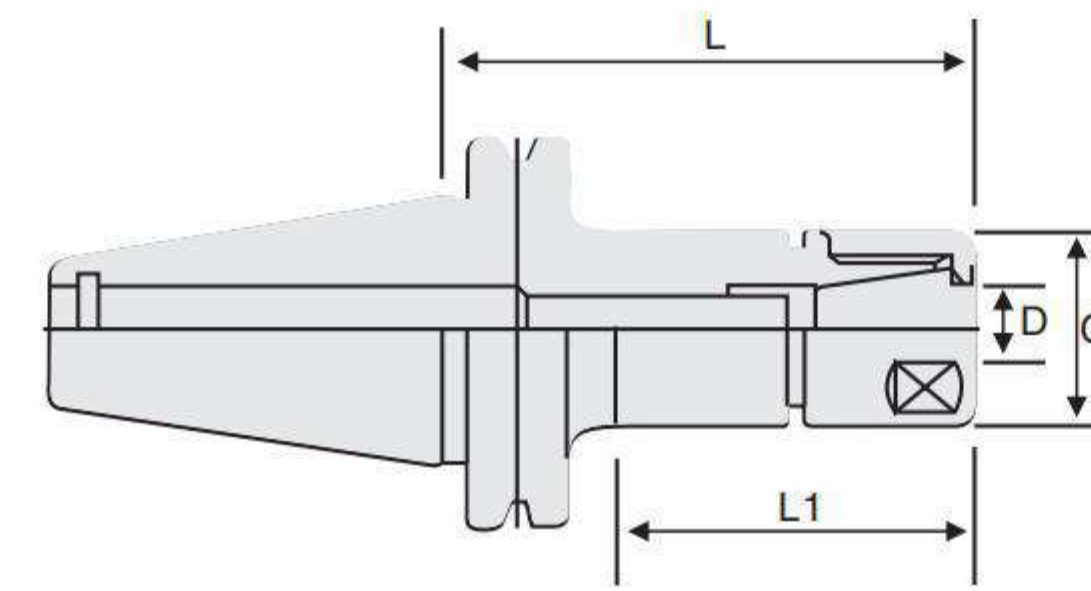
70-98







## PRECISION MILLING HOLDER 銑削夾持具



BT-SK HIGH SPEED TOOL HOLDER

**BT-SK 高速刀柄** 預設動平衡、精度高，適合高速旋轉 最高轉速40000MIN<sup>-1</sup>

	型號 Specification	夾持範圍 Clamping range	尺寸 Size			最高旋轉數 MAX.min <sup>-1</sup>	Sk筒夾 Collet
			L	L1	C		
<b>BT30</b>	-SK6-60	2~6.0	60	38	19.5	SK6	SK6
	-SK6-90		90	68			
	-SK10-60	2~10.0	60	38	27	SK10	SK10
	-SK10-90		90	68			
	-SK16-60	3~16.0	60	38	40	SK16	SK16
	-SK16-90		90	68			
	-SK20-60	3~20.0	60	38	48	SK20	SK20
	-SK20-90		90	68			
<b>BT40</b>	-SK6-60	2~6.0	60	33	19.5	SK6	SK6
	-SK6-90		90	63			
	-SK6-120		120	93			
	-SK10-60	2~10.0	60	33	27	SK10	SK10
	-SK10-90		90	63			
	-SK10-120		120	93			
	-SK16-60	3~16.0	60	33	40	SK16	SK16
	-SK16-90		90	63			
-SK16-120	120		93				
-SK20-90	3~20	90	63	48	SK20	SK20	
<b>BT50</b>	-SK10-100	2~10.0	100	73	27	SK10	SK10
	-SK10-150		150	123			
	-SK10-200		200	173			
	-SK10-250		250	223			
	-SK16-100	3~16.0	100	73	40	SK16	SK16
	-SK16-150		150	123			
-SK16-200	200	173					
-SK16-250	250	223					

- 1、不帶鎖緊扳手如需要請另訂購
- 2、不附帶拉了



SPANNER  
**SK 型扳手**

樣式 Pattern	型號 Specification	D	重量 weight(KG)
标准型	SK6-SP	19.5	0.2
	SK10-SP	27	0.27
	SK16-SP	40	0.39
	SK20-SP	48	0.45



HIGH SPEED NUT  
**SK 高速螺帽**

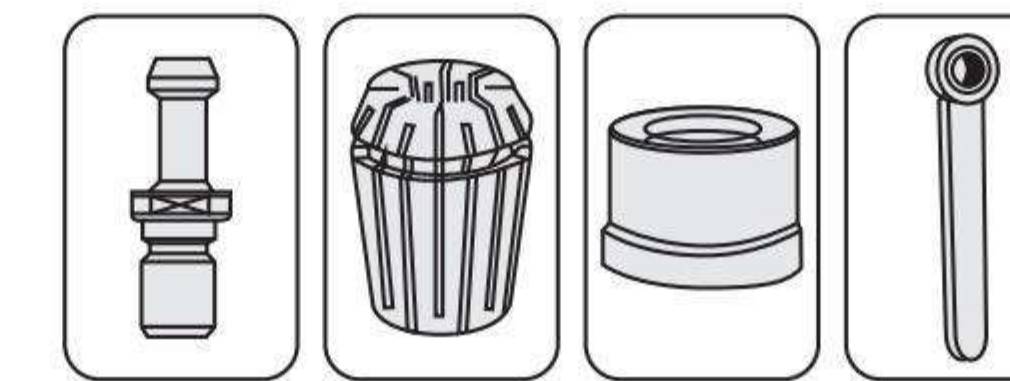
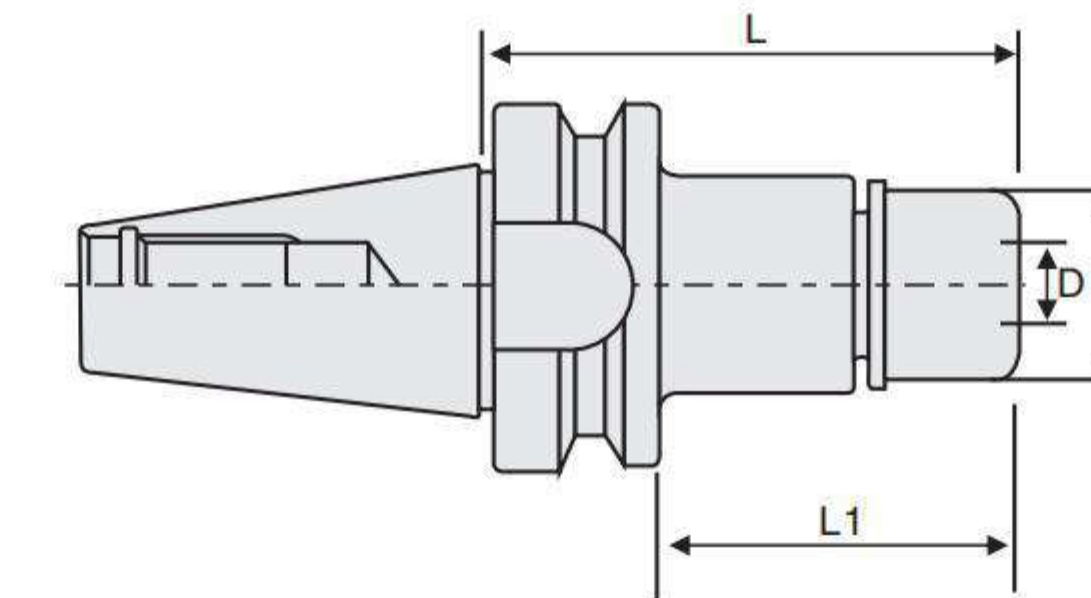
樣式 Pattern	型號 Specification	D
标准型	SK6-CN	19.5
	SK10-CN	27
	SK16-CN	40
	SK20-CN	48

### 特點/Feature

- 1、預設動平衡，刀柄精度高，適合高速旋轉，跳動0.003mm，最高轉速G2.5 40000rpm。
  - 2、表面硬度HV220的滑動旋轉，不會損傷，無響聲。
  - 3、是面與面接觸，微米跳動切削力提高，道具使用壽命延長。
  - 4、同心度高，穩定的震動精度，提高精加工表面精度。
- 1、Pre-balanced, high precision run-out 0.003mm, suitable for high rotating, maximum G2.5 40000 rpm.
  - 2、Surface hardness up to HV 220 by rotating, no damage and noise.
  - 3、Covering interface with precision vibration and high metal removal, increased tool life.
  - 4、High concentricity, stable run-out accuracy to enhance fine machining surface roughness.

## PRECISION MILLING HOLDER 銑削夾持具

G2.5  
30000RPM



BT-GER HIGH SPEED ER COLLET CHUCK

**BT-GER 高速刀柄**

	型號 Specification	夾持範圍 Clamping range	尺寸 Size		最高轉數 Min <sup>-1</sup>	筒夾 Collet	螺帽 Nut
			L	L1			
<b>BT30</b>	-GER16-70	3.0~10.0	70	48	30000	ER16	GER16
	-GER16-100	3.0~10.0	100	78	30000	ER16	GER16
	-GER20-70	3.0~12.0	70	48	30000	ER20	GER20
	-GER20-100	3.0~12.0	100	78	30000	ER20	GER20
	-GER25-70	3.0~16.0	70	48	30000	ER25	GER25
	-GER25-100	3.0~16.0	100	78	30000	ER25	GER25
	-GER32-100	3.0~20.0	100	78	25000	ER32	GER32
	-GER32-150	3.0~20.0	150	123	20000	ER32	GER32
<b>BT40</b>	-GER16-70	3.0~10.0	70	43	25000	ER16	GER16
	-GER16-100	3.0~10.0	100	73	25000	ER16	GER16
	-GER20-70	3.0~12.0	70	43	25000	ER20	GER20
	-GER20-100	3.0~12.0	100	73	25000	ER20	GER20
	-GER25-70	3.0~16.0	70	43	25000	ER25	GER25
	-GER25-100	3.0~16.0	100	73	25000	ER25	GER25
	-GER25-150	3.0~16.0	150	123	25000	ER25	GER25
	-GER32-70	3.0~20.0	70	43	20000	ER32	GER32
-GER32-100	3.0~20.0	100	73	20000	ER32	GER32	
-GER32-150	3.0~20.0	150	123	20000	ER32	GER32	

### 特點/Feature

- 1、預設動平衡，刀柄精度高，高速銑削鑽攻中心機專用刀柄，跳動0.003mm，最高轉速G2.5 30000rpm。
- 2、噪音低，風阻小。
- 3、前后自適應定位，重複裝夾精度高。

- 1、Pre-balanced, high precision run-out 0.003mm, applied for high speed engraving&milling and drilling machining center, maximum G2.5 30000 rpm.
- 2、Low noise and small wind resistance.
- 3、Adaptive positioning from both front and back and high precision repetition.





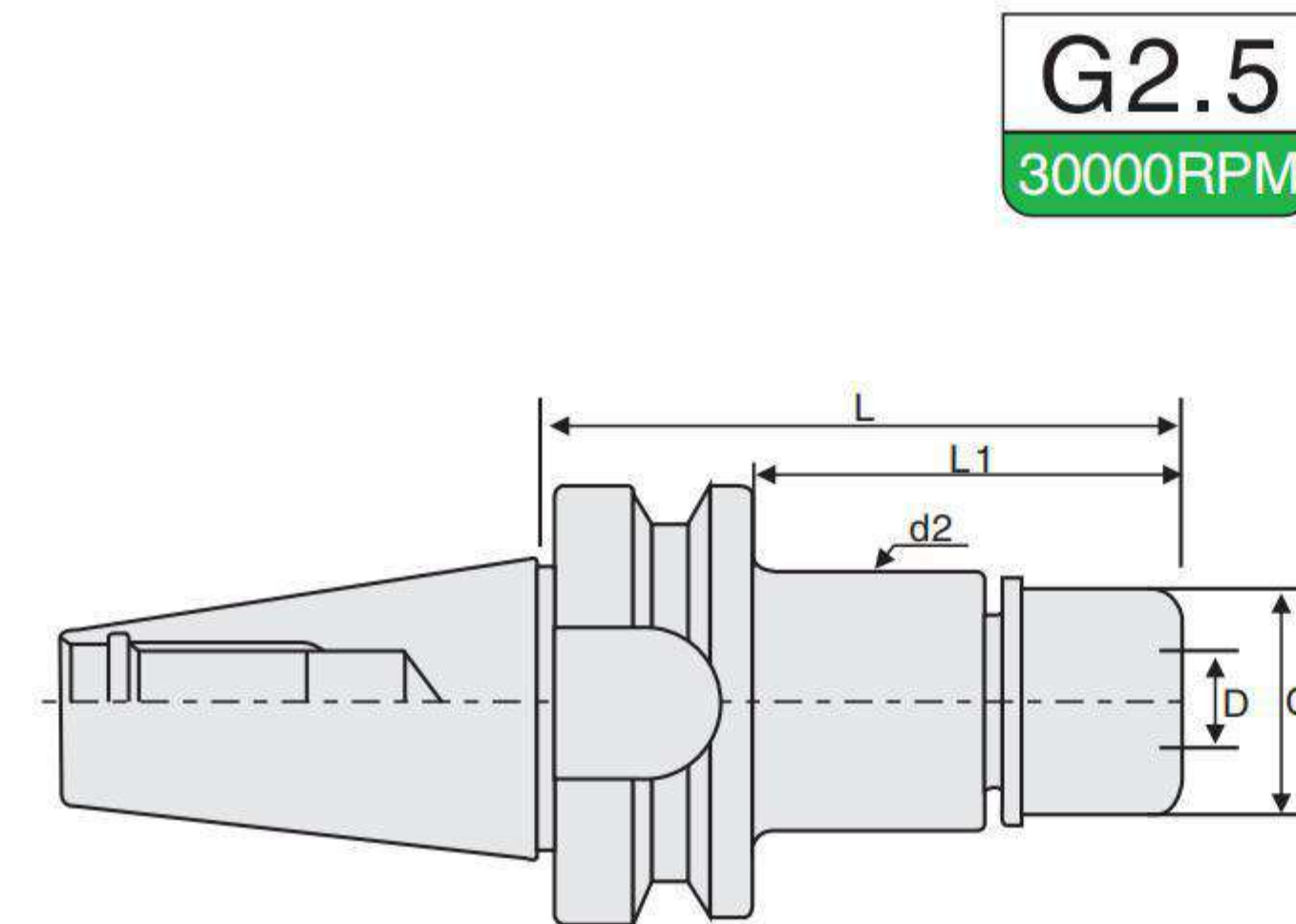
## PRECISION MILLING HOLDER 銑削夾持具



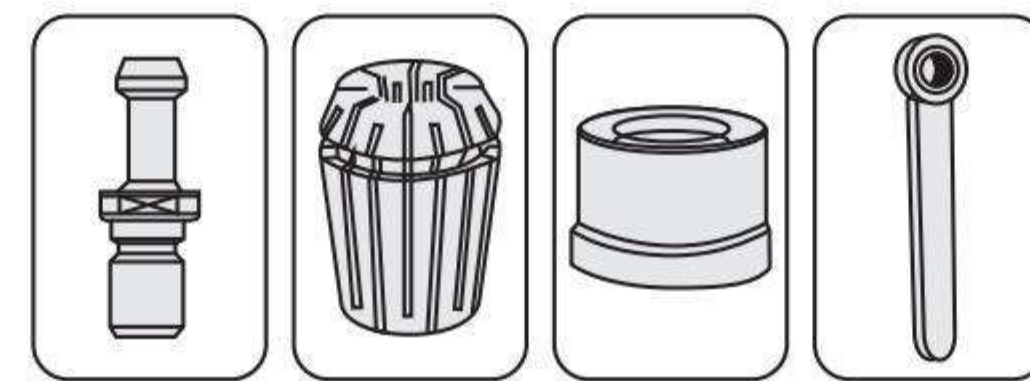
**NEW**

BT-GER HIGH SPEED ER COLLET CHUCK

### BT-HGER 高速刀柄



G2.5  
30000RPM



	型號	夾持範圍	L	L1	ΦC	最高轉數 Min <sup>-1</sup>	筒夾 Collet	螺帽 Nut
	Specification	Clamping range						
<b>BT30</b>	-HGER16-70	3.0~10.0	70	48	30	30000	ER16	HGER16
	-HGER16-100	3.0~10.0	100	78	30	30000	ER16	HGER16
	-HGER20-70	3.0~12.0	70	48	35	30000	ER20	HGER20
	-HGER20-100	3.0~12.0	100	78	35	30000	ER20	HGER20
	-HGER25-70	3.0~16.0	70	48	40	30000	ER25	HGER25
	-HGER25-100	3.0~16.0	100	78	40	30000	ER25	HGER25
<b>BT40</b>	-HGER32-70	3.0~20.0	70	48	50	25000	ER32	HGER32
	-HGER32-100	3.0~20.0	100	78	50	25000	ER32	HGER32
	-HGER16-70	3.0~10.0	70	43	30	25000	ER16	HGER16
	-HGER16-100	3.0~10.0	100	73	30	25000	ER16	HGER16
	-HGER20-70	3.0~12.0	70	43	35	25000	ER20	HGER20
	-HGER20-100	3.0~12.0	100	73	35	25000	ER20	HGER20
	-HGER25-70	3.0~16.0	70	43	40	25000	ER25	HGER25
	-HGER25-100	3.0~16.0	100	73	40	25000	ER25	HGER25
	-HGER25-150	3.0~16.0	150	123	40	25000	ER25	HGER25
	-HGER32-70	3.0~20.0	70	43	50	20000	ER32	HGER32
-HGER32-100	3.0~20.0	100	73	50	20000	ER32	HGER32	
-HGER32-150	3.0~20.0	150	123	50	20000	ER32	HGER32	

#### 特點/Feature

1. 預設動平衡，刀柄精度高，跳動0.003mm，高速雕銑鑽攻中心機專用刀柄，最高轉速G2.5 30000rpm。
  2. T型螺牙設計，扭力提升50%，避免掉刀。
  3. 非偏心平衡全圓螺帽。
  4. 前后自適應定位，重復裝夾精度高。
  5. 噪音低，風阻小。
1. Pre-balanced, high precision run-out 0.003mm, applied for high speed engraving&milling and drilling machining center, maximum G2.5 30000 rpm.
  2. T type screw design enhances 50% of the torque value to avoid drop of the tool.
  3. Non-decenter balanced round nut.
  4. Adaptive positioning from both front and back and high precision repetition.
  5. Low noise and small wind resistance.

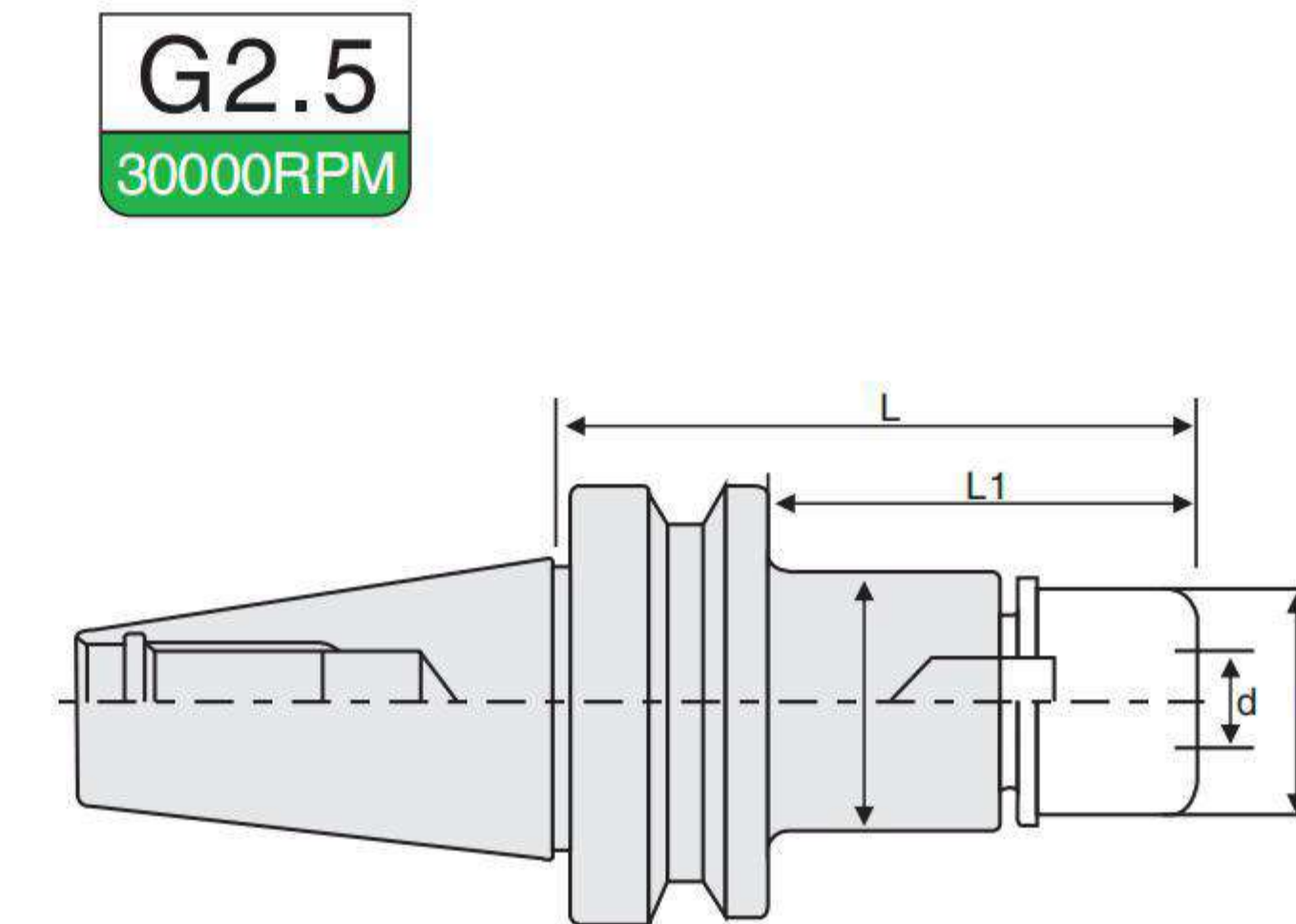


## PRECISION MILLING HOLDER 銑削夾持具

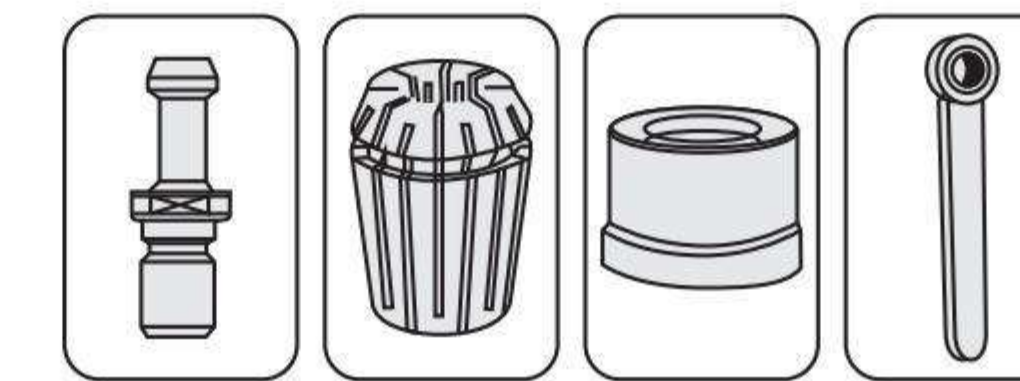


NBT-GER HIGH SPEED ER CHUCK SYSTEM

### NBT-GER 高速刀柄



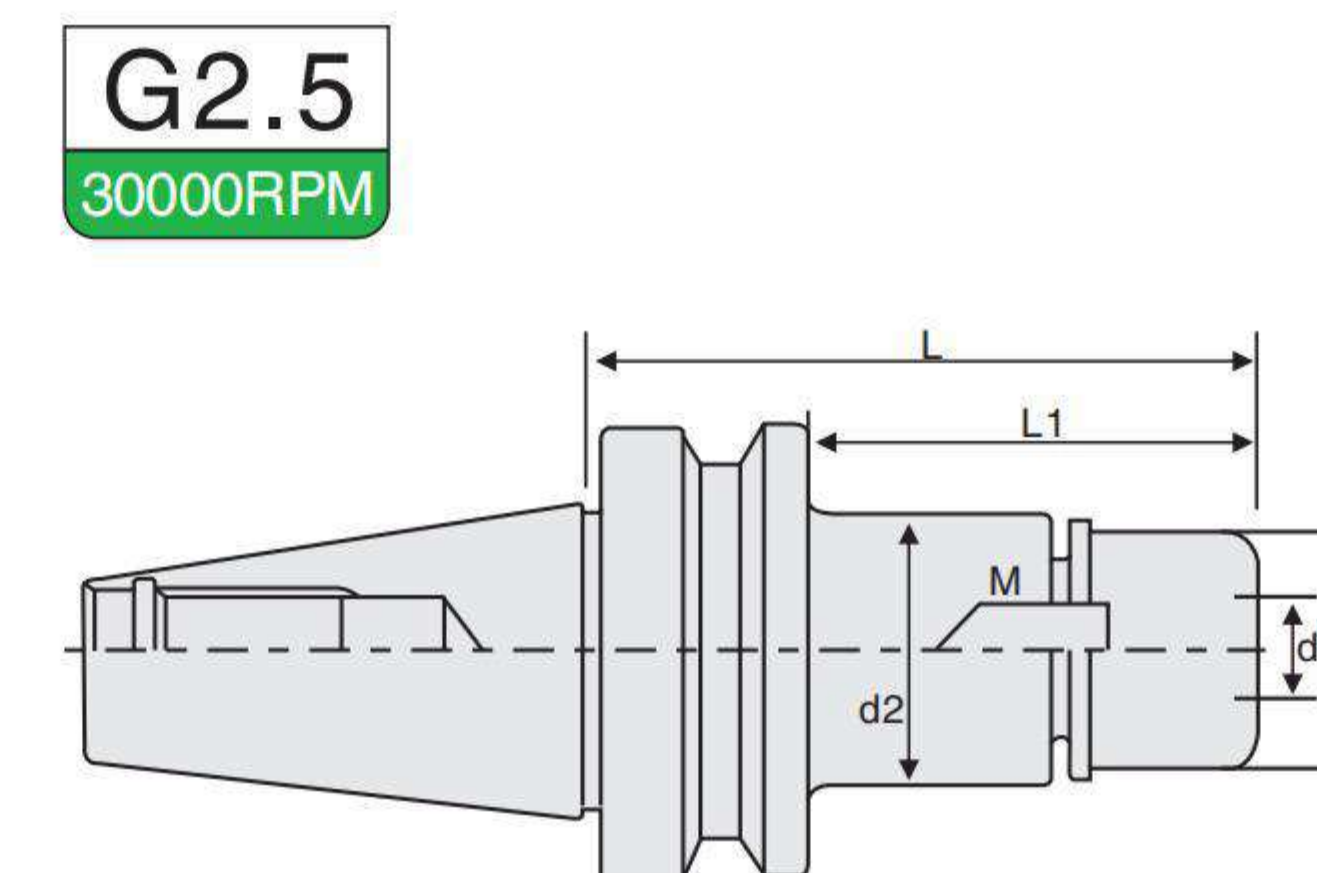
G2.5  
30000RPM



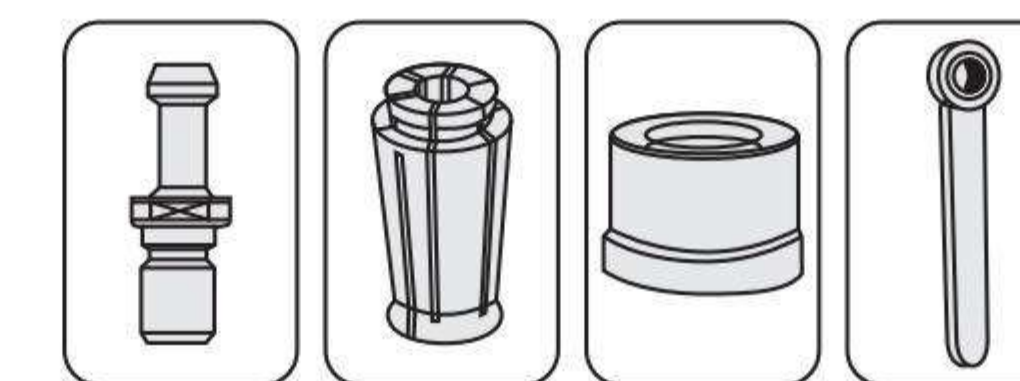
	型號	把握直徑	d1	d2	L	L1	M	螺帽	筒夾	扳手	鎖刀座
	Specification	Clamping range						Nut	Collet	spanner	
<b>NBT30</b>	-GER16-70	3.0~10.0	27	27.5	70	48	M22X1.0	GER16MINI	ER16	25	NBT30
	-GER20-70	3.0~13.0	30	30.5	70	48	M25X1.0	GER20MINI	ER20	30	NBT30
	-GER25-70	3.0~16.0	35	35.5	70	48	M30X1.0	GER25MINI	ER25	35	NBT30

#### 特點/Feature

1. 預設動平衡，刀柄精度高，高速雕銑鑽攻中心機專用刀柄，跳動0.003mm，最高轉速G2.5 30000rpm。
  2. 噪音低，風阻小。
  3. 前后自適應定位，重復裝夾精度高。
1. Pre-balanced, high precision run-out 0.003mm, applied for high speed engraving&milling and drilling machining center, maximum G2.5 30000 rpm.
  2. Low noise and small wind resistance.
  3. Adaptive positioning from both front and back and high precision repetition.



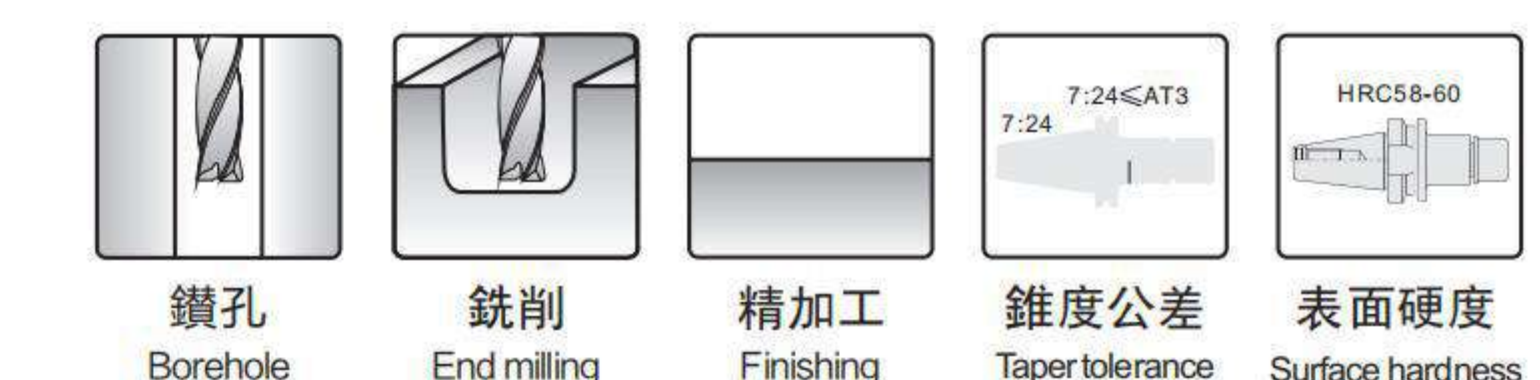
G2.5  
30000RPM



	型號	把握直徑	d1	d2	L	L1	M	螺帽	筒夾	扳手	鎖刀座
	Specification	Clamping range						Nut	Collet	spanner	
<b>NBT30</b>	-GSK10-60	3.0~10.0	27	27.5	60	38	M21.5X1.0	GSK10	SK10	HGC27	NBT30
	-GSK16-60	3.0~16.0	40	40.5	60	38	M32X1.0	GSK16	SK16	HGC40	NBT30

#### 特點/Feature

1. 預設動平衡，刀柄精度高，適合高速旋轉，跳動0.003mm，最高轉速G2.5 40000rpm。
  2. 表面硬度HV220的滑動旋轉，不會損傷，無響聲。
  3. 是面與面接觸，微米跳動切削力提高，工具使用壽命延長。
  4. 同心度高，穩定的震動精度，提高精加工表面精度。
1. Pre-balanced, high precision run-out 0.003mm, suitable for high rotating, maximum G2.5 40000 rpm.
  2. Surface hardness up to HV 220 by rotating, no damage and noise
  3. Covering interface with precision vibration and high metal removal, increased tool life
  4. High concentricity, stable run-out accuracy to enhance fine machining surface roughness.

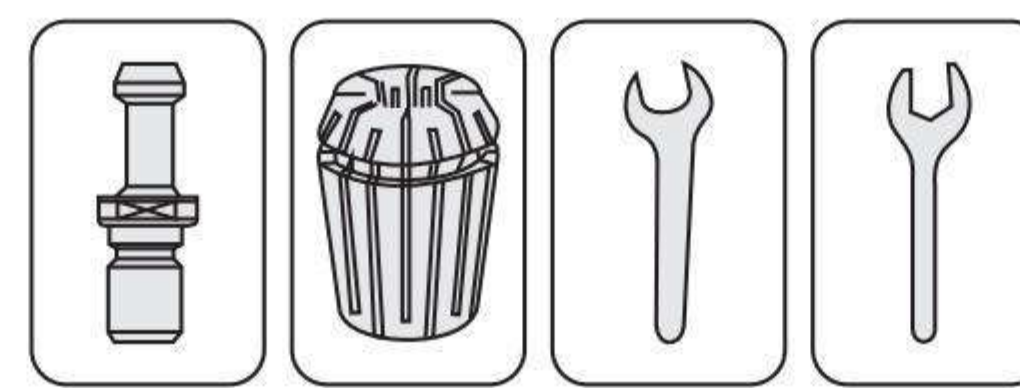
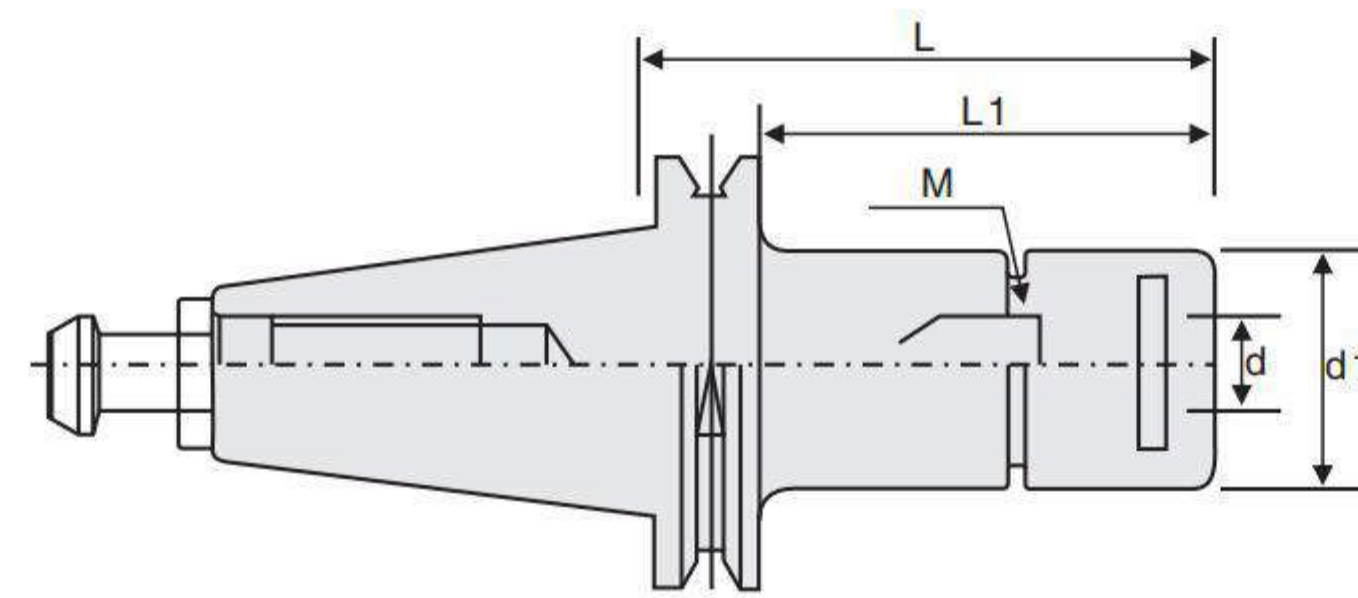




# PRECISION MILLING HOLDER 銑削夾持具



G2.5  
30000RPM



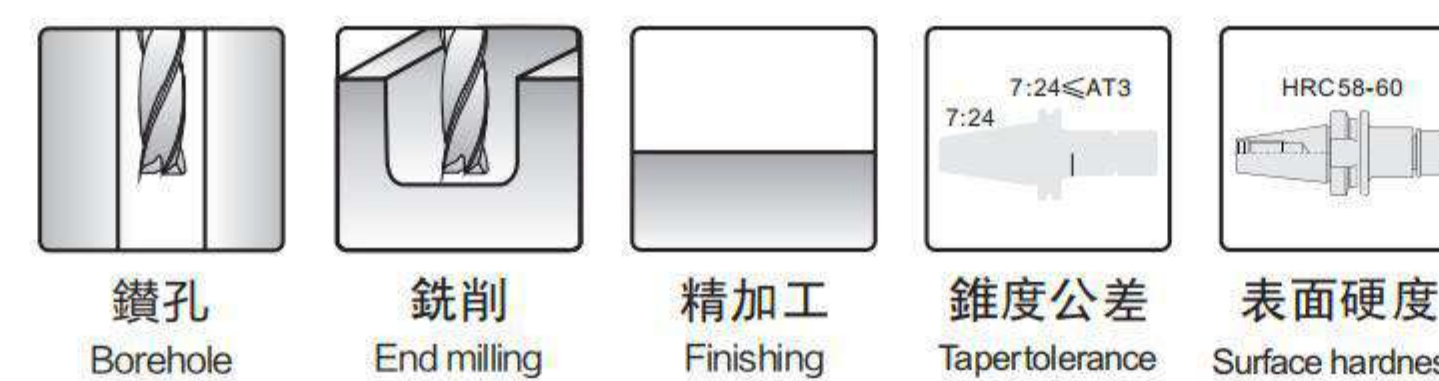
ISO HIGH SPEED TOOL HOLDER

## ISO 高速刀柄

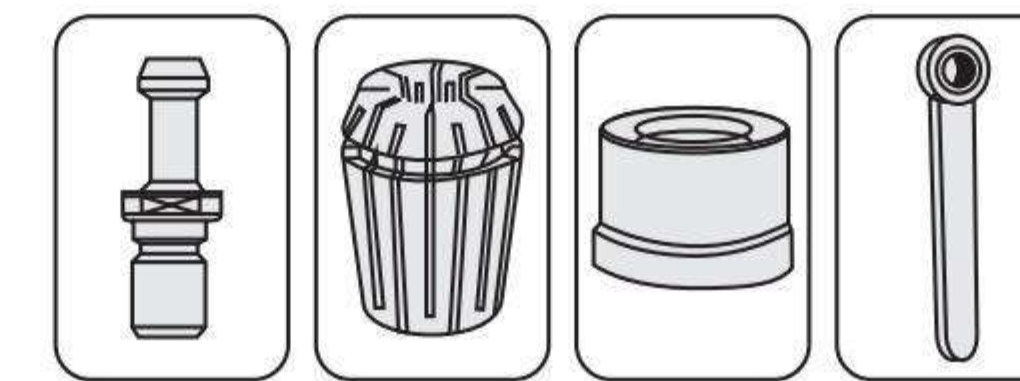
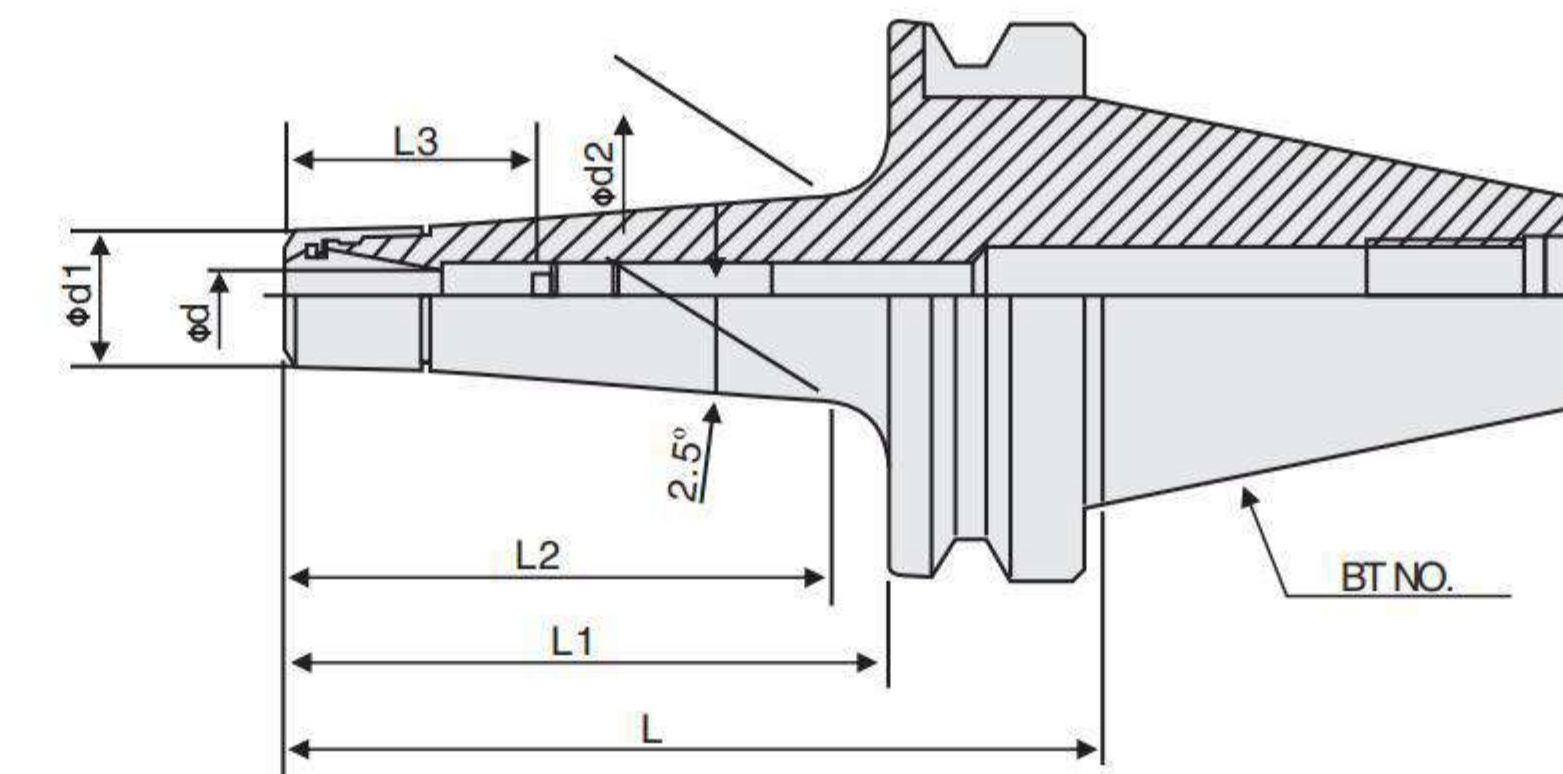
	型號	把握直徑				螺帽	筒夾	扳手1	扳手2	
	Specification	Clamping range	d1	L	L1	M	Nut	Collet	spanner	spanner
ISO20	-ER16-35	3.0~10.0	22	35	27	M19 × 1.0	ER16MS	ER16	ISO 20	ER16MS
	-ER20-35	3.0~13.0	28	35	27	M24 × 1.0	ER20MS	ER20	ISO 20	ER20MS
ISO25	-ER16-35	3.0~10.0	22	35	27	M19 × 1.0	ER16MS	ER16	ISO 25	ER16MS
	-ER20-35	3.0~13.0	28	35	27	M24 × 1.0	ER20MS	ER20	ISO 25	ER20MS
	-ER25-35	3.0~16.0	35	35	27	M30 × 1.0	ER25MS	ER25	ISO 25	ER25MS
ISO30	-ER16-60	3.0~10.0	22	60	44.1	M19 × 1.0	ER16MS	ER16		ER16MS
	-ER20-60	3.0~13.0	28	60	44.1	M24 × 1.0	ER20MS	ER20		ER20MS
	-ER25-60	3.0~16.0	35	60	44.1	M30 × 1.0	ER25MS	ER25		ER25MS

### 特點/Feature

- 1、刀柄精度高，跳動0.003mm，最高轉速G2.5 30000rpm。
  - 2、高速銑銑機專用刀柄。
  - 3、穩定的震動精度，提高精加工表面精度。
- 1、 High precision run-out 0.003mm, maximum G2.5 30000 rpm.
  - 2、 Suitable for high speed engraving&milling and drilling application with super finish surface.
  - 3、 Stable run-out accuracy to enhance fine machining surface roughness.



# PRECISION MILLING HOLDER 銑削夾持具



BT-HER SLIM COLLET CHUCK

## BT-THER 小徑刀柄

	型號	夾持範圍						刀具夾持深度	螺帽	筒夾	扳手
	Specification	Clamping range	Φd1	Φd2	L	L1	L2	Tool clamping	Nut	Collet	suitable spanner
BT30	THER11-100M	1.0~7.0	16	20.9	100	78	73.2	19~48	HER11M	ER11	HER11
	THER16-100M	1.0~10.0	22	26.5	100	78	73.2	29~58	HER16M	ER16	HER16
BT40	THER11-100M	1.0~7.0	16	20.2	100	73	65.3	19~48	HER11M	ER11	HER11
	THER11-160M	1.0~7.0	16	25.5	160	133	125.3	19~48	HER11M	ER11	HER11
	THER16-100M	1.0~10.0	22	26.1	100	73	68.2	29~58	HER16M	ER16	HER16
BT50	THER16-160M	1.0~10.0	22	31.3	160	133	128.2	29~58	CHER16M	ER16	HER16
	THER11-100M	1.0~7.0	16	20	100	54.3	62	19~48	HER11M	ER11	HER11
	THER11-160M	1.0~7.0	16	26.2	160	122	114.9	19~48	HER11M	ER11	HER11
	THER16-100M	1.0~10.0	22	27.5	100	62	54.9	29~58	HER16M	ER16	HER16
	THER16-160M	1.0~10.0	22	33.8	160	122	100	29~58	HER16M	ER16	HER16

需配合3 μ HP筒夾 With 3 μ HP Grade Collet

### 特點/Feature

- 1、刀柄斜度設計有效抵抗加工震動，適合模具深腔加工。
  - 2、T型螺牙設計超強夾持力，重複裝夾精度高。
  - 3、高韌性材料制作全圓螺帽，有效減少風阻。
  - 4、-190度深冷處理工藝，跳動穩定，提高加工精度。
- 1、 Taper design to reduce the processing shock, suitable for deep cavity machining in mold.
  - 2、 T-type screw ensures powerful clamping strength, high precision repetition.
  - 3、 Tough material for round clamping nuts to reduce wind resistance.
  - 4、 Deep Cryogenic treatment below -190 °C, stable run-out accuracy to enhance fine machining surface roughness.



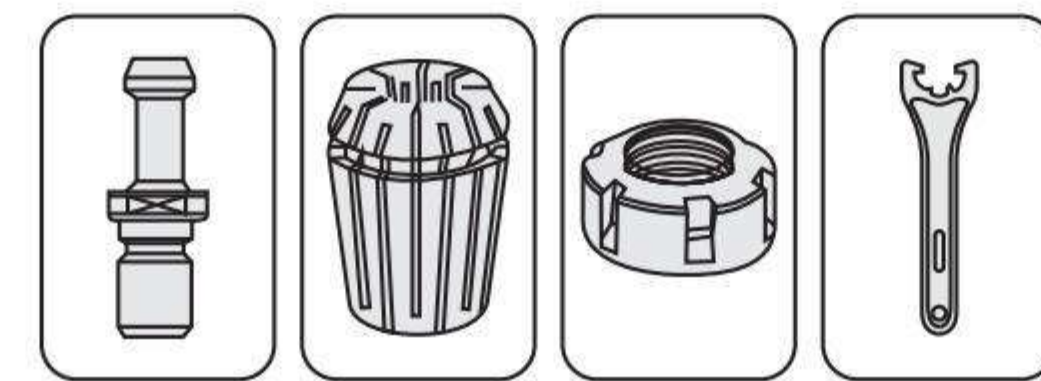
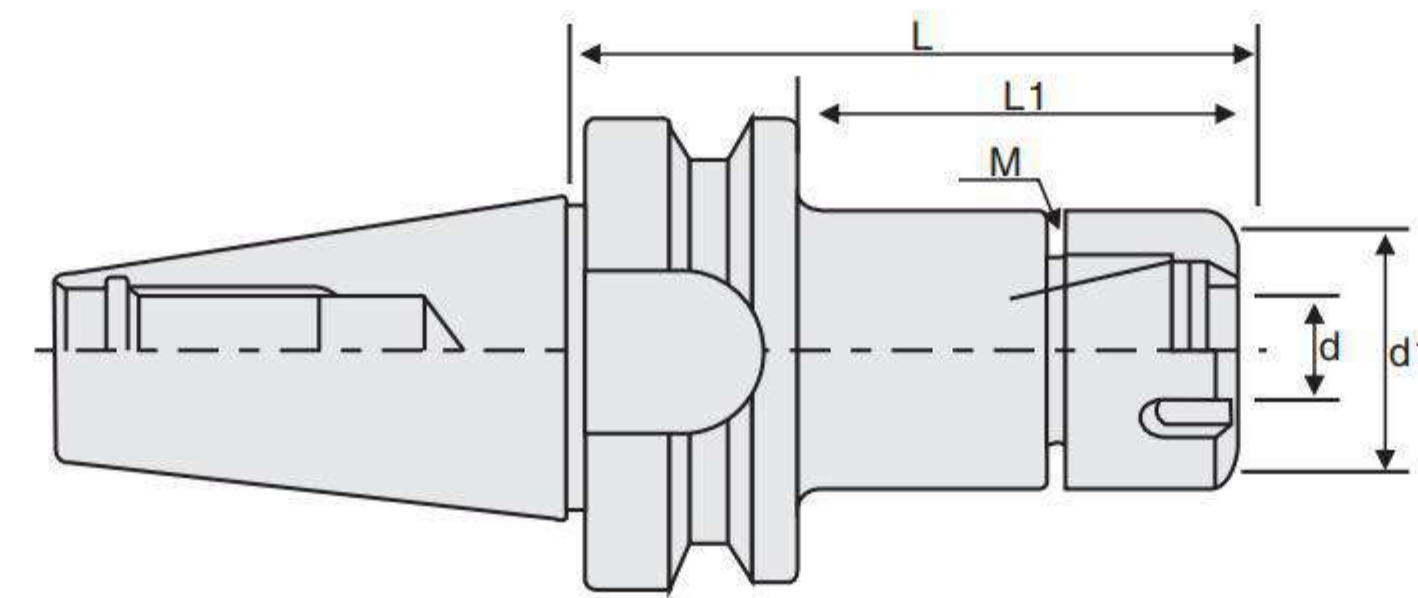


# PRECISION MILLING HOLDER 銑削夾持具

# PRECISION MILLING HOLDER 銑削夾持具



G2.5  
30000RPM



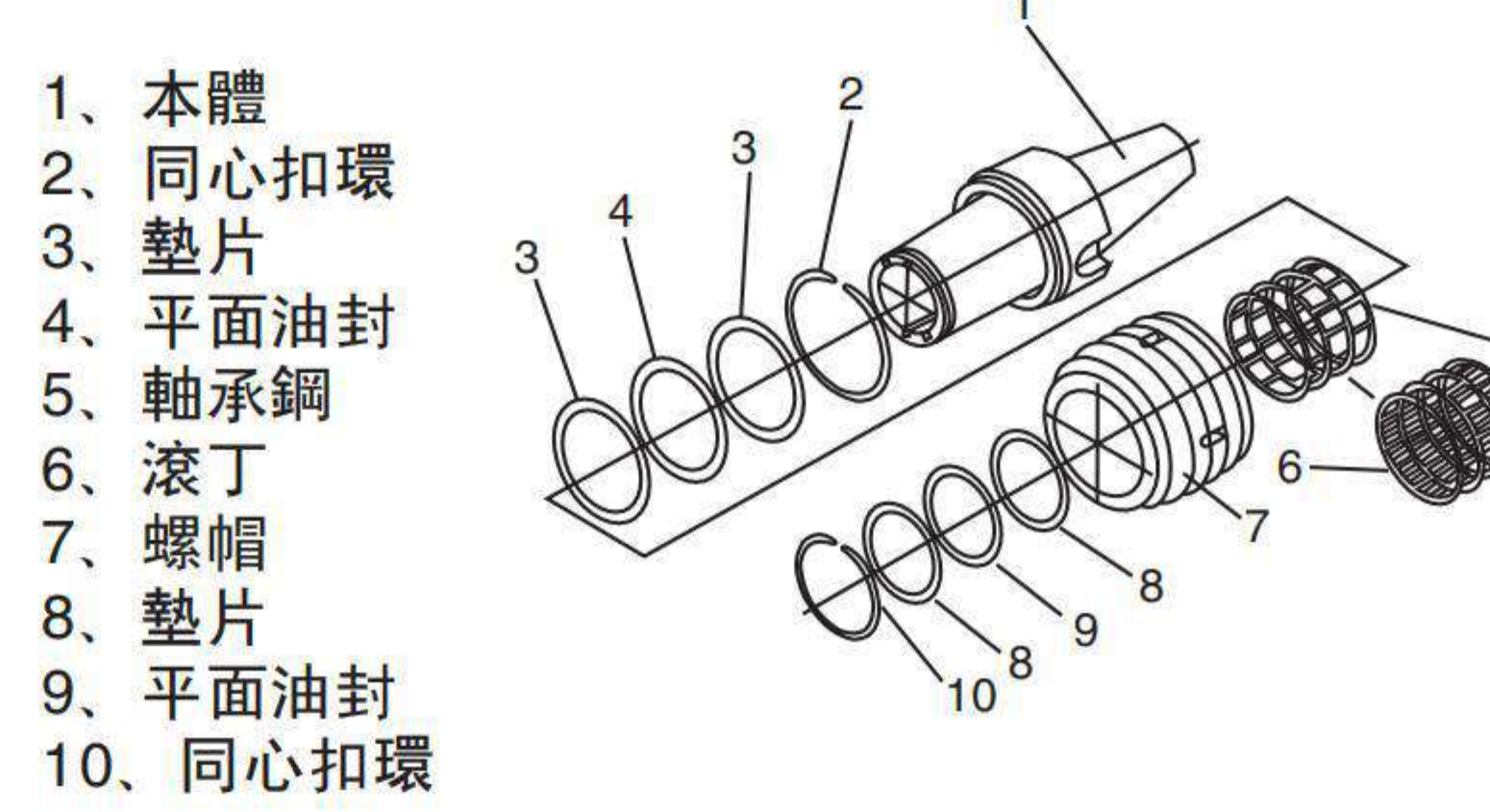
BT-ER COLLET CHUCK

## BT-ER 彈性刀柄

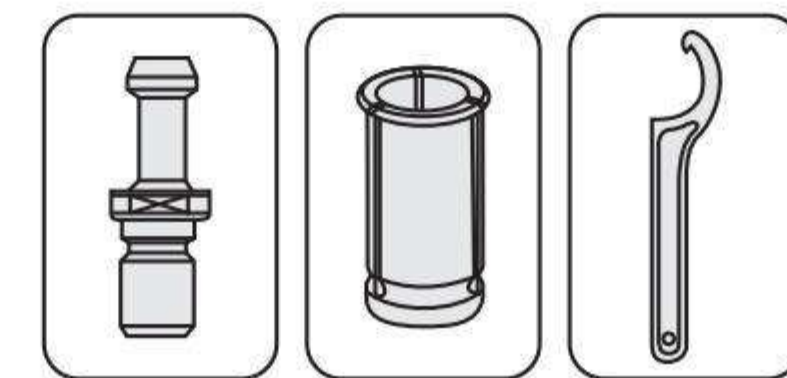
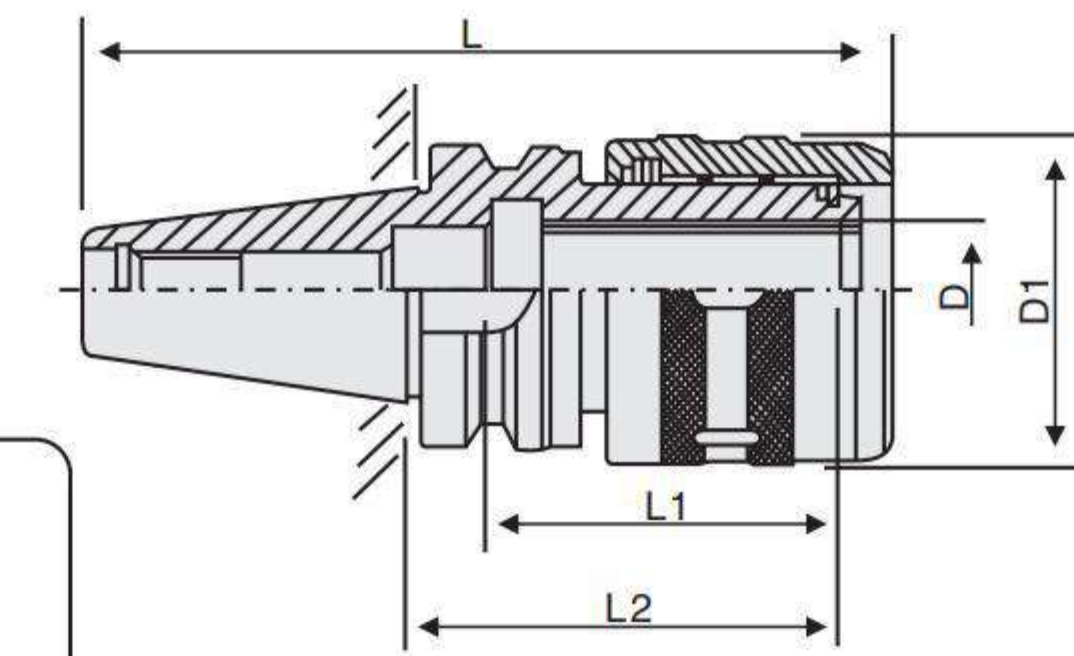
型號 Specification	把握直徑 Clamping range	d1	L	L1	M	螺帽 Nut	筒夾 Collet	扳手 spanner	重量 Weight(KG)
<b>BT30</b>	-ER16-70	3-10	28	70	48	M22 × 1.5	ER16A	ER16	0.55
	-ER16-100		100	78	0.80				
	-ER20-70	3-13	34	70	48	M25 × 1.5	ER20A	ER20	0.75
			-ER20-100	100	78				0.85
-ER25-70	3-16	42	70	48	M32 × 1.5	ER25UM	ER25	0.70	
		-ER25-100	100	78				1.45	
	-ER32-70	3-20	50	70	48	M40 × 1.5	ER32UM	ER32	0.95
			-ER32-100	100	78				1.05
<b>BT40</b>	-ER16-70	3-10	28	70	43	M22 × 1.5	ER16A	ER16	1.20
			-ER16-100	100	73				1.30
			-ER16-150	150	123				1.35
	-ER20-70	3-13	34	70	43	M25 × 1.5	ER20A	ER20	1.40
			-ER20-100	100	73				1.50
			-ER20-150	150	123				1.70
	-ER25-70	3-16	42	70	43	M32 × 1.5	ER25UM	ER25	1.30
			-ER25-100	100	73				1.65
			-ER25-150	150	123				2.25
	-ER32-70	3-20	50	80	43	M40 × 1.5	ER32UM	ER32	1.30
			-ER32-100	100	73				1.70
			-ER32-150	150	123				2.50
-ER40-100	6-26	63	100	73	M50 × 1.5	ER40UM	ER40	2.05	
		-ER40-150	150	123				3.10	
		-ER40-150	150	123				3.10	
<b>BT50</b>	-ER16-100	3-10	28	100	62	M22 × 1.5	ER16A	ER16	4.30
			-ER16-150	150	112				4.50
	-ER20-100	3-13	34	100	62	M25 × 1.5	ER20A	ER20	4.30
			-ER20-150	150	112				4.70
	-ER25-100	3-16	42	100	62	M32 × 1.5	ER25UM	ER25	4.40
			-ER25-150	150	112				5.50
	-ER32-100	3-20	50	100	62	M40 × 1.5	ER32UM	ER32	4.80
			-ER32-150	150	112				5.30
-ER40-100	6-26	63	100	62	M50 × 1.5	ER40UM	ER40	4.40	
		-ER40-150	150	112				5.50	

## 特點/Feature

- 1、預設動平衡，刀柄精度高，跳動0.003mm，最高轉速G2.5 30000rpm。
- 2、同心度高，穩定的震動精度，應用廣泛。
- 1、 Pre-balanced, high precision run-out 0.003mm, G2.5 30000 rpm.
- 2、 High concentricity, stable run-out accuracy for most wide application.



- 1、本體
- 2、同心扣環
- 3、墊片
- 4、平面油封
- 5、軸承鋼
- 6、滾丁
- 7、螺帽
- 8、墊片
- 9、平面油封
- 10、同心扣環



採用直型筒夾，精度高。

BT-C POWER CHUCK TOOL HOLDER

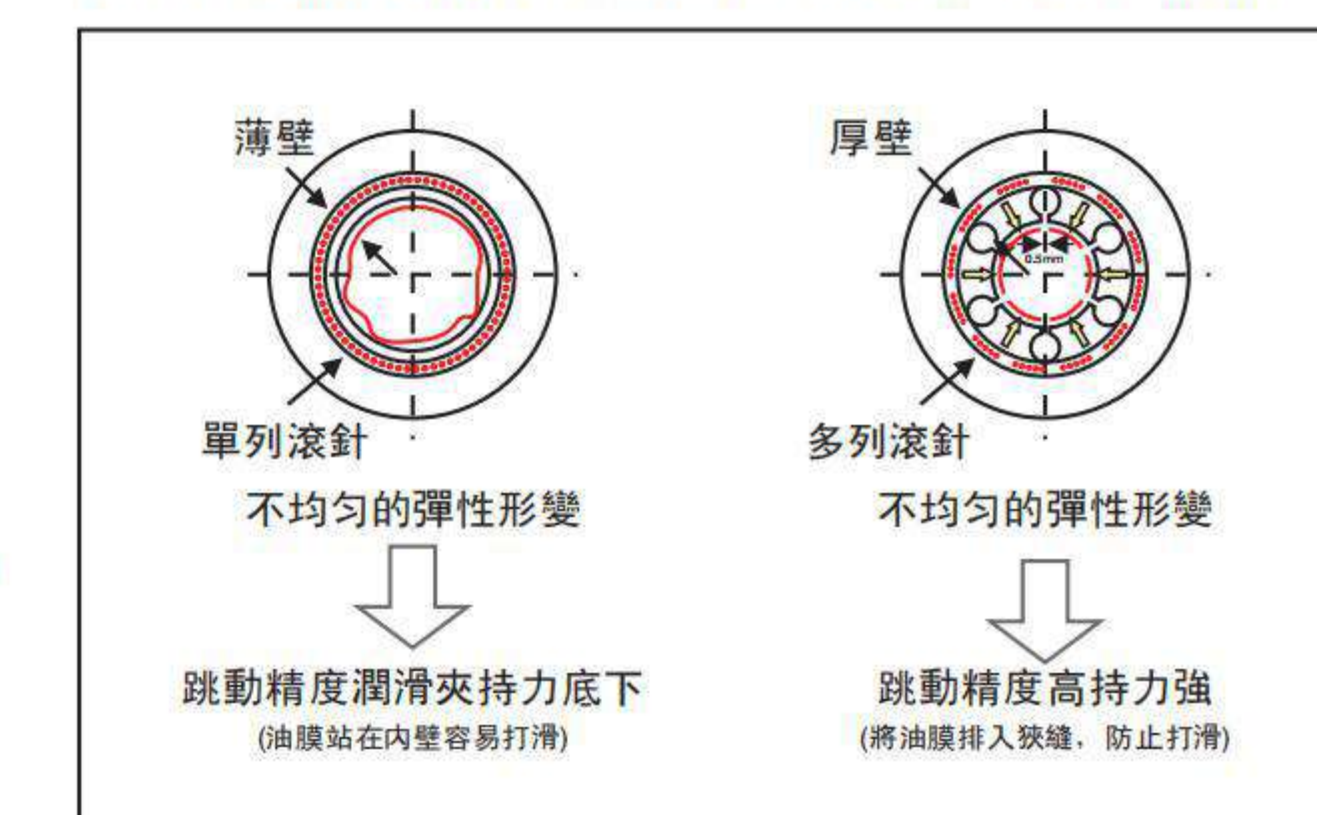
## BT-C 高速刀柄

型號 Specification	內附筒夾規格 Size					D1	扳手 suitable spanner	筒夾 Collet	重量 weight(KG)
	D	L2	L1	L	L				
<b>BT30</b>	-C20-80	20	80	70	128.4	53	C20-BS	C20	1.80
	-C25-80	25	80	73	128.4	60	C25-BS	C25	1.95
<b>BT40</b>	-C20-105	20	105	70	170.4	53	C20-BS	C20	2.60
	-C25-105	25	105	73	170.4	60	C25-BS	C25	2.65
	-C32-105	32	105	76	170.4	70	C32-BS	C32	2.80
	-C32-135	32	135	76	200.4	70	C32-BS	C32	3.00
<b>BT50</b>	-C32-165	32	165	76	230.4	70	C32-BS	C32	3.50
	-C20-105	20	105	70	206.8	53	C20-BS	C20	4.50
	-C25-105	25	105	73	206.8	60	C25-BS	C25	4.60
	-C32-105	32	105	95	206.8	70	C32-BS	C32	5.15
	-C32-135		236.8		5.90				
	-C32-165		266.8		6.60				
-C42-115	42	115	98	216.8	92	C42-BS	C42	6.10	
-C42-135	42	135	98	236.8	92	C42-BS	C42	6.60	
-C42-165	42	165	98	266.8	92	C42-BS	C42	7.40	

## 特點/Feature

- 1、刀柄內孔分割6槽以防止滑動，加大夾持力。
- 2、採用兩線裝置，當刀具滑動至針錐面時滾動摩擦避免脫落。
- 3、加持部加厚設計，提高剛性，防止震動。
- 4、加持力強，跳動精度高。
- 1、 6 slots design inside the holder to avoid slipping, enhancing clamping force.
- 2、 Frictional gripping force increased by the clamping design, when the cutting tools slip to the cone face.
- 3、 Reinforced thickness of the chuck holder improve the rigidity and anti-vibrations.
- 4、 High clamping force and run-out accuracy.

支持高精度的加厚設計及獨特的夾縫結構



夾頭的加厚設計，可以增加剛性，以承受立銑刀的重切削。而採用獨特的夾縫結構可以使夾持部分均與變形，以獲得強大的夾持力及穩定的跳動精度。



PRECISION MILLING HOLDER 銑削夾持具



BT-C POWER CHUCK TOOL HOLDER

BT-C 高速刀柄

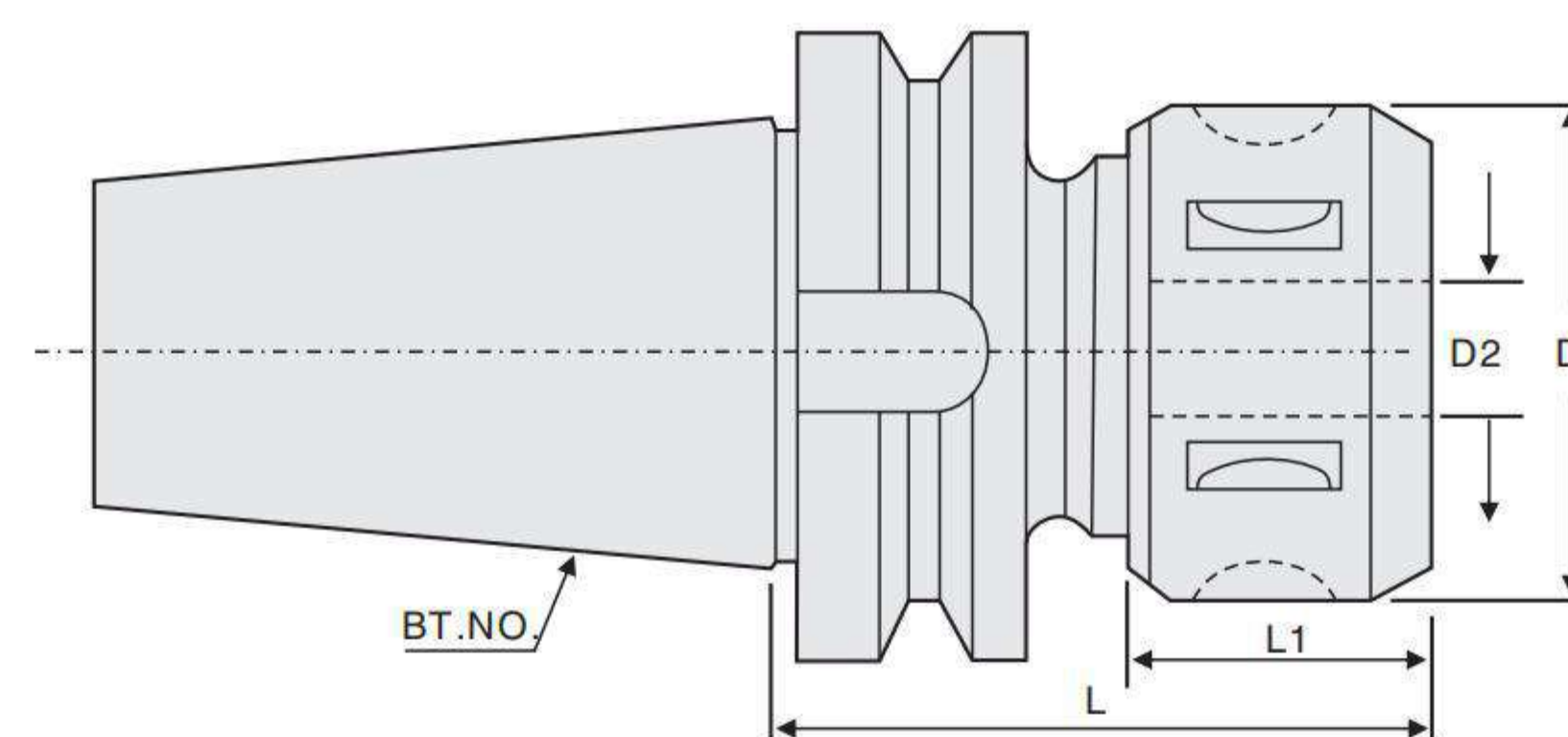
	型號 Specification	COLLET	內附筒夾規格 spanner
BT30	C20-80-7PCS	C20	3,4,6,8,10,12,16
BT40	C20-105-7PCS		
	C32-105-7PCS	C32	6,8,10,12,16,20,25 1/4,5/16,3/8,1/2,3/4,5/8,1"
	C32-105-7PCS		
BT50	C20-105-7PCS	C20	3,4,6,8,10,12,16
	C32-105-7PCS	C32	6,8,10,12,16,20,25 3/4,3/8,5/8,5/16,1/4,1/2,1"
	C32-105-7PCS		
	C42-115-8PCS	C42	6,8,10,12,16,20,25,32 1/4,5/16,3/8,1/2,3/4,5/8,1",1-1/4
	C42-115-8PCS		

特點/Feature

1. 刀柄內孔分割6槽以防止滑動，加大夾持力。
2. 採用雨綫裝置，當刀具滑動至針錐面時滾動摩擦避免脫落。
3. 加持部加厚設計，提高剛性，防止震動。
4. 加持力強，跳動精度高。
1. 6 slots design inside the holder to avoid slipping, enhancing clamping force.
2. Frictional gripping force increased by the clamping design, when the cutting tools slip to the cone face.
3. Reinforced thickness of the chuck holder improve the rigidity and anti-vibrations.
4. High clamping force and run-out accuracy.

以上套裝含刀柄1支、筒夾7個或8個、木盒1個、扳手一支、拉釘一支。

PRECISION MILLING HOLDER 銑削夾持具



BT-OZ HEAVY DUTY TOOL HOLDER

BT-OZ 重切削刀柄

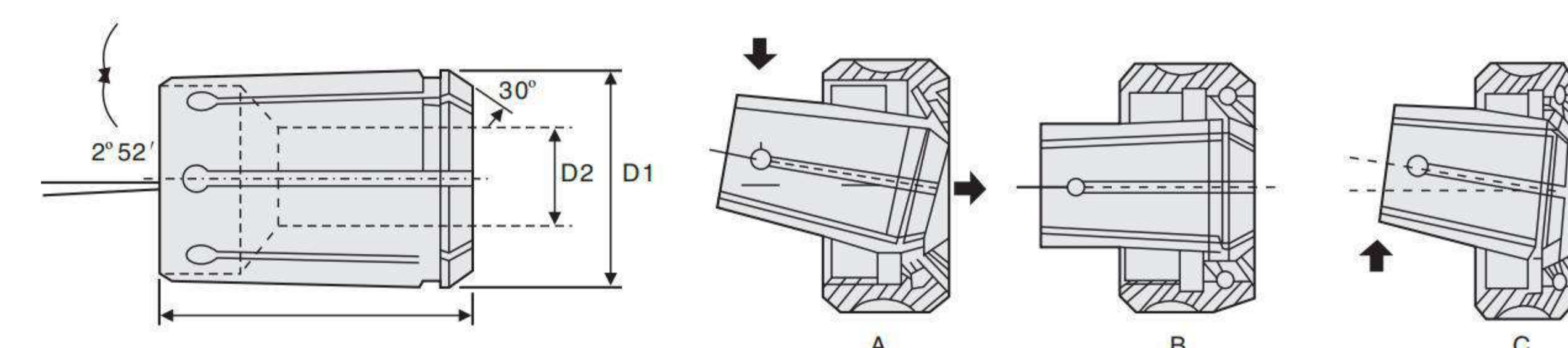
	型號 Specification	D2	L	尺寸 Size D	L1	筒型 Collet Type
BT40	OZ25-80	3-25	80	60	30	OZ25
	OZ25-120	3-25	120	60	30	OZ25
	OZ32-80	6-32	80	72	33	OZ32
	OZ32-150	6-32	150	72	33	OZ32
BT50	OZ25-90	3-25	90	60	30	OZ25
	OZ25-130	3-25	130	60	30	OZ25
	OZ32-105	6-32	105	72	33	OZ32
	OZ32-150	6-32	150	72	33	OZ32

特點/Feature

1. 特殊夾持結構能夠在重切削加工中擁有超強加持力。
2. 夾持部加厚設計，提高剛性，減少震動。
3. 適合於夾持鑽頭銑刀及其絲攻刀具。
1. Special clamping structure supports strong clamping force for heavy duty processing.
2. Reinforced thickness of the chuck to improve the rigidity and low tendency towards vibrations.
3. Suitable for drilling, milling and tapping tools.

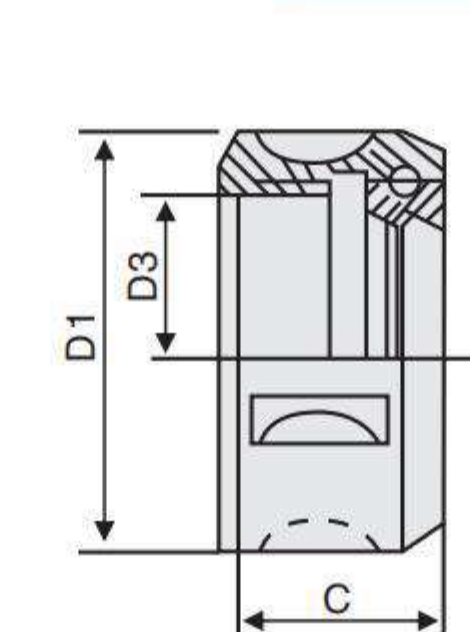


OZ 重切削筒夾/索咀

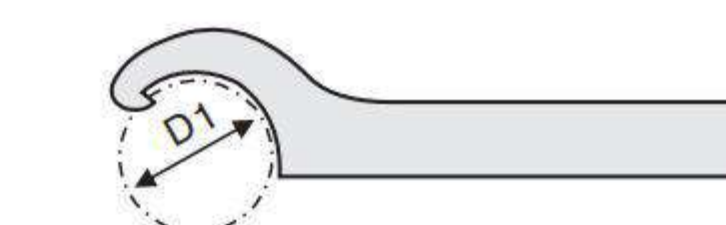


型號 Specification	D1	L	D2
OZ25	35.5	52	3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25
OZ32	44	60	6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32

型號 Specification	D1	L	D2
OZ25	35.5	52	1/8,3/16,1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1"
OZ32	44	60	1/4,5/16,3/8,7/16,1/2,9/16,5/8,11/16,3/4,13/16,7/8,15/16,1",11/8",11/4"



重切削OZ螺帽



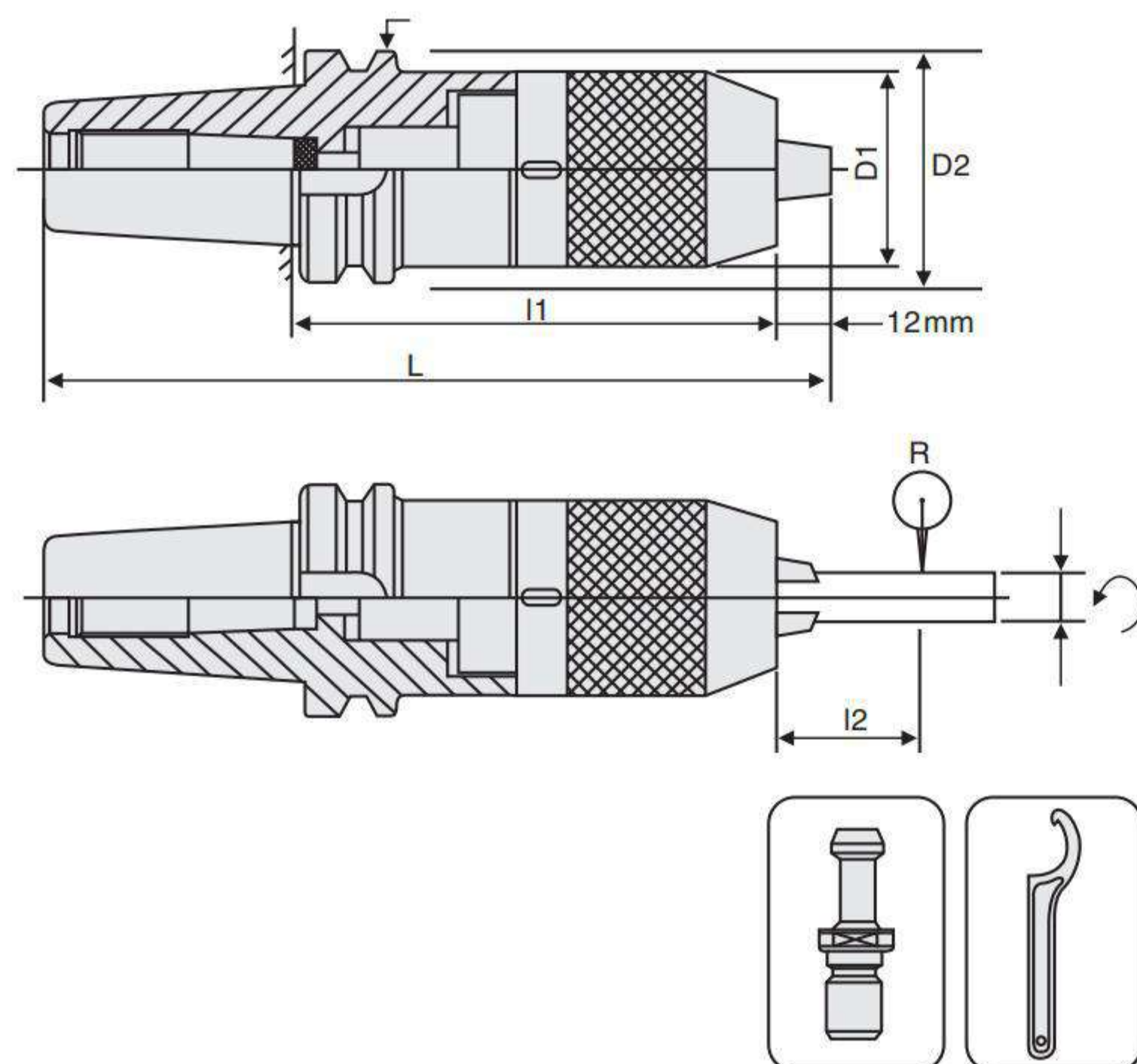
OZ 扳手

型號 Specification	C	D1	D3	筒型 Collet Type
BN25	30	60	M48 × 2	OZ25
BN32	33	72	M60 × 2.5	OZ32

型號 Specification	尺寸 Size(mm) D1	筒型 Collet Type
WOZ25	60	OZ25
WOZ32	80	OZ32



PRECISION MILLING HOLDER 銑削夾持具



BT-APU DRILL CHUCK HOLDER  
BT-APU 一體式鑽夾頭

	型號 Specification	尺寸 Size				夾持範圍 Clamping range	重量 Weight(KG)
		D1	D2	L1	L		
BT30	-APU8-80	36.5	46	80	137.4	0.5~8	0.80
	-APU13-110	48	46	110	158.4	1~13	1.85
	-APU16-110	55.5	46	110	158.4	3~16	2.18
BT40	-APU8-85	36.5	0.63	85	150.4	0.5~8	1.46
	-APU13-105	48	0.63	105	170.4	1~13	2.00
	-APU13-130	48	0.63	130	195.4	1~13	2.33
BT50	-APU16-105	55.5	0.63	105	170.4	3~16	2.33
	-APU16-130	55.5	0.63	130	195.4	3~16	2.60
	-APU8-90	36.5	100	90	191.8	0.5~8	4.20
BT50	-APU13-110	48	100	110	211.8	1~13	4.70
	-APU13-180	48	100	180	281.8	1~13	5.80
	-APU16-115	55.5	100	115	216.8	3~16	5.10
	-APU16-130	55.5	100	130	236.8	3~16	4.80
	-APU16-190	55.5	100	190	296.8	3~16	6.10

特點/Feature

1. 連接柄和夾頭整體的設計，防止兩個刀體意外分離，加工穩定可靠。
  2. 夾頭自緊，加緊鑽頭後隨鑽孔扭矩的增加同步增強夾持力，防止鑽頭打滑。
  3. 夾持力強，高精度，持久耐用。
  4. 適用各類鑽床，銑床和車床。
1. Integrated design of holder and chuck prevents separation of the tool components, ensure reliable and stable machining.
  2. Self tightening, gripping force is enhanced when the drilling torque increase, which can avoid slipping of the drills.
  3. Super drill chuck with high precision and durability.
  4. Wide application in drilling machine, milling machines and lathe.



STRAIGHT SHANK DRILL CHUCK  
C-APU 直柄式鑽夾頭

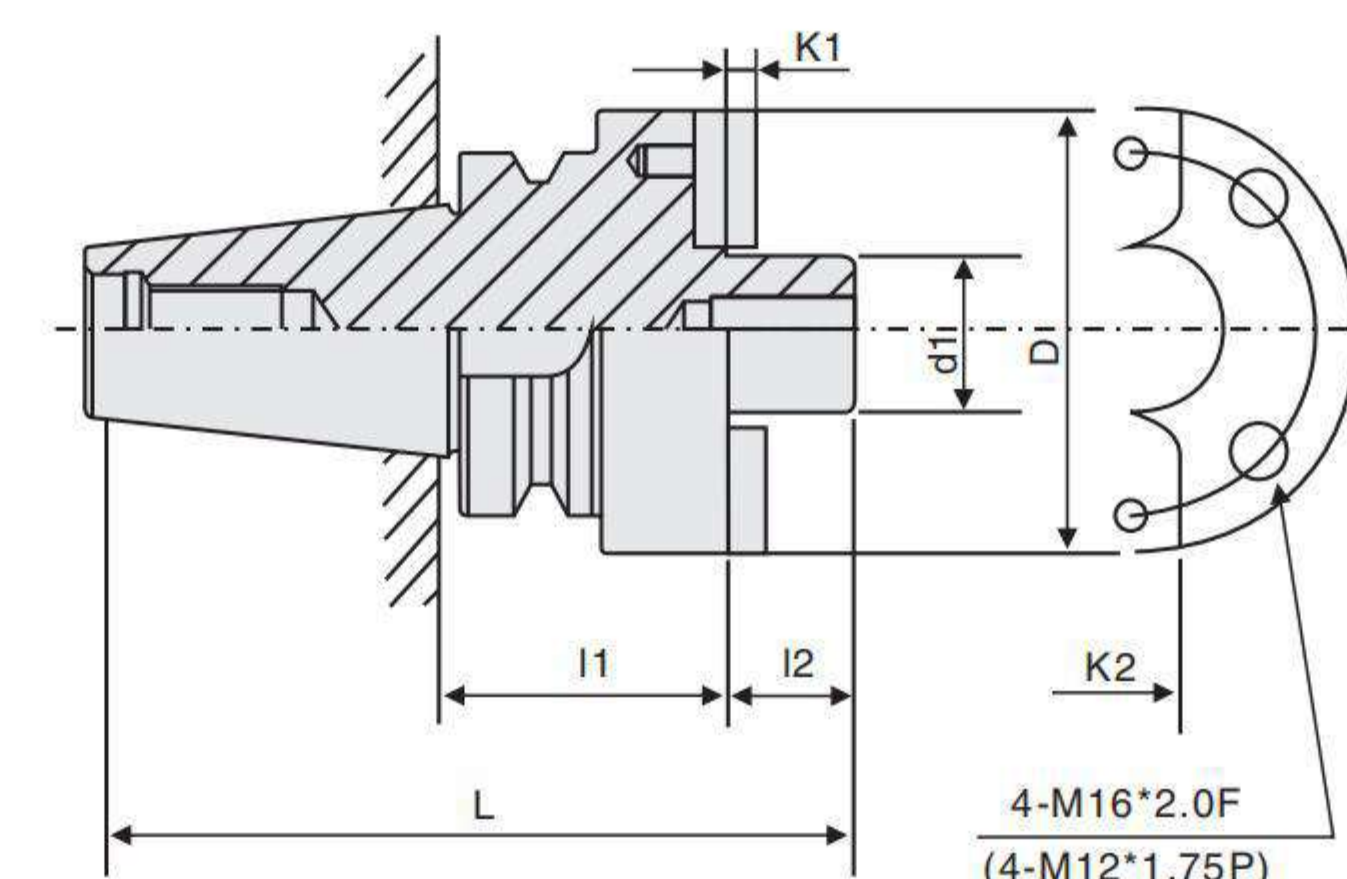
	型號 Specification	L
C20	-APU8	120
	-APU13	140
	-APU16	150
C25	-APU13	161
	-APU16	165
C32	-APU13	165
	-APU16	165



MORSE TAPER DRILL CHUCK  
MT-APU 莫式柄一體式鑽夾頭

	型號 Specification	L
MT2	-APU8	164
MT3	-APU13	179
	-APU16	184
MT4	-APU13	202
	-APU16	207

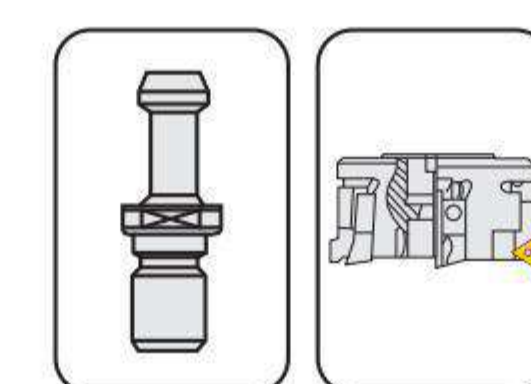
PRECISION MILLING HOLDER 銑削夾持具



專用面銑刀盤用刀柄



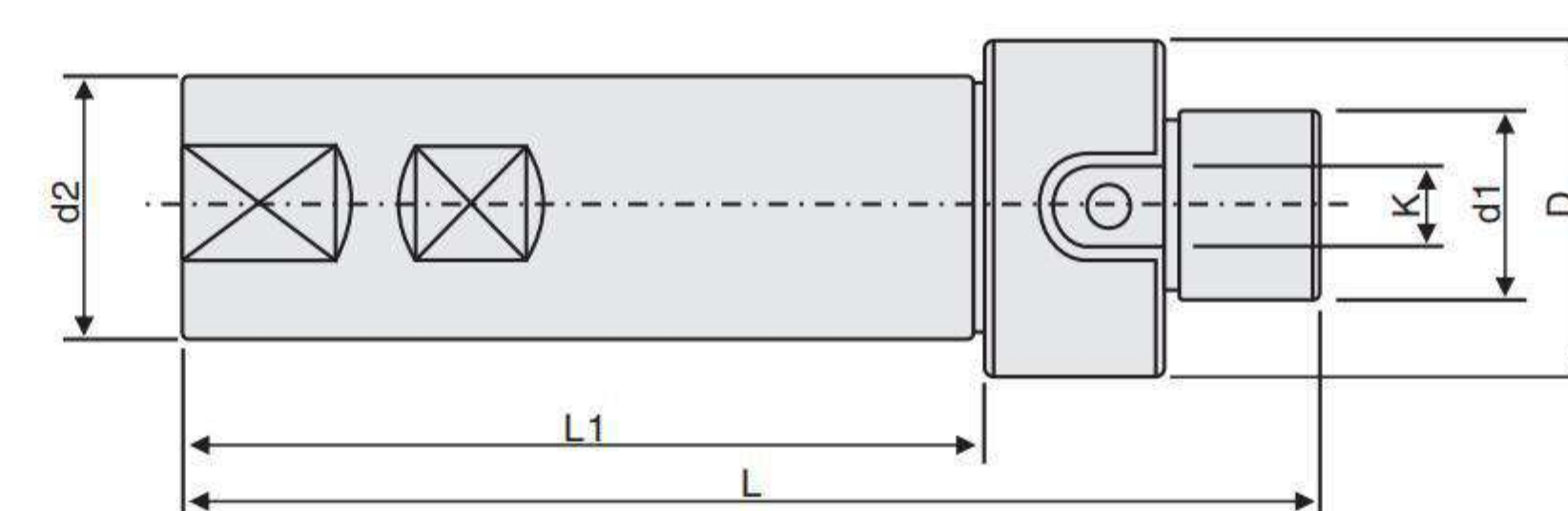
BT-FMA FACE MILLING ARBOR  
BT-FMA 面銑刀柄



	型號 Specification	尺寸 Size						重量 Weight(KG)	
		d1	D	L1	L2	L	K1	K2	Weight(KG)
BT30	-FMA25.4-45	25.4	50	45	20	113.4	4.52	9.52	1.00
	-FMA25.4-60	25.4	50	60	20	128.4	4.52	9.52	1.30
	-FMA31.75-45	31.75	60	45	22	115.4	6.7	12.7	1.35
BT40	-FMA25.4-45	25.4	50	45	20	130.4	4.52	9.52	1.80
	-FMA25.4-90	25.4	50	90	20	175.4	4.52	9.52	2.60
	-FMA31.75-45	31.75	60	45	22	132.4	6.7	12.7	2.00
	-FMA31.75-90	31.75	60	90	22	177.4	6.7	12.7	2.90
	-FMA38.1-60	38.1	75	60	25	150.4	8.87	15.87	2.80
	-FMA50.8-90	50.8	98	90	26	181.4	9.75	19.05	4.60
BT50	-FMA25.4-45	25.4	50	45	20	166.8	4.52	9.52	4.40
	-FMA25.4-90	25.4	50	90	20	211.8	4.52	9.52	5.10
	-FMA25.4-150	25.4	50	150	20	271.8	4.52	9.52	6.10
	-FMA31.75-45	31.75	80	45	22	168.8	6.7	12.7	4.50
	-FMA31.75-90	31.75	80	90	22	213.8	6.7	12.7	5.70
	-FMA31.75-150	31.75	80	150	22	273.8	6.7	12.7	6.00
	-FMA38.1-60	38.1	60	60	25	186.8	8.87	15.87	4.90
	-FMA38.1-150	38.1	98	150	25	276.8	8.87	15.87	5.70
	-FMA50.8-90	50.8	95	90	26	217.8	9.75	19.05	6.95
	-FMA50.8-150	50.8	95	150	26	277.8	9.75	19.05	7.90
	-FMA47.62-75	47.62	128.75	75	32	208.8	12.5	25.4	7.90

特點/Feature

1. 整支通孔，利于出水及抗震。
  2. 附帶緊固螺絲。
  3. 使用中心內冷時，請另外訂購帶有孔的緊固螺絲。
1. Hollow design to increase water outlet and low tendency towards vibrations.
  2. Clamping nuts included.
  3. Separated order for clamping nuts is needed, if using internal coolant system.

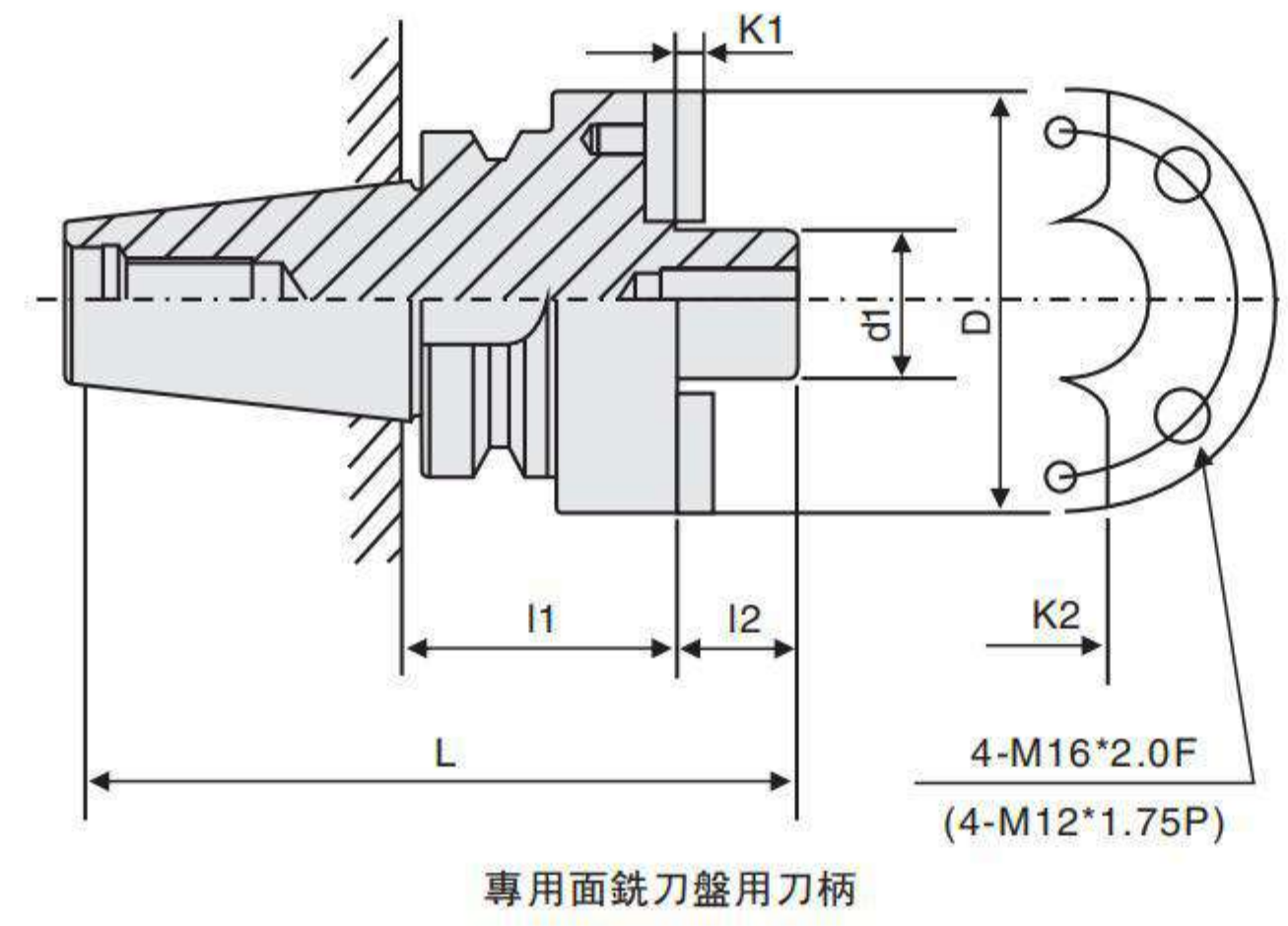


STRAIGHT FACE MILL ARBOR EXTENSION HOLDER  
C-FMB 直柄面銑刀延長杆

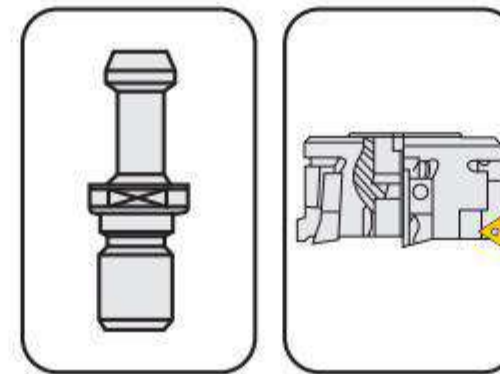
	型號 Specification	尺寸 Size				
		d1	d2	D	L1	L
C20	-FMB22-60	22	20	47	60	98
	-FMB22-60	22	32	47	60	98
	-FMB22-100	22	32	47	100	138
C32	-FMB22-150	22	32	47	150	138



## PRECISION MILLING HOLDER 銑削夾持具



專用面銑刀銑用刀柄



### BT-FMB FACE MILLING ARBOR

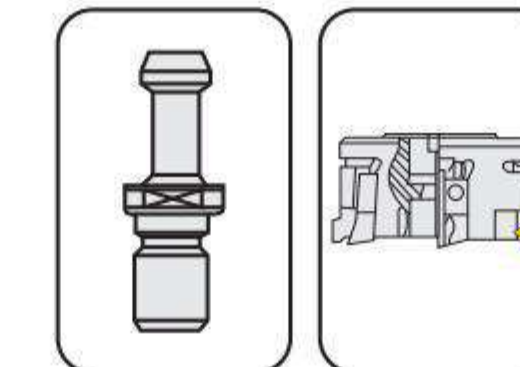
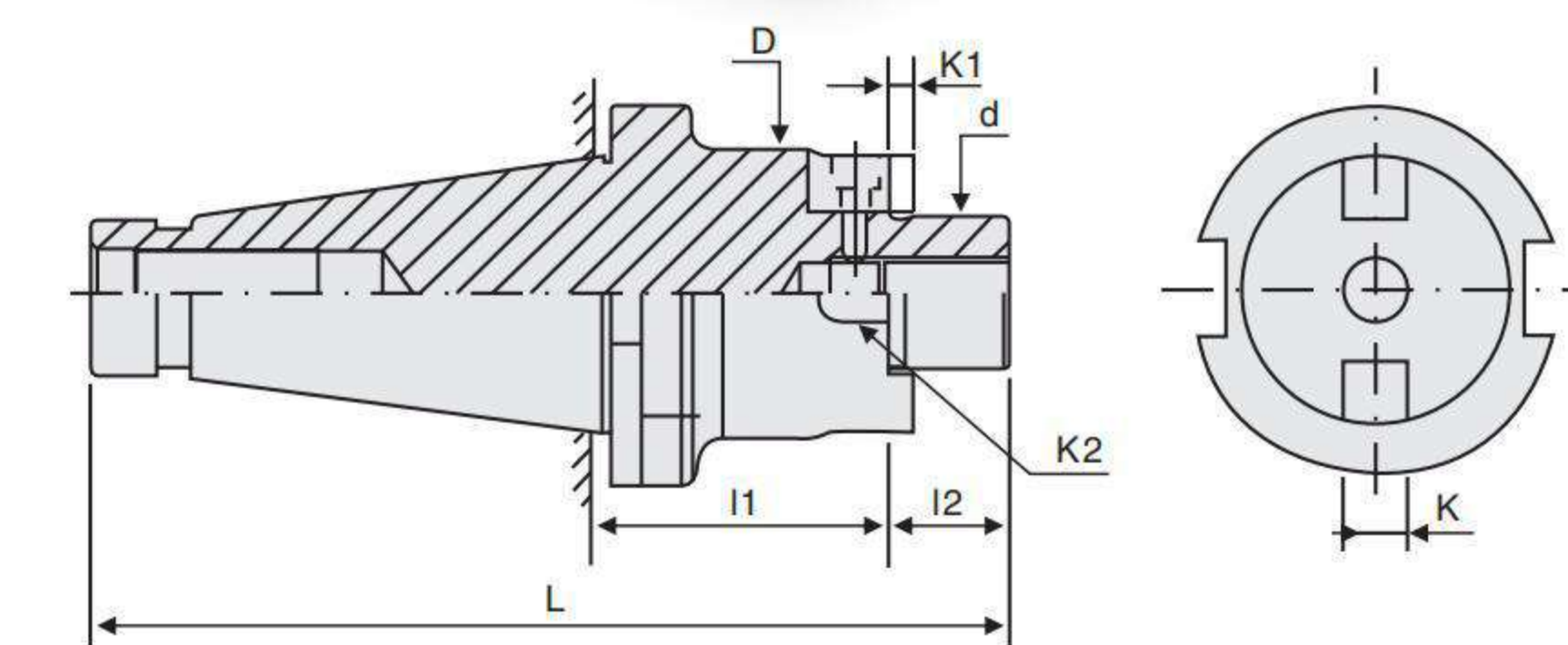
#### BT-FMB 面銑刀柄

	型號 Specification	尺寸 Size							重量 Weight(KG)
		d1	D	L1	L2	L	K1	K2	
BT30	-FMB22-45	22	48	45	18	111.4	4.8	10	0.85
	-FMB27-45	27	60	45	20	113.4	5.8	12	1.20
	-FMB32-45	32	78	45	22	115.4	6.8	14	1.35
BT40	-FMB22-45	22	48	45	18	128.4	4.8	10	1.45
	-FMB22-60			60		143.4			1.70
	-FMB22-100			100		183.4			2.10
	-FMB22-120			120		205.4			2.30
	-FMB22-150			150		233.4			3.10
	-FMB22-200			200		283.4			3.80
	-FMB22-250	250	283.4	4.50					
	-FMB22-300	300	333.4	5.10					
	-FMB27-60	27	68	45	20	128.4	5.8	12	1.60
	-FMB32-60	32	78	45	22	128.4	6.8	14	1.70
-FMB40-60L	40	80	45	25	128.4	8.3	16	2.10	
BT50	-FMB22-100	22	48/58	100	18	201.8	4.8	10	5.20
	-FMB22-150			150		269.8			6.80
	-FMB22-200			200		319.8			7.00
	-FMB22-250			250		369.8			8.00
	-FMB22-300			300		419.8			9.00
	-FMB22-350			350		469.8			10.00
	-FMB22-400	400	519.8	12.00					
	-FMB22-450	450	569.8	12.00					
	-FMB22-500	500	619.8	13.00					
	-FMB27-100	27	60	100	20	201.8	5.8	12	6.50
	-FMB27-150			150		269.8			7.50
	-FMB27-200			200		319.8			9.50
	-FMB32-100	32	78	100	22	201.8	6.8	14	6.20
	-FMB32-150			150		269.8			7.00
	-FMB40-60	40	89	60	25	176.8	8.3	16	5.20
-FMB40-100	100			201.8		7.20			
-FMB40-150	150			269.8		7.80			
-FMB60-60	60	140	60	26	161.8	12.5	25.4	8.50	

#### 特點/Feature

- 1、整支通孔，利于出水及抗震。
  - 2、附帶緊固螺絲。
  - 3、使用中心內冷時，請另外訂購帶有孔的緊固螺絲。
- 1、Hollow design to increase water outlet and low tendency towards vibrations.
  - 2、Clamping nuts included.
  - 3、Separated order for clamping nuts is needed, if using internal coolant system.

## PRECISION MILLING HOLDER 銑削夾持具



### NT-FMB FACE MILLING ARBOR

#### NT-FMB 面銑刀柄

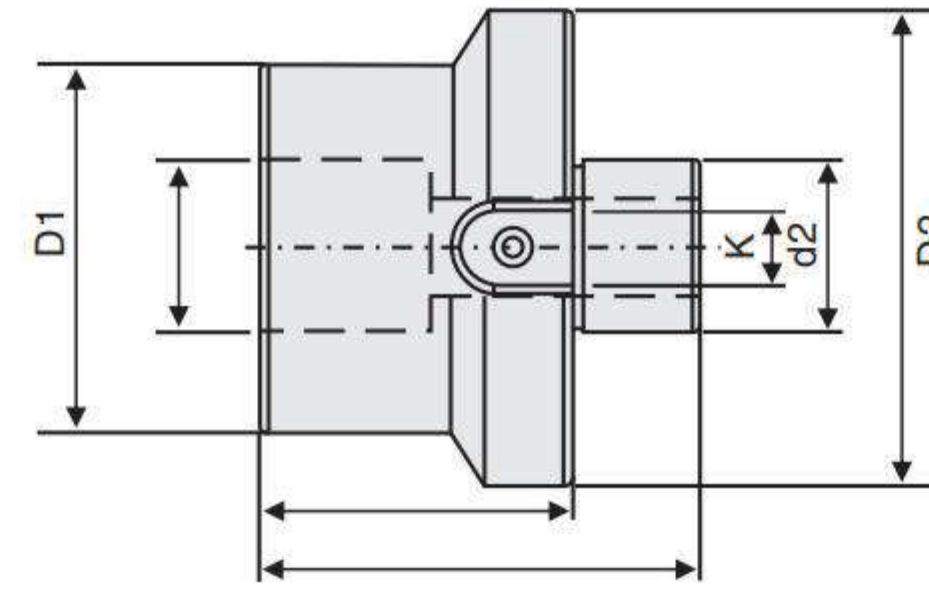
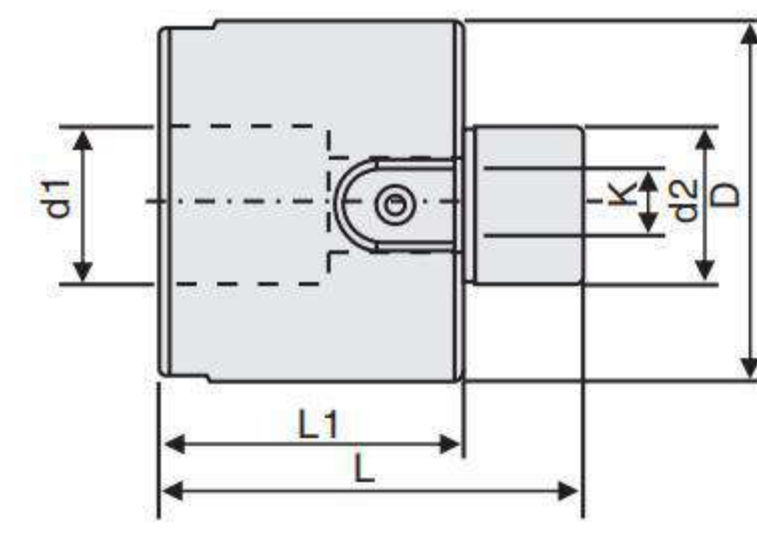
	型號 Specification	轴径d	尺寸 Size				DRAW BOLT	
			L	L1	L2	K	INCH	METRIC
NT40	FMB22-30	22	131.4	30	18	10	5/8"-1UNC	M16×2.0
	FMB27-30	27	133.4	30	20	12	5/8"-1UNC	M16×2.0
	FMB32-45	32	135.4	45	22	14	5/8"-1UNC	M16×2.0
	FMB40-50	40	138.4	50	25	16	5/8"-1UNC	M16×2.0
NT50	FMB22-35	22	164.8	35	18	10	1"-8UNC	M24×3.0
	FMB27-35	27	166.8	35	20	12	1"-8UNC	M24×3.0
	FMB32-35	32	168.8	35	22	14	1"-8UNC	M24×3.0
	FMB40-35	40	216.8	35	25	16	1"-8UNC	M24×3.0
FMB60-65	60	216.8	65	25	25.4	1"-8UNC	M24×3.0	

#### 特點/Feature

- 1、整支通孔，利于出水及抗震。
  - 2、附帶緊固螺絲。
  - 3、使用中心內冷時，請另外訂購帶有孔的緊固螺絲。
- 1、Hollow design to increase water outlet and low tendency towards vibrations.
  - 2、Clamping nuts included.
  - 3、Separated order for clamping nuts is needed, if using internal coolant system.



PRECISION MILLING HOLDER 銑削夾持具



MILL CHUCK

FMB-FMB 面銑刀柄延長接頭

型號 Specification	尺寸 Size						KG
	d2	D1	D	L1	L		
FMB22	22	22	47	40	60	0.5	
FMB22	22	22	58	50	70	0.6	



MILL CHUCK

FMB-FMB 面銑刀柄轉換接頭

型號 Specification	尺寸 Size						KG
	d2	d1	D1	D2	L1	L	
FMB22	27	22	47	58	40	60	0.64



MILL CHUCK

FMB-FMB 面銑刀柄轉換接頭

型號 Specification	尺寸 Size						KG
	d2	d1	D1	D2	L1	L	
FMB22	32	22	47	58	48	70	0.8



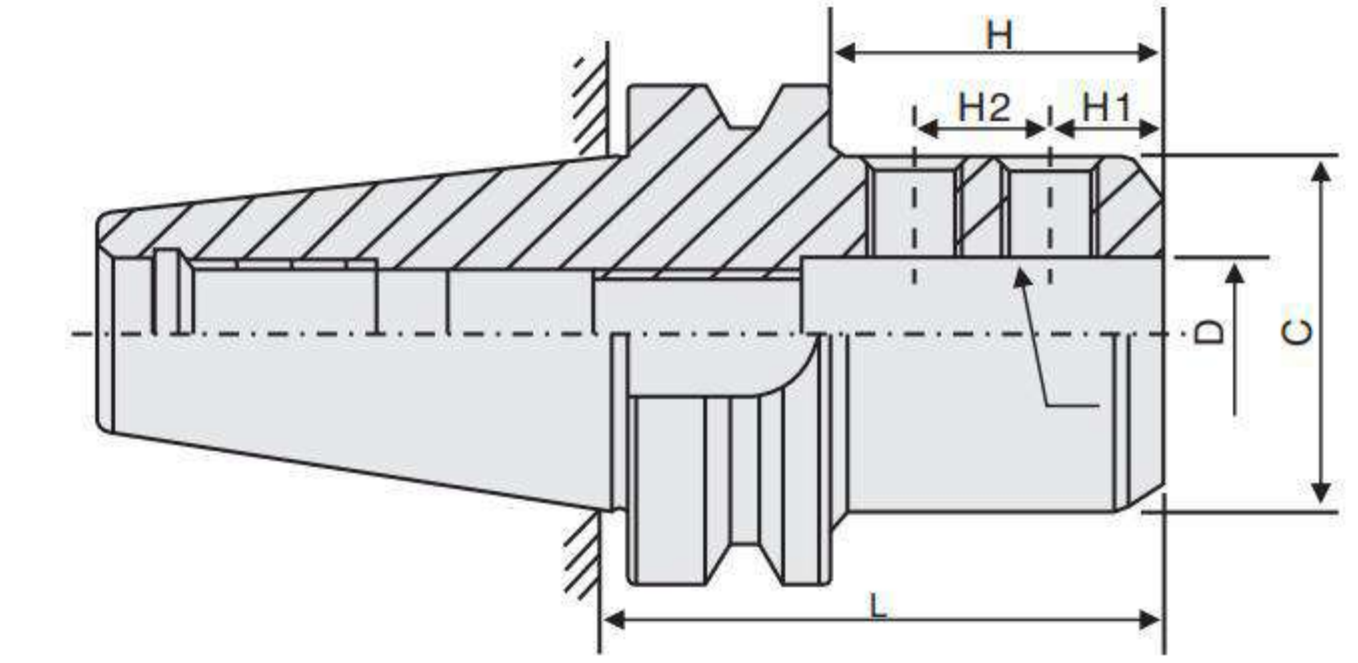
MILL CHUCK

FMB-FMA 面銑刀柄轉換接頭

型號 Specification	尺寸 Size						KG
	d2	D1	D	L1	L		
FMB22	25.4	22	47	40	60	0.52	



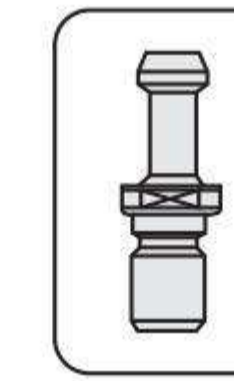
PRECISION MILLING HOLDER 銑削夾持具



不分孔徑皆為二只鎖緊螺絲用于夾持具有側圓平面的刀具

BT-SLA WELDON TOOL HOLDER

BT-SLA 側固刀柄



型號 Specification	尺寸 Size						重量			
	ΦD	L	ΦC	H(MIN)	H(MAX)	H1	H2	M	Weight(KG)	
BT30	-SLA6-60	6	60	25	20	35	18	M6	0.55	
	-SLA8-60	8	60	28	20	35	18	M8	0.6	
	-SLA10-60	10	60	35	35	50	14	13	M10	0.7
	-SLA12-60	12	60	40	35	50	14	13	M10	0.75
	-SLA16-90	16	90	40	55	70	25	20	M10	1.05
	-SLA20-90	20	90	50	55	70	25	20	M12	1.1
	-SLA25-90	25	90	50	55	70	25	20	M12	1.7
	-SLA32-105	32	105	60	65	80	25	25	M16	1.85
BT40	-SLA6-75	6	75	25	20	35	18	M6	1.2	
	-SLA8-75	8	75	28	20	35	18	M8	1.25	
	-SLA10-75	10	75	35	35	50	14	13	M10	1.3
	-SLA12-75	12	75	40	35	50	14	13	M10	1.35
	-SLA16-90	16	90	40	55	70	25	20	M10	1.6
	-SLA20-90	20	90	50	55	70	25	20	M12	1.65
	-SLA25-90	25	90	50	55	70	25	20	M12	2.5
	-SLA32-105	32	105	60	65	80	25	25	M16	2.8
BT50	-SLA40-105	40	105	70	65	80	25	25	M20	2.95
	-SLA42-105	42	105	70	65	80	25	25	M20	3.15
	-SLA6-105	6	105	25	20	35			M6	3.9
	-SLA8-105	8	105	28	20	35			M8	3.9
	-SLA10-105	10	105	35	35	50	13	13	M10	4.0
	-SLA12-105	12	105	40	35	50	13	13	M10	4.0
	-SLA16-105	16	105	40	55	70	20	20	M10	4.5
	-SLA20-105	20	105	50	55	70	20	20	M12	4.7
	-SLA20-150	20	150	50	55	70	20	20	M12	5.5
	-SLA20-200	20	200	50	55	70	20	20	M12	6.0
	-SLA25-105	25	105	50	55	70	20	20	M12	5.2
	-SLA25-150	25	150	50	55	70	20	20	M12	6.0
-SLA25-200	25	200	50	55	70	20	20	M12	7.5	
-SLA32-105	32	105	60	65	80	25	25	M16	6.0	
-SLA32-150	32	150	60	65	80	25	25	M16	6.5	
-SLA32-200	32	200	60	65	80	25	25	M16	7.3	
-SLA40-105	40	105	70	65	80	25	25	M20	6.6	
-SLA42-150	42	105	70	65	80	25	25	M20	7.2	
-SLA42-200	42	150	70	65	80	25	25	M20	7.8	
-SLA42-250	42	250	70	65	80	25	25	M20	7.8	
-SLA50.8-120	51	120	90	65	80	35	35	M20	7.4	

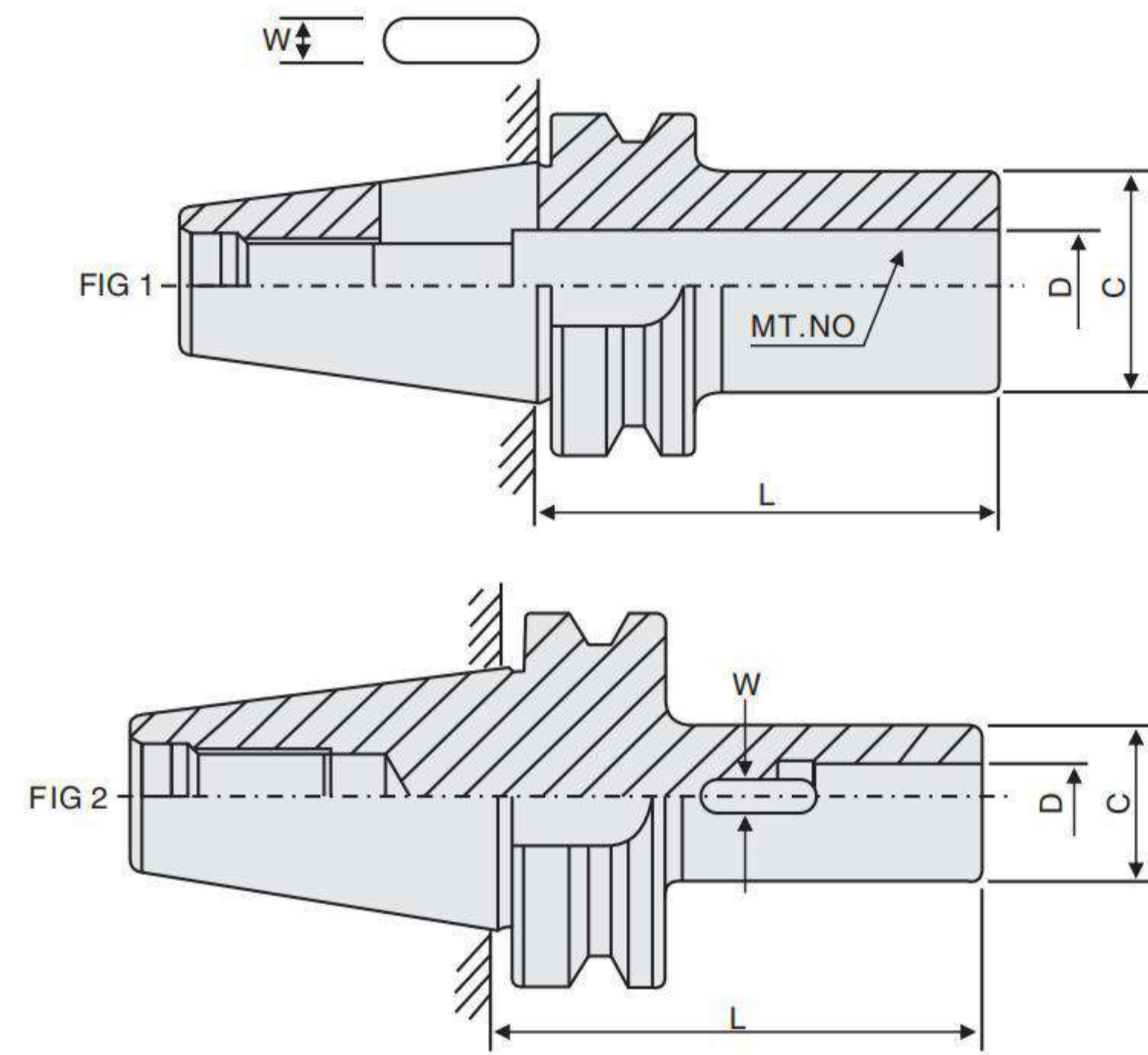
特點/Feature

1. 刃具裝着時，刃物的槽口平面部時與刀柄的側固螺釘對齊，強力鎖緊。
  2. 側固刀柄柄部形狀有不同，使用的刀柄也有區別，必須確認側固螺釘的位置。
1. The slot face should be adjusted equally to the side screw and be tightly locked.
  2. The pattern of the holder is different, so confirm the position of the side screw before choosing the chuck type.



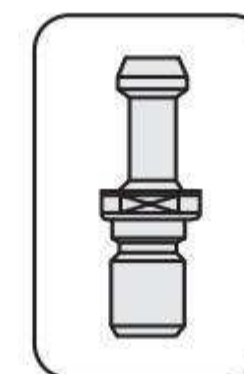
PRECISION MILLING HOLDER 銑削夾持具

PRECISION MILLING HOLDER 銑削夾持具

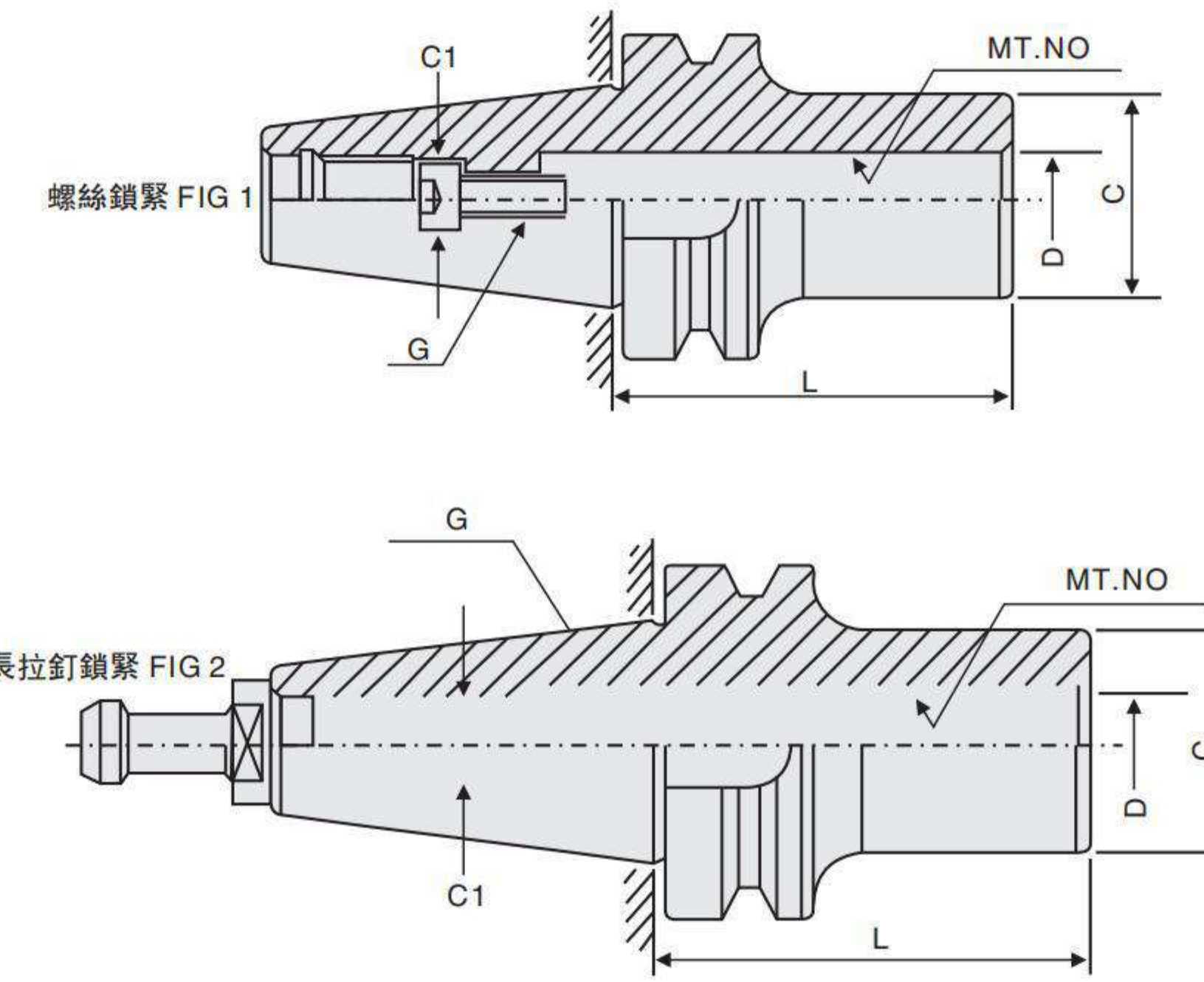


BT-MTA MORSE TAPER DRILL CHUCK

BT-MTA 莫式錐度鑽頭刀柄

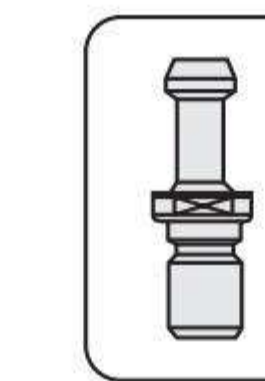


	型號		尺寸 Size				重量
	Specification	类型 (Type)	D	L	C	W	Weight(KG)
BT30	MTA1-45	1	12.065	45	20	5.6	0.55
	MTA2-45	1	17.780	45	30	6.6	0.6
	MTA3-45	1	23.825	45	40	8.4	0.7
BT40	MTA1-45	1	12.065	45	25	5.6	1.05
	MTA1-120	2	12.065	120	25	5.6	1.4
	MTA2-45	1	17.780	45	32	6.6	1.1
	MTA2-120	2	17.780	120	32	6.6	1.85
	MTA3-75	1	23.825	75	40	8.4	1.25
BT50	MTA3-135	2	23.825	135	40	8.4	1.9
	MTA4-90	1	31.065	90	50	12.4	1.45
	MTA4-165	2	31.065	165	50	12.4	2.5
	MTA1-45	1	12.065	45	25	5.6	3.8
	MTA1-120	2	12.065	120	25	5.6	4.3
	MTA1-180	2	12.065	180	25	5.6	5.0
	MTA2-45	1	17.780	45	25	6.6	4.0
	MTA2-135	2	17.780	135	25	6.6	4.7
	MTA2-180	2	17.780	180	25	6.6	5.0
	MTA3-70	1	23.835	75	40	8.4	3.8
MTA3-150	2	23.835	150	40	8.4	5.0	
MTA3-180	2	23.835	180	40	8.4	5.5	
MTA4-90	1	31.267	90	50	12.4	4.5	
MTA4-180	2	31.267	180	50	12.4	5.5	
MTA5-105	1	44.399	105				4.3



BT-MTB MORSE TAPER TOOL HOLDER

BT-MTB 莫式錐度刀柄

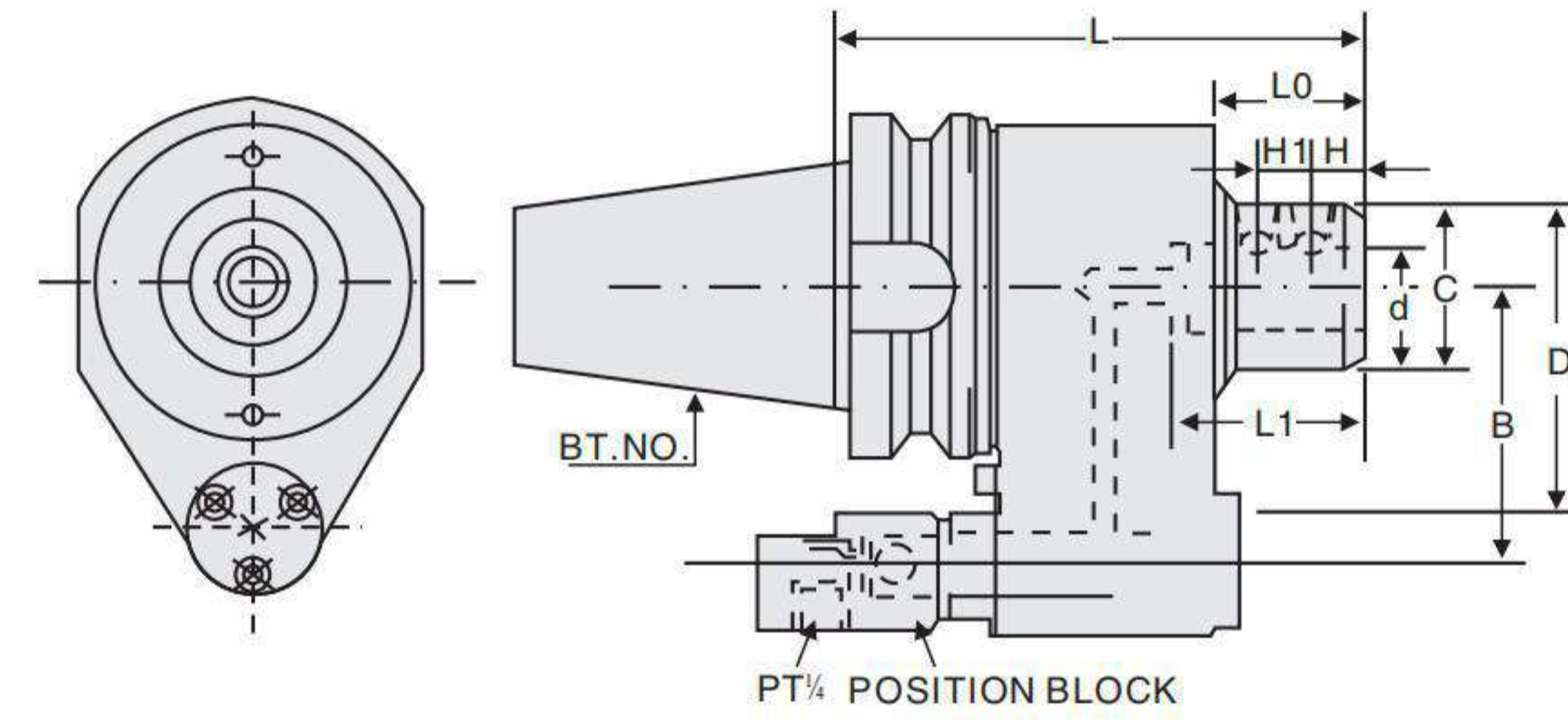


	型號		尺寸					重量
	Specification	样式 (Manner)	D	L	C	C1	G	Weight(KG)
BT30	MTB1-45	1	12.065	45	25	10	M6×1	0.55
	MTR2-45	1	12.065	45	32	10	M10×1	0.55
BT40	MTB1-45	1	12.065	45	25	10	M6×1	1.05
	MTB2-45	1	17.780	45	32	13.5	M10×1.5	1.85
	MTB3-75	1	23.825	75	42	18	M12×1.75	1.3
BT50	MTB4-90	2	31.267	90	50	20.5	M16×2	1.4
	MTB1-45	1	12.065	45	25	10	M6×1	3.8
	MTB2-45	1	17.780	45	32	16	M10×1.5	3.9
	MTB3-60	1	23.825	60	42	18	M12×1.75	4.0
	MTB4-75	1	31.267	75	50	20.5	M16×2	4.2
MTB5-120	2	44.399	120	70	22.5	M20×2	4.3	

	型號	配套刀柄	G
	Specification	Supporting Shank	
MTB 长拉钉	BT30-45°-MTB2	BT30-MTB2	M10×1.5
	BT40-45°-MTB2	BT40-MTB2	M10×1.5
	BT40-45°-MTB3	BT40-MTB3	M12×1.75
	BT40-45°-MTB4	BT40-MTB4	M16×2
	BT50-45°-MTB2	BT50-MTB2	M10×1.5
	BT50-45°-MTB3	BT50-MTB3	M12×1.75
	BT50-45°-MTB4	BT50-MTB4	M16×2



## PRECISION MILLING HOLDER 銑削夾持具



BT-SLO OIL-FEED TOOL HOLDER

### BT-SLO 油路刀柄

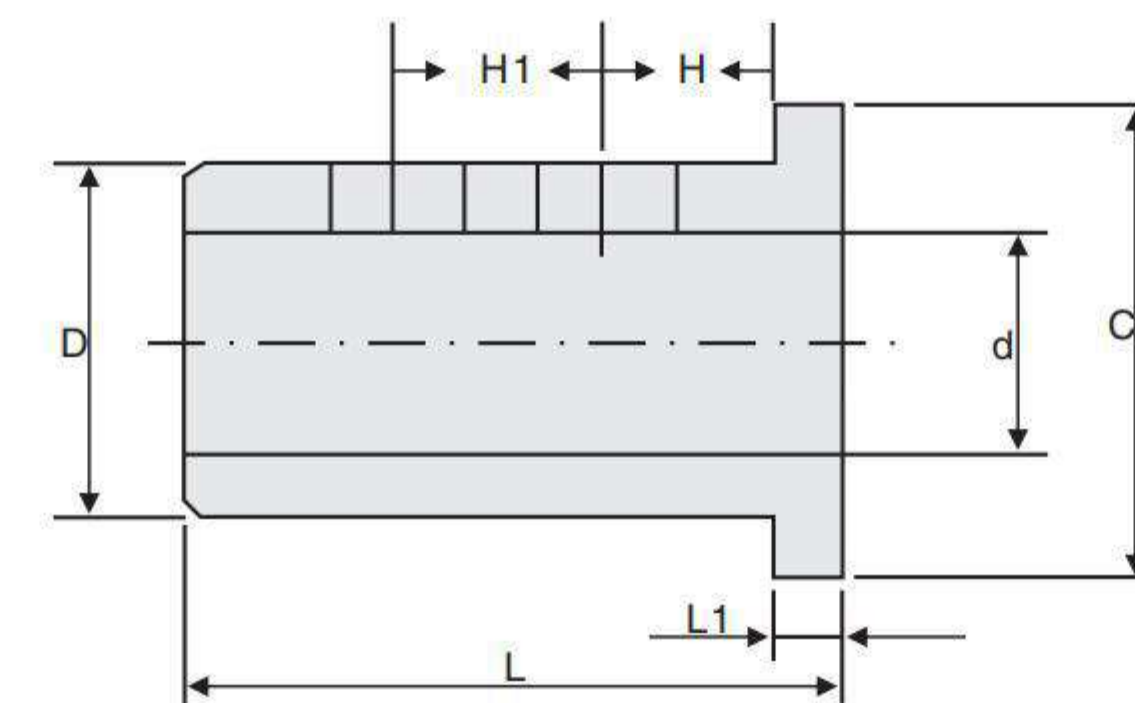
	型號	尺寸 Size								
	Specification	d	L	B	C	D	L0	L1	H	H1
<b>BT40</b>	SLO32-150	32	150	60/65	52	90	50	60	15	15
	SLO40-150	40	150	60/65	70	90	50	70	19	18
<b>BT50</b>	SLO32-160	32	160	80/82	54	100	50	60	15	15
	SLO40-160	40	160	80/82	64	100	50	70	19	18

#### 特點/Feature

- 刀柄本體精加工，加工過程中跳動穩定。
- Tool body finish machined for stable run-out accuracy.

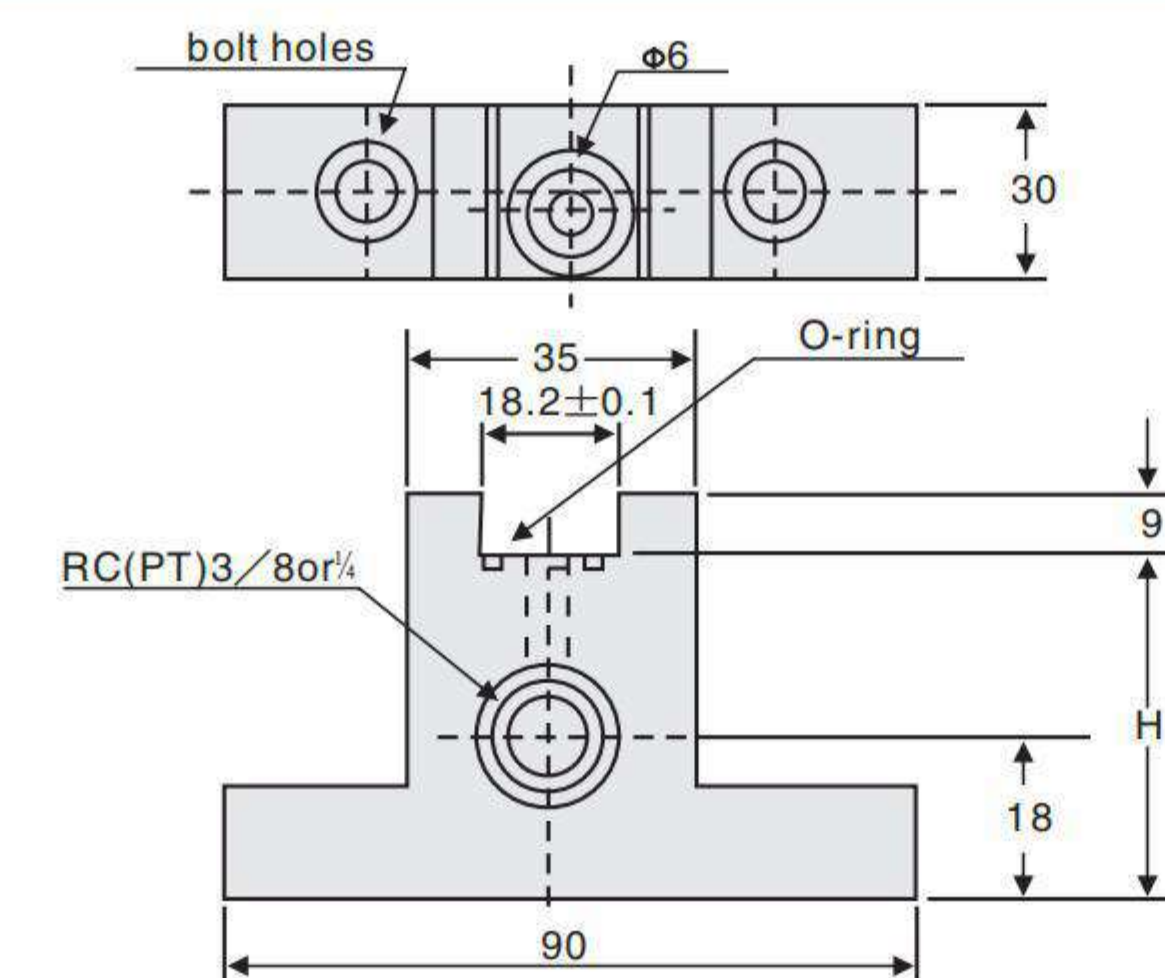
請于訂購時，依據機臺規格確認中心距離B的尺寸。

### 油路刀套

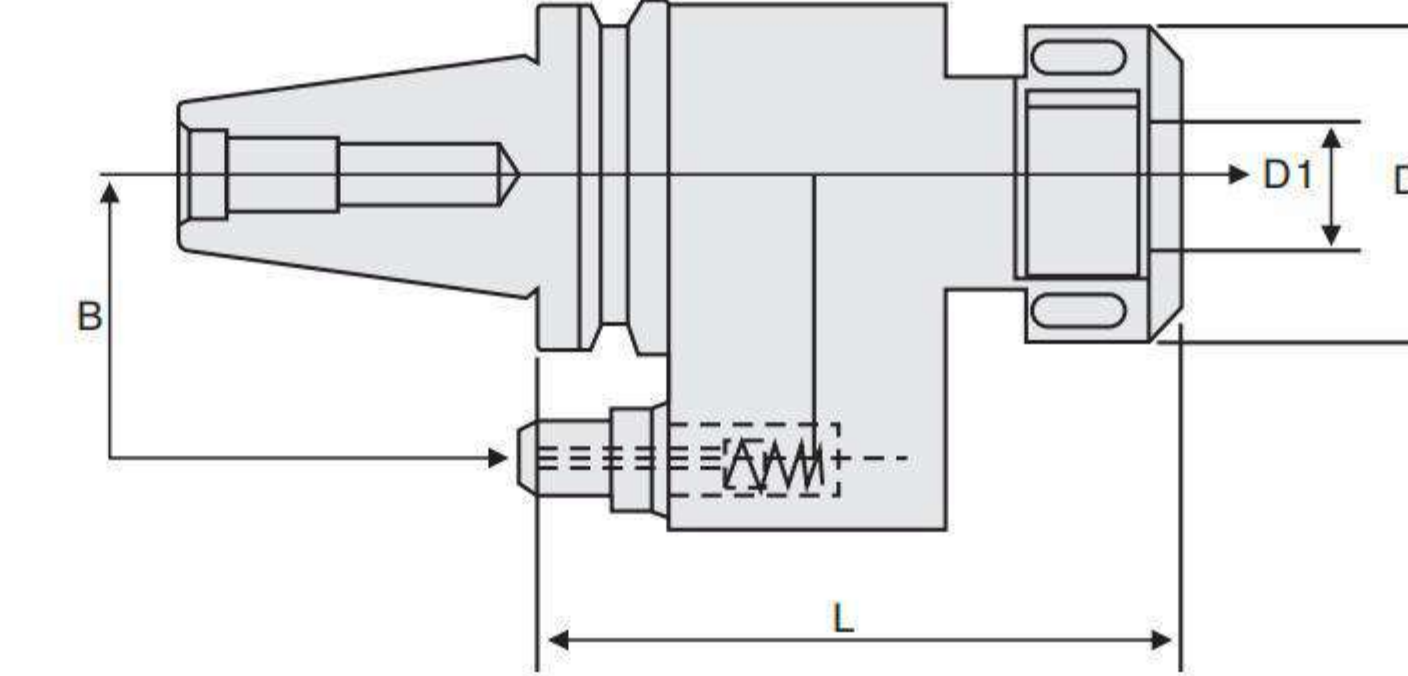


	型號	尺寸 Size						
	Specification	L	L1	H	H1	d	D	C
<b>C32</b>	16	65	10	15	15	16	32	53
	20	65	10	15	15	20	32	53
	25	65	10	15	15	25	32	53
<b>C40</b>	16	75	10	19	18	16	40	63
	20	75	10	19	18	20	40	63
	25	75	10	19	18	25	40	63
	32	75	10	19	18	32	40	63

### 止動塊



## PRECISION MILLING HOLDER 銑削夾持具

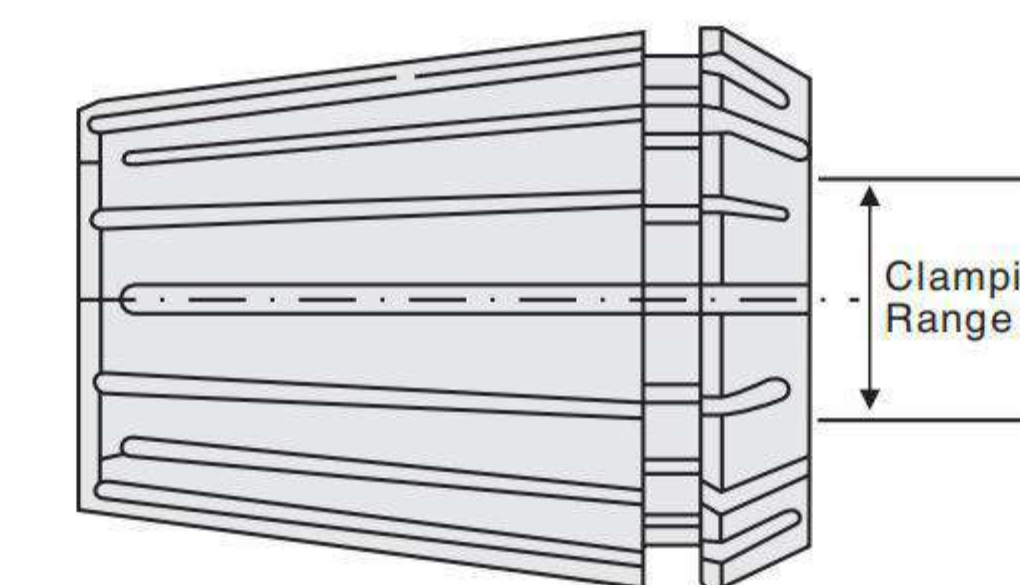


ERO OIL-FEED TOOL HOLDER

### ERO 油路刀柄

	型號	尺寸 Size			中心距 Center Dia.
	Specification	D1	D	L	B
<b>BT40</b>	ERO32-145	ERO32-φ6-φ20	50	145	60/65
	ERO40-150	ERO40-φ6-φ25	63	150	60/65
<b>BT50</b>	ERO32-160	ERO32-φ6-φ20	50	155	80/82
	ERO40-160	ERO40-φ6-φ25	63	160	80/82

- ERO油路刀把:請使用ER止水筒夾和止水螺帽。
- 請于訂購時，依據機臺規格確認中心距離B的尺寸；
- ERO油路刀把止動塊為另購品。



型號	夾持範圍
Specification	Clamping Range
<b>ER32</b> 4C	4.0-3.0
5C	5.0-4.0
6C	6.0-5.0
7C	7.0-6.0
8C	8.0-7.0
9C	9.0-8.0
10C	10.0-9.0
11C	11.0-10.0
12C	12.0-11.0
13C	13.0-12.0
14C	14.0-13.0
15C	15.0-14.0
16C	16.0-15.0
17C	17.0-16.0
18C	18.0-17.0
19C	19.0-18.0
20C	20.0-19.0

型號	夾持範圍
Specification	Clamping Range
<b>ER40</b> 4C	4.0-3.0
5C	5.0-4.0
6C	6.0-5.0
7C	7.0-6.0
8C	8.0-7.0
9C	9.0-8.0
10C	10.0-9.0
11C	11.0-10.0
12C	12.0-11.0
13C	13.0-12.0
14C	14.0-13.0
15C	15.0-14.0
16C	16.0-15.0
17C	17.0-16.0
18C	18.0-17.0
19C	19.0-18.0
20C	20.0-19.0

### ER 止水型筒夾

型號	夾持範圍
Specification	Clamping Range
<b>ER40</b> 21C	21.0-20.0
22C	22.0-21.0
23C	23.0-22.0
24C	24.0-23.0
25C	25.0-24.0
26C	26.0-25.0



PRECISION MILLING HOLDER 銑削夾持具



SDC HIGH PRECISION TOOL HOLDER

SDC 后拉式刀柄

	型號	d	尺寸 Size	
	Specification		L	C
BT30	-SDC6-60	3.0-6.0	60	14.5
	-SDC6-90	3.0-6.0	90	14.5
	-SDC8-60	3.0-10.0	60	22
	-SDC8-90	3.0-10.0	90	22
	-SDC12-60	3.0-12.0	60	34
	-SDC12-90	3.0-12.0	90	34
BT40	-SDC6-100	3.0-6.0	100	14.5
	-SDC6-150	3.0-6.0	150	14.5
	-SDC6-200	3.0-6.0	200	14.5
	-SDC6-250	3.0-6.0	250	14.5
	-SDC8-100	3.0-10.0	100	22
	-SDC8-150	3.0-10.0	150	22
	-SDC8-200	3.0-10.0	200	22
	-SDC8-250	3.0-10.0	250	22
	-SDC12-100	3.0-12.0	100	34
	-SDC12-150	3.0-12.0	150	34
	-SDC12-200	3.0-12.0	200	34
	BT50	-SDC6-100	3.0-6.0	100
-SDC6-150		3.0-6.0	150	14.5
-SDC6-200		3.0-6.0	200	14.5
-SDC6-250		3.0-6.0	250	14.5
-SDC6-300		3.0-6.0	300	14.5
-SDC8-100		3.0-10.0	100	22
-SDC8-150		3.0-10.0	150	22
-SDC8-200		3.0-10.0	200	22
-SDC8-250		3.0-10.0	250	22
-SDC8-300		3.0-10.0	300	22
-SDC12-100		3.0-12.0	100	34
-SDC12-150		3.0-12.0	150	34
-SDC12-200		3.0-12.0	200	34
-SDC12-250		3.0-12.0	250	34
-SDC12-300		3.0-12.0	300	34

特點/Feature

1. 預設動平衡, 刀柄精度高, 跳動0.003mm, 最高轉速G2.5 30000rpm適合高精密加工。
2. 無螺帽設計, 減少加工干涉。
3. 后拉筒夾特殊角度設計, 加持力強, 重複裝夾精度高。
4. 安裝和拆卸刀具方便, 使用六角扳手即可。
1. Pre-balanced, high precision run-out 0.003mm, maximum G2.5 30000 rpm, suitable for high precision machining.
2. Without clamping nut, less processing interference.
3. Back locking collet design ensures high clamping force and precision repetition.
4. Assembling and disassembling process is simple and easy by hexagonal wrench.

PRECISION MILLING HOLDER 銑削夾持具



SDC COLLET

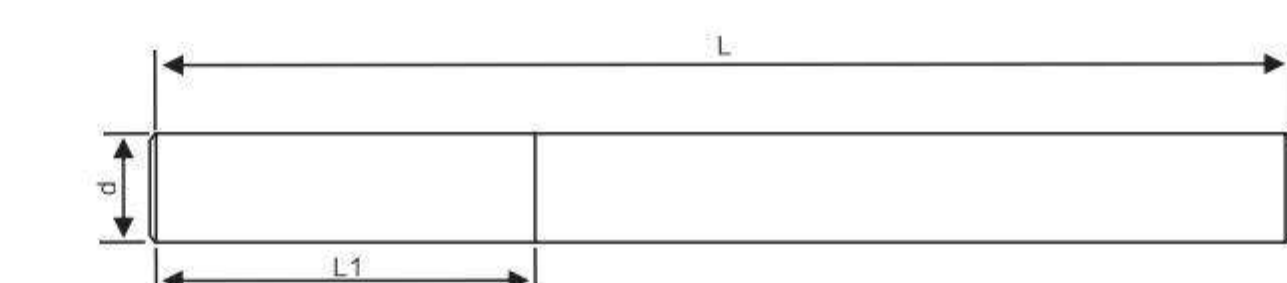
SDC 后拉式筒夾

型號	標準	精密	型號	標準	精密	型號	標準	精密			
									Specification	Standard	Precision
SDC6	-3	0.005	0.003	SDC8	-3	0.005	0.003	SDC12	-3	0.005	0.003
	-4	0.005	0.003		-4	0.005	0.003		-4	0.005	0.003
	-5	0.005	0.003		-5	0.005	0.003		-5	0.005	0.003
	-6	0.005	0.003		-6	0.005	0.003		-6	0.005	0.003
									-8	0.005	0.003
									-10	0.005	0.003
									-12	0.005	0.003



SDC EXTENSION HOLDER

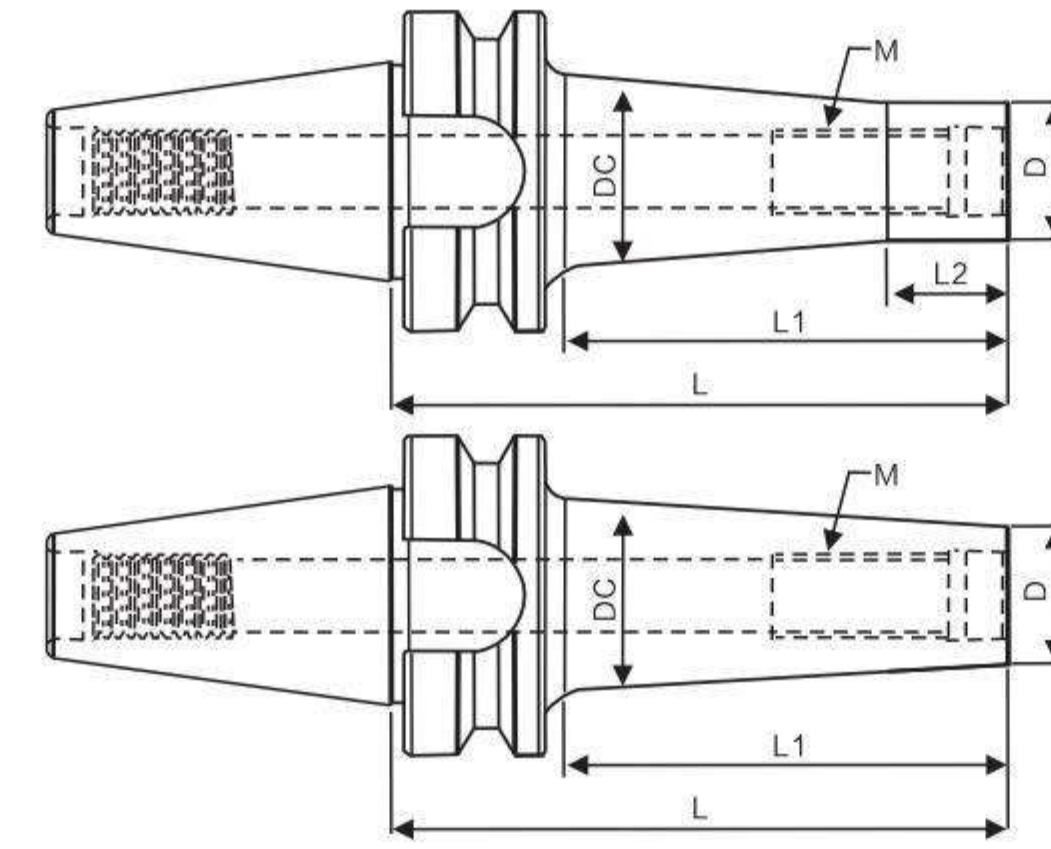
SDC 延長杆



型號	Specification	d	D	L	L1	斜度
						Angle
SDC	ST12-SDC6-120L	14.5	12	120	45	
	ST12-SDC6-150L	14.5	12	150	45	
	ST16-SDC6-130L	14.5	16	130	30	单边3°
	ST16-SDC6-150L	14.5	16	150	30	单边3°
	ST16-SDC6-200L	14.5	16	200	35	单边3°
	ST16-SDC6-250L	14.5	16	250	35	单边3°
	ST20-SDC6-150L	14.5	20	150	30	单边3°
	ST20-SDC6-200L	14.5	20	200	35	单边3°
	ST20-SDC6-250L	14.5	20	250	35	单边3°
	ST20-SDC8-150L	22	20	150	45	
	ST20-SDC8-200L	22	20	200	45	
	ST20-SDC8-250L	22	20	250	45	

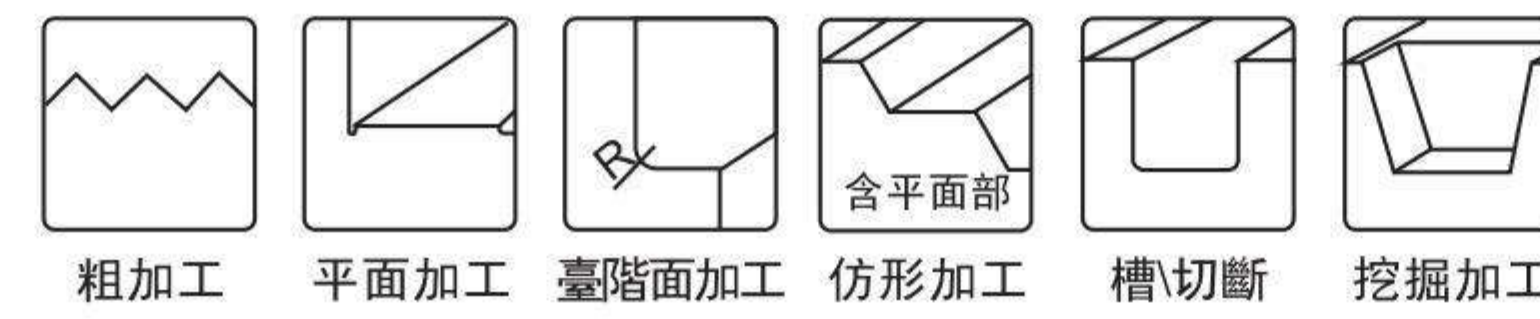


## PRECISION MILLING HOLDER 銑削夾持具



INDEXABLE SCREW TYPE MODULAR CUTTER

可轉位鎖牙式立銑刀柄

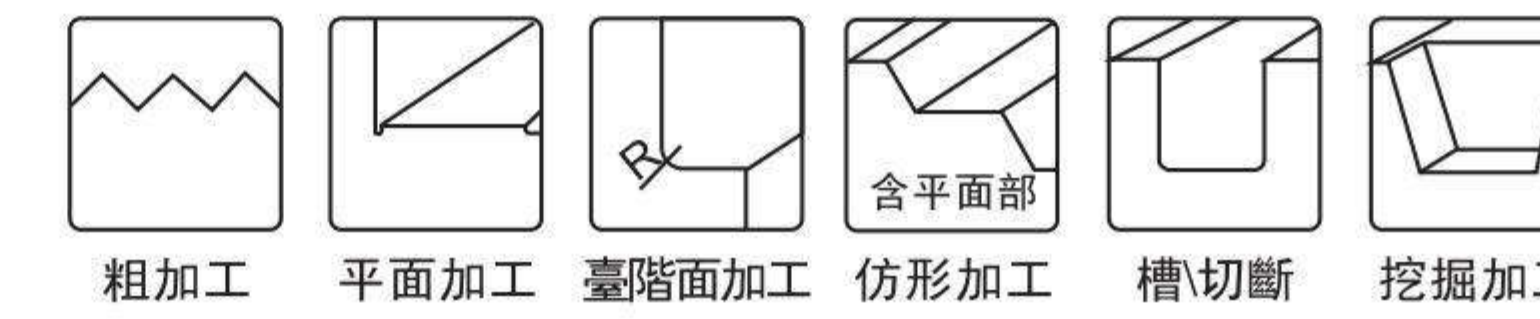
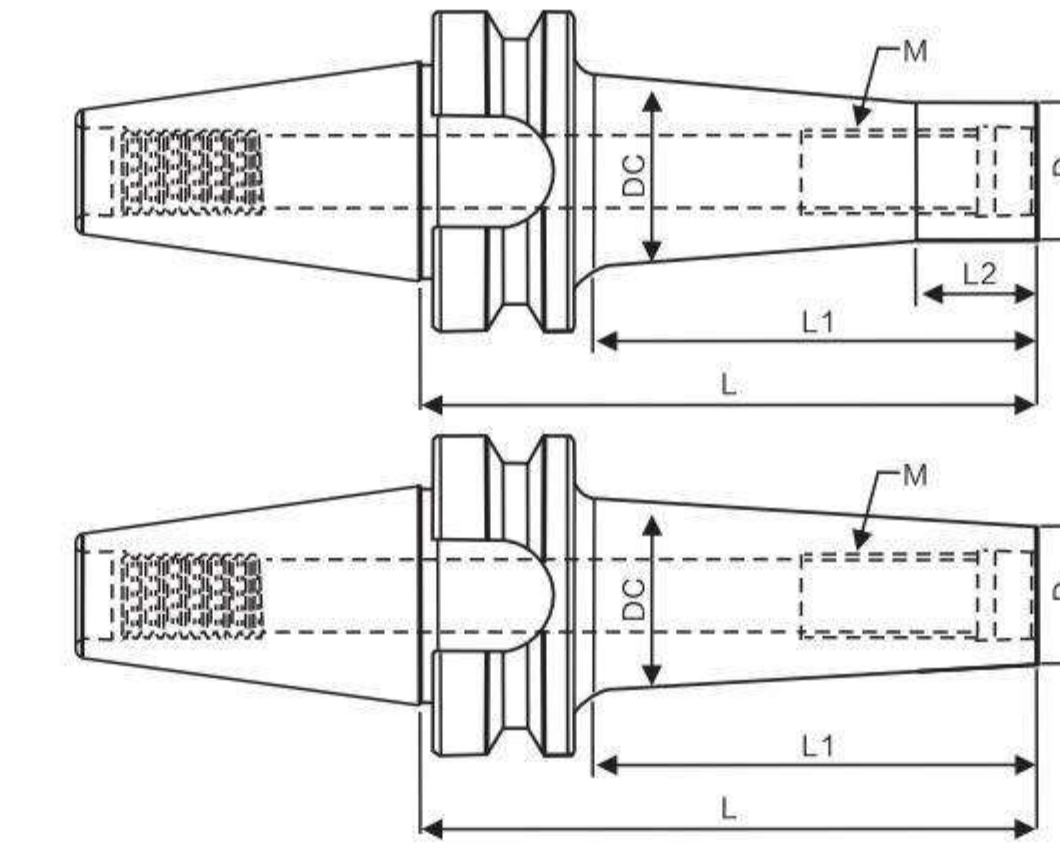


型號 Specification	M	D	DC	L	L2	L1
BT30-M6-50L	6	12	17	50	/	30
BT30-M6-100L	6	12	17	100	/	80
BT30-M8-45L	8	15	17	45	/	25
BT30-M8-50L	8	15	17	50	/	30
BT30-M8-100L	8	15	17	100	/	80
BT30-M10-45L	10	19	21	45	/	25
BT30-M10-50L	10	19	21	50	/	30
BT30-M10-100L	10	19	21	100	/	80
BT30-M12-60L	12	24	25	60	/	40
BT30-M12-100L	12	24	26	100	/	80
BT30-M16-45L	16	30	33	45	/	30
BT30-M16-60L	16	30	33	60	/	40
BT30-M16-100L	16	30	32	100	/	80
BT40-M8-70L	8	15	17	70	/	45
BT40-M8-100L	8	15	17	100	/	75
BT40-M8-150L	8	15	22	150	50	125
BT40-M8-200L	8	15	22	200	70	175
BT40-M10-70L	10	19	20	70	/	45
BT40-M10-100L	10	19	25	100	/	75
BT40-M10-150L	10	19	25	150	/	125
BT40-M10-200L	10	19	31	200	70	175
BT40-M12-70L	12	24	26	70	/	45
BT40-M12-100L	12	24	32	100	/	75
BT40-M12-150L	12	24	37	150	50	125
BT40-M12-200L	12	24	68	200	/	175
BT40-M16-70L	16	30	32	70	/	45
BT40-M16-100L	16	30	36	100	30	75
BT40-M16-150L	16	30	41	150	/	125
BT40-M16-200L	16	30	46	200	70	175

### 特點/Feature

- 1、模塊化組合，刀頭與刀柄螺紋連接，沉頭結合
  - 2、刀柄直接連接刀頭，無需筒夾，降低多次裝夾精度公差
  - 3、刀片切削均勻提高刀片壽命，減少加工過程中因為周跳導致的振紋
  - 4、可換式刀頭，重複裝夾精度高，適合開粗和精銑
  - 5、刀頭可以對應不同型號刀片，與刀柄多種組合，即使刀具部分損壞也可立即更換，更經濟
1. Modular type screw cutter connected with tool holder, countersink surface.
  2. Direct connection without collet, repetition tolerance is reduced.
  3. Equal cutting force promise the improved insert life and less processing chatter marks
  4. Changeable screw cutter bar, precision repetition, suitable for rough and finish machining.
  5. Various insert type can be applied for the the screw cutter, different combinations with the tool holder are available. Part of tools can be replaced easily, more economical

## PRECISION MILLING HOLDER 銑削夾持具



INDEXABLE SCREW TYPE MODULAR CUTTER

可轉位鎖牙式立銑刀柄

型號 Specification	M	D	DC	L	L2	L1
BT50-M8-130L	8	16	30	130	/	95
BT50-M8-200L	8	16	32	200	/	165
BT50-M8-250L	8	16	37	250	/	215
BT50-M8-300L	8	16	37	300	/	265
BT50-M10-130L	10	20	30	130	/	95
BT50-M10-200L	10	20	37	200	/	165
BT50-M10-250L	10	20	37	250	/	215
BT50-M10-300L	10	20	37	300	85	265
BT50-M12-130L	12	24	33	120	/	95
BT50-M12-200L	12	24	40	200	/	165
BT50-M12-250L	12	24	50	250	/	215
BT50-M12-300L	12	24	50	300	105	265
BT50-M16-130L	16	29	40	135	/	95
BT50-M16-200L	16	29	50	200	65	165
BT50-M16-250L	16	29	55	250	85	215
BT50-M16-300L	16	29	55	300	105	265

### 特點/Feature

- 1、模塊化組合，刀頭與刀柄螺紋連接，沉頭結合
  - 2、刀柄直接連接刀頭，無需筒夾，降低多次裝夾精度公差
  - 3、刀片切削均勻提高刀片壽命，減少加工過程中因為周跳導致的振紋
  - 4、可換式刀頭，重複裝夾精度高，適合開粗和精銑
  - 5、刀頭可以對應不同型號刀片，與刀柄多種組合，即使刀具部分損壞也可立即更換，更經濟
1. Modular type screw cutter connected with tool holder, countersink surface.
  2. Direct connection without collet, repetition tolerance is reduced.
  3. Equal cutting force promise the improved insert life and less processing chatter marks
  4. Changeable screw cutter bar, precision repetition, suitable for rough and finish machining.
  5. Various insert type can be applied for the the screw cutter, different combinations with the tool holder are available. Part of tools can be replaced easily, more economical



PRECISION MILLING HOLDER 銑削夾持具



BT-SR SHRINK FIT CHUCK  
BT-SR 熱縮刀柄

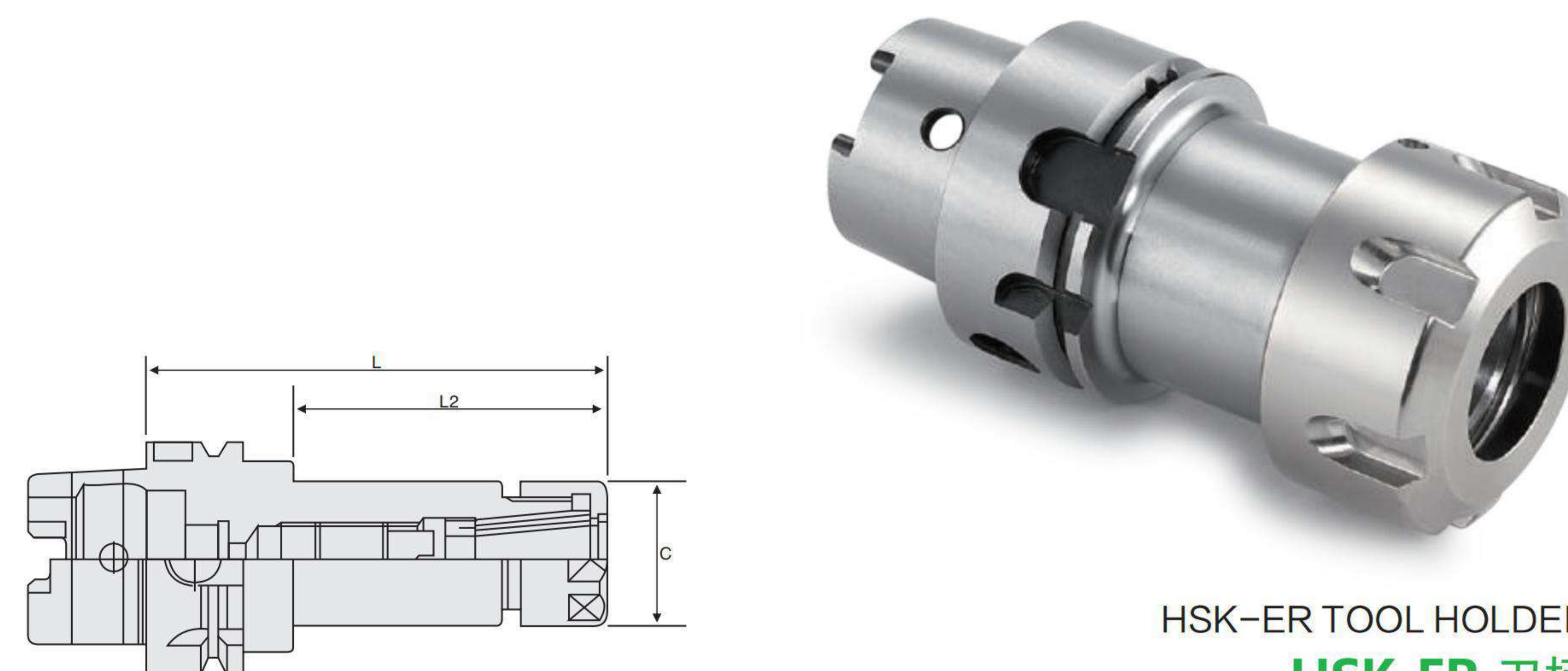
精度高，適合高速旋轉  
預設動平衡：G2.5最高轉速25000min<sup>-1</sup>，  
比DIN精密更佳。

	型號 Specification	尺寸 Size				L	重量 Weight(KG)
		Φd1	D1	D2	L1		
BT30	-SR3-80	14.8	3	9	10	80	0.90
	-SR4-80	15.8	4	10	10	80	0.90
	-SR5-80	16.8	5	11	10	80	0.90
	-SR6-80	17.8	6	12	10	80	0.90
	-SR8-80, 120	19.8	8	14	10	80, 120	0.90,1.00
	-SR10-80, 120	21.8	10	16	26	80,120	0.90,1.00
	-SR12-80, 120	23.8	12	18	32	80,120	1.10,1.35
	-SR14-80, 120	25.8	14	20	38	80,120	1.30,1.50
	-SR16-90, 120	27.8	16	22	38	90,120	1.80,1.95
	-SR18-90, 120	29.8	18	24	40	90,120	2.0,2.2
	-SR20-90, 120	31.8	20	26	42	90, 120	2.20,2.30
	BT40	-SR3-90	17	3	9	10	90
-SR4-90		18	4	10	10	90	1.00
-SR5-90		19	5	11	10	90	1.10
-SR6-90, 120		20	6	12	10	90,120	1.00,1.10
-SR8-90, 120		22	8	14	10	90,120	1.00,1.10
-SR10-90, 120		24	10	16	26	90,120	1.10,1.10
-SR12-90, 120		26	12	18	32	90,120	1.10,1.10
-SR14-90, 120		28	14	20	38	90,120	1.20,1.20
-SR16-90, 120		30	16	22	38	90,120	1.20,1.30
-SR18-95, 120		32	18	24	40	90,120	1.40,1.60
-SR20-95, 120		34	20	26	42	95,120	2.00,2.20
-SR25-100, 120		39	25	31	50	100,120	2.50,3.00
BT50	-SR3-90	17	3	9	10	90	3.40
	-SR4-90	18	4	10	10	90	3.40
	-SR5-90	19	5	11	10	90	3.50
	-SR6-90, 120	20	6	12	10	90,120	3.50,3.60
	-SR8-90, 120	22	8	14	10	90,120	3.50,3.60
	-SR10-90, 120	24	10	16	26	90,120	3.80,4.0
	-SR12-90, 120	26	12	18	32	90,120	3.95,4.05
	-SR14-90, 120	28	14	20	38	90,120	4.10,4.30
	-SR16-90, 120	30	16	22	38	90,120	4.15,4.40
	-SR18-95, 120	32	18	24	40	90,120	4.80,5.10
	-SR20-95, 120	34	20	26	42	95,120	5.00,5.30
	-SR25-100, 120	39	25	31	50	100,120	5.50,6.10

特點/Feature

- 1、夾持力強。
- 2、同心度高，高精度，適合高速精密加工。
- 1、 Strong torque power . 2、 High concentricity and run-out accuracy, suitable for fine finishing machining .

PRECISION MILLING HOLDER 銑削夾持具



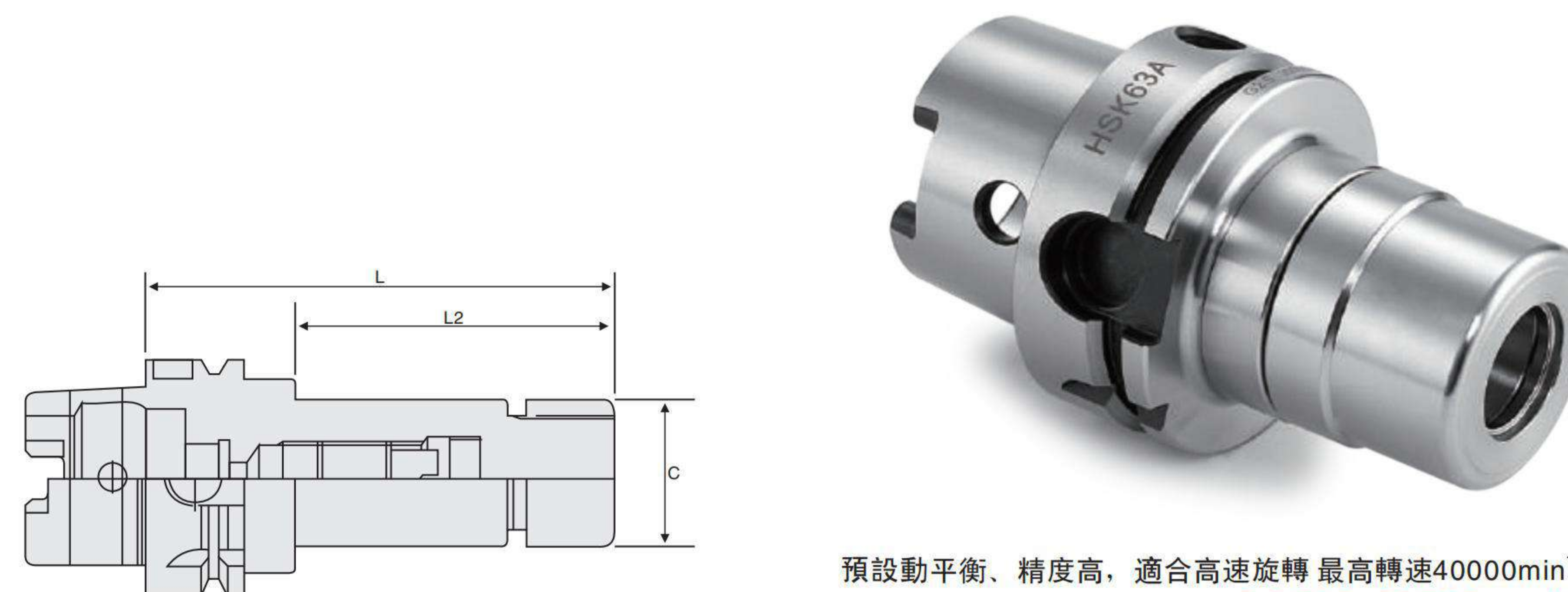
HSK-ER TOOL HOLDER  
HSK-ER 刀柄

	型號 Specification	夾持範圍 Clamping range	φC	L	L2	筒夾 suitable Collet	重量 Weight(KG)
HSK 63A	-ER20-95	1.0~13.0	34	95	69	ER20	1.0
	-ER25-105	1.0~16.0	42	105	79	ER25	1.2
	-ER32-110	1.0~20.0	50	110	84	ER32	1.4

HSK 63A-GER16/20/25/32接受訂貨。

特點/Feature

- 1、刀柄精度高。
- 2、穩定的震動精度，提高精加工表面精度。
- 1、 High precision. 2、 Stable run-out accuracy to enhance fine machining surface roughness.



預設動平衡、精度高，適合高速旋轉 最高轉速40000min<sup>-1</sup>  
HSK-GSK 刀柄

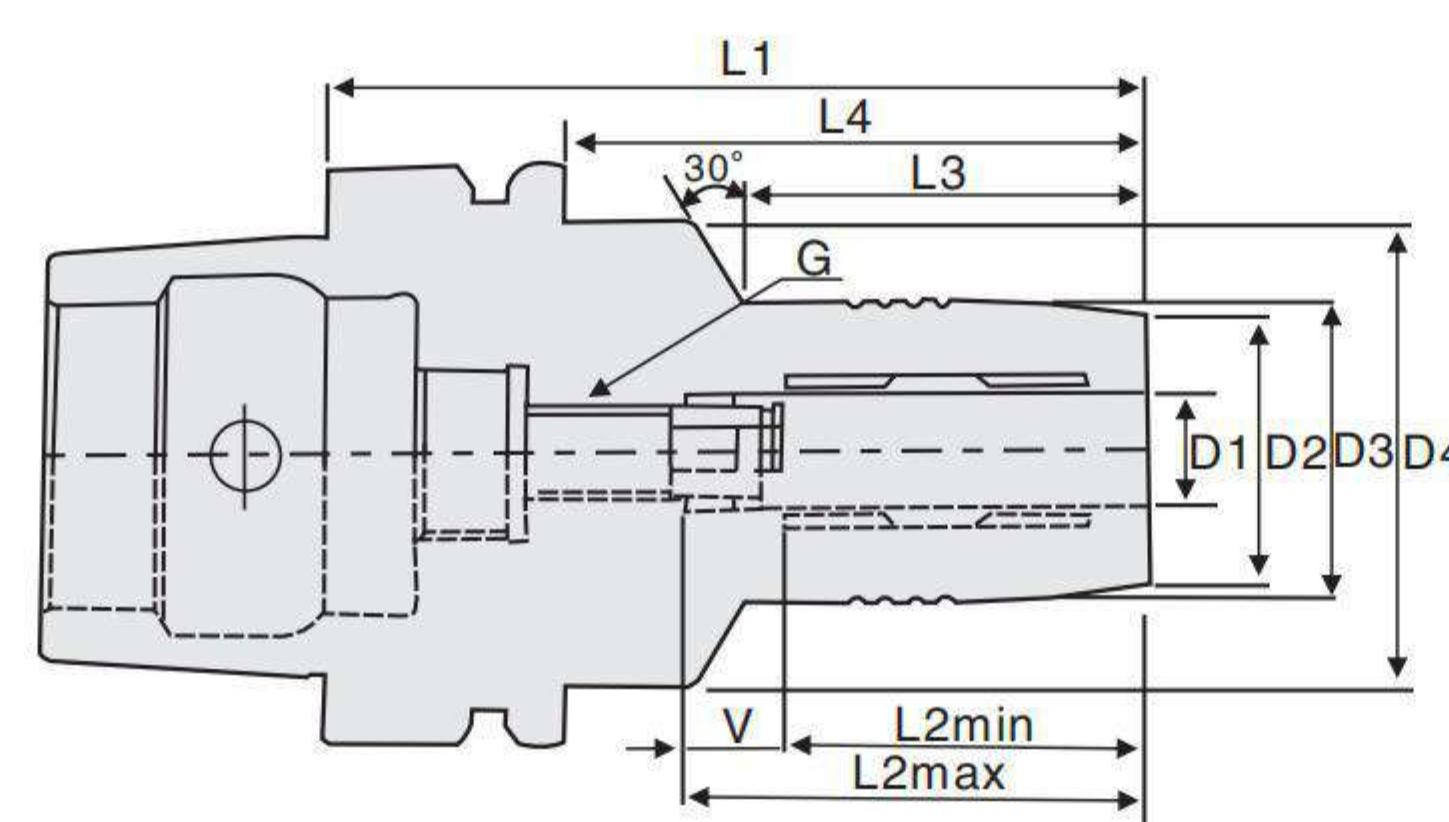
	型號 Specification	夾持範圍 Clamping range			最高旋轉數 MAX.min <sup>-1</sup>	筒夾 suitable Collet	
		C	L	L2			
HSK 50A	-SK10-60/75	27.5	60/75	25/40	1.75~10.0	40,000	SK10
	-SK16-80	40.0	80	45	2.75~16.0	30,000	SK16
HSK 63A	-SK10-105/150	27.5	105/150	63/108	1.75~10.0	30,000	SK10
	-SK16-120/150	40.0	120/150	78/108	2.75~16.0	25,000	SK16

特點/Feature

- 1、預設動平衡，刀柄精度高。
- 2、穩定的震動精度，提高精加工表面精度。
- 1、 Pre-balanced for high precision. 2、 Stable run-out accuracy to enhance fine machining surface roughness.



## PRECISION MILLING HOLDER 銑削夾持具



HSK40E/50E-HM HYDRAULIC CHUCK

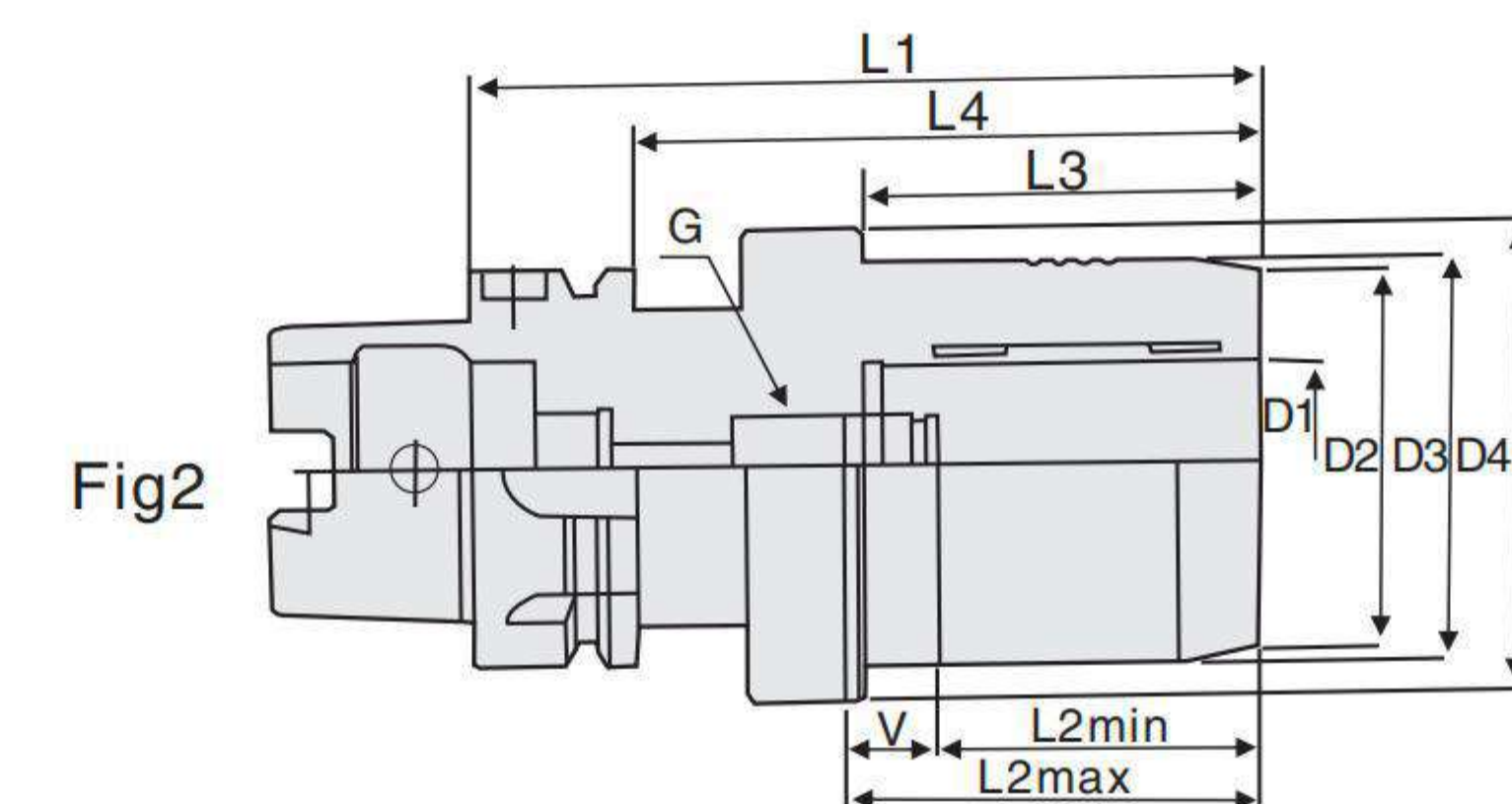
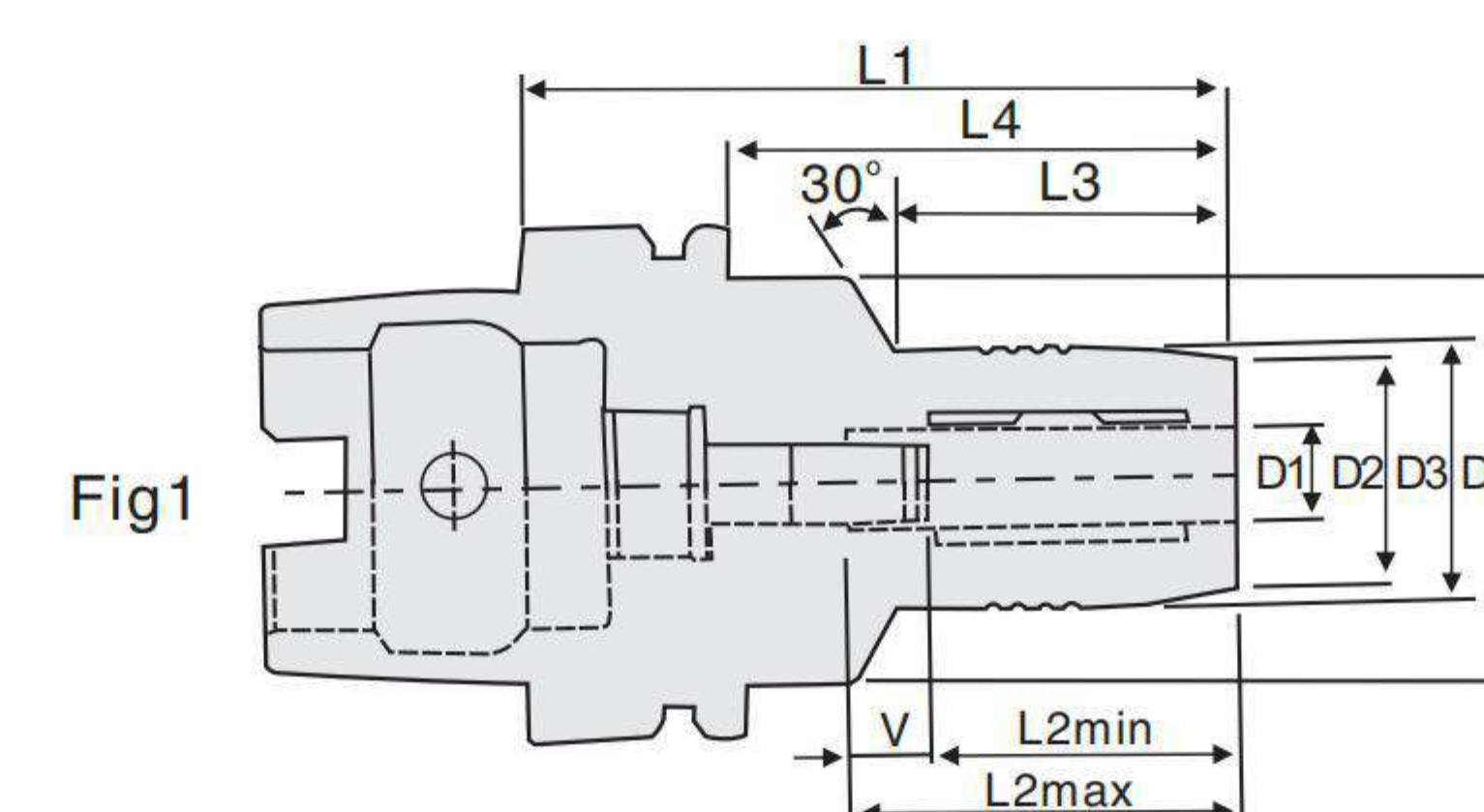
### HSK40E/50E-HM 液壓刀柄

HSK 40E	型號	D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	Type
	Specification												
HSK 40E	HM6-75	6	25	28	34	75	37.5	27.5	10	28	55	M5X0.8	Fig1
	HM8-70	8	27	30	34	70	37.5	27.5	10	28	50	M5X0.8	Fig1
	HM10-75	10	29	32	34	75	42.5	32.5	10	34	55	M5X0.8	Fig1
	HM12-85	12	31	34	34	85	47.5	37.5	10	-	65	M5X0.8	Fig1
HSK 50E	HM6-70	6	25	28	40	70	37.5	27.5	10	28	44	M5X0.8	Fig1
	HM8-70	8	27	30	40	70	37.5	27.5	10	28	44	M6X1.0	Fig1
	HM10-80	10	29	32	40	80	42.5	32.5	10	34	54	M6X1.0	Fig1
	HM12-85	12	31	34	40	85	47.5	37.5	10	44	59	M6X1.0	Fig1
	HM16-90	16	35	38	60	90	52.5	42.5	10	30	64	M6X1.0	Fig1
HM20-90	20	40	43	-	90	52.5	42.5	10	-	64	M6X1.0	Fig1	

#### 特點/Feature

- 夾持力強。
- 同心度高，高精度，適合高速精密加工。
- Strong torque power .
- High concentricity and run-out accuracy, suitable for fine finishing machining .

## PRECISION MILLING HOLDER 銑削夾持具

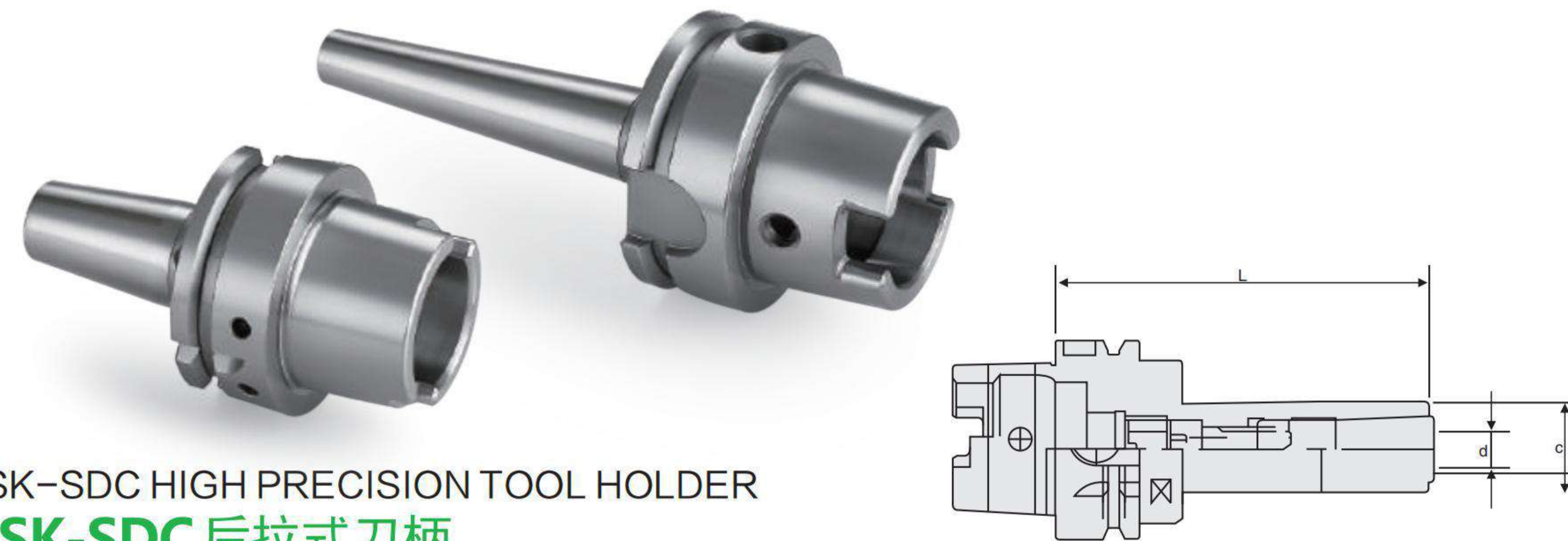


HSK40A/50A/63A/100A-HM HYDRAULIC CHUCK  
HSK40A/50A/63A/100A-HM 液壓刀柄

HSK 40A	型號	D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	Type
	Specification												
HSK 40A	HM6-70	6	25	28	34	70	37.5	27.5	10	28	50	M5X0.8	Fig1
	HM8-70	8	27	30	34	70	37.5	27.5	10	28	50	M5X0.8	Fig1
	HM10-75	10	29	32	34	75	42.5	32.5	10	34	55	M5X0.8	Fig1
	HM12-85	12	31	34	34	85	47.5	37.5	10	-	65	M6X1.0	Fig1
HSK 50A	HM6-70	6	25	28	40	70	37.5	27.5	10	28	44	M5X0.8	Fig1
	HM8-70	8	27	30	40	70	37.5	27.5	10	28	44	M6X1.0	Fig1
	HM10-80	10	29	32	40	80	42.5	32.5	10	34	54	M6X1.0	Fig1
	HM12-85	12	31	34	40	85	47.5	37.5	10	44	59	M6X1.0	Fig1
	HM14-85	14	33	36	40	85	47.5	37.5	10	44	59	M6X1.0	Fig1
	HM16-90	16	35	38	60	90	52.5	42.5	10	30	64	M6X1.0	Fig2
	HM18-90	18	38	41	-	90	52.5	42.5	10	-	64	M6X1.0	Fig1
	HM20-90	20	40	43	-	90	52.5	42.5	10	-	64	M6X1.0	Fig1
HSK 63A	HM6-70	6	25	28	50	70	37.5	27.5	10	24	44	M5X0.8	Fig1
	HM8-70	8	27	30	50	70	37.5	27.5	10	24	44	M6X1.0	Fig1
	HM10-80	10	29	32	50	80	42.5	32.5	10	35	54	M6X1.0	Fig1
	HM12-85	12	31	34	50	85	47.5	37.5	10	40	59	M6X1.0	Fig1
	HM14-85	14	33	36	50	85	47.5	37.5	10	40	59	M6X1.0	Fig1
	HM16-90	16	35	38	50	90	52.5	42.5	10	46	64	M8X1.0	Fig1
	HM18-90	18	38	41	50	90	52.5	42.5	10	47	64	M8X1.0	Fig1
	HM20-90	20	40	43	50	90	52.5	42.5	10	48	64	M8X1.0	Fig1
HSK 100A	HM25-120	25	40	43	63	120	61	51	10	59	94	M16X1.0	Fig2
	HM32-125	32	53	57	75	125	65	55	10	63	99	M16X1.0	Fig2
	HM6-75	6	25	28	54	75	37.5	27.5	10	26	46	M5X0.8	Fig1
	HM8-75	8	27	30	54	75	37.5	27.5	10	26	46	M6X1.0	Fig1
	HM10-90	10	29	32	50	90	42.5	32.5	10	42	61	M6X1.0	Fig1
	HM12-95	12	31	34	50	95	47.5	37.5	10	47	66	M6X1.0	Fig1
	HM14-95	14	33	36	50	95	47.5	37.5	10	47	66	M6X1.0	Fig1
	HM16-100	16	35	38	50	100	52.5	42.5	10	53	71	M8X1.0	Fig1
HM18-100	18	38	41	50	100	52.5	42.5	10	53	71	M8X1.0	Fig1	
HM20-105	20	40	43	50	105	52.5	42.5	10	59	76	M8X1.0	Fig1	
HM25-110	25	40	43	63	110	61	51	10	62	81	M8X1.0	Fig1	
HM32-110	32	53	57	75	110	65	55	10	62	81	M8X1.0	Fig1	

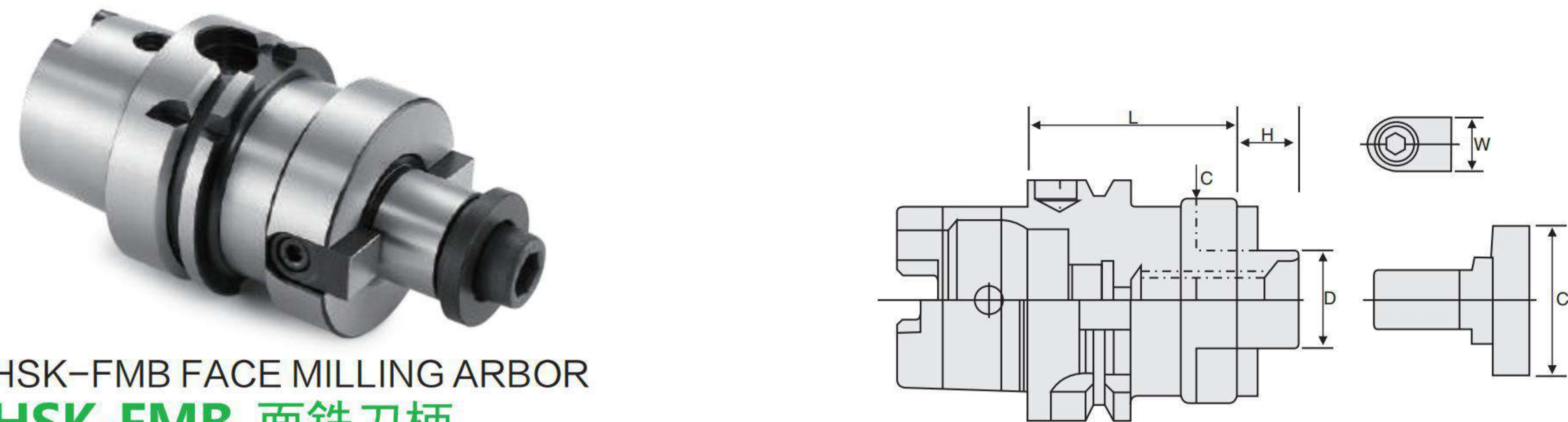


## PRECISION MILLING HOLDER 銑削夾持具



HSK-SDC HIGH PRECISION TOOL HOLDER  
HSK-SDC 后拉式刀柄

	型號 Specification	D	L	C	重量 Weight(KG)
HSK 50A	-SDC6-100	3.0-6.0	100	14.5	0.8
	-SDC6-150	3.0-6.0	150	14.5	1.0
	-SDC8-100	3.0-10.0	100	22	1.0
	-SDC8-150	3.0-10.0	150	22	1.2
	-SDC12-100	3.0-12.0	100	34	1.0
	-SDC12-150	3.0-12.0	150	34	1.2
HSK 63A	-SDC6-100	3.0-6.0	100	14.5	0.9
	-SDC6-150	3.0-6.0	150	14.5	1.2
	-SDC8-100	3.0-10.0	100	22	1.0
	-SDC8-150	3.0-10.0	150	22	1.3
	-SDC12-100	3.0-12.0	100	34	1.2
	-SDC12-150	3.0-12.0	150	34	1.6



HSK-FMB FACE MILLING ARBOR  
HSK-FMB 面銑刀柄

	型號 Specification	D	L	H	C	C1	W	鍵塊 Drive key	鎖緊螺栓 Lock bolt
HSK 50A	-FMB27-55	27	55	20	60	33	9.5	FW5	FM12
	-FMB22-60	22	60	18	45				
HSK 63A	-FMB27-65	27	65	20	60	33	9.5	FW5	FM12
	-FMB32-75	32	75	22	85	40	12.7	FW13	FM16
HSK 100A	-FMB22-60	22	60	18	45				
	-FMB27-65	27	65	20	60	33	9.5	FW5	FM12
	-FMB32-75	32	75	22	85	40	12.7	FW13	FM16
	-FMB40-75	40	75	34	80	50	15.9	FW19	FM20
	-FMB60-75	60	75	36	100	65	19	FW24	FM24

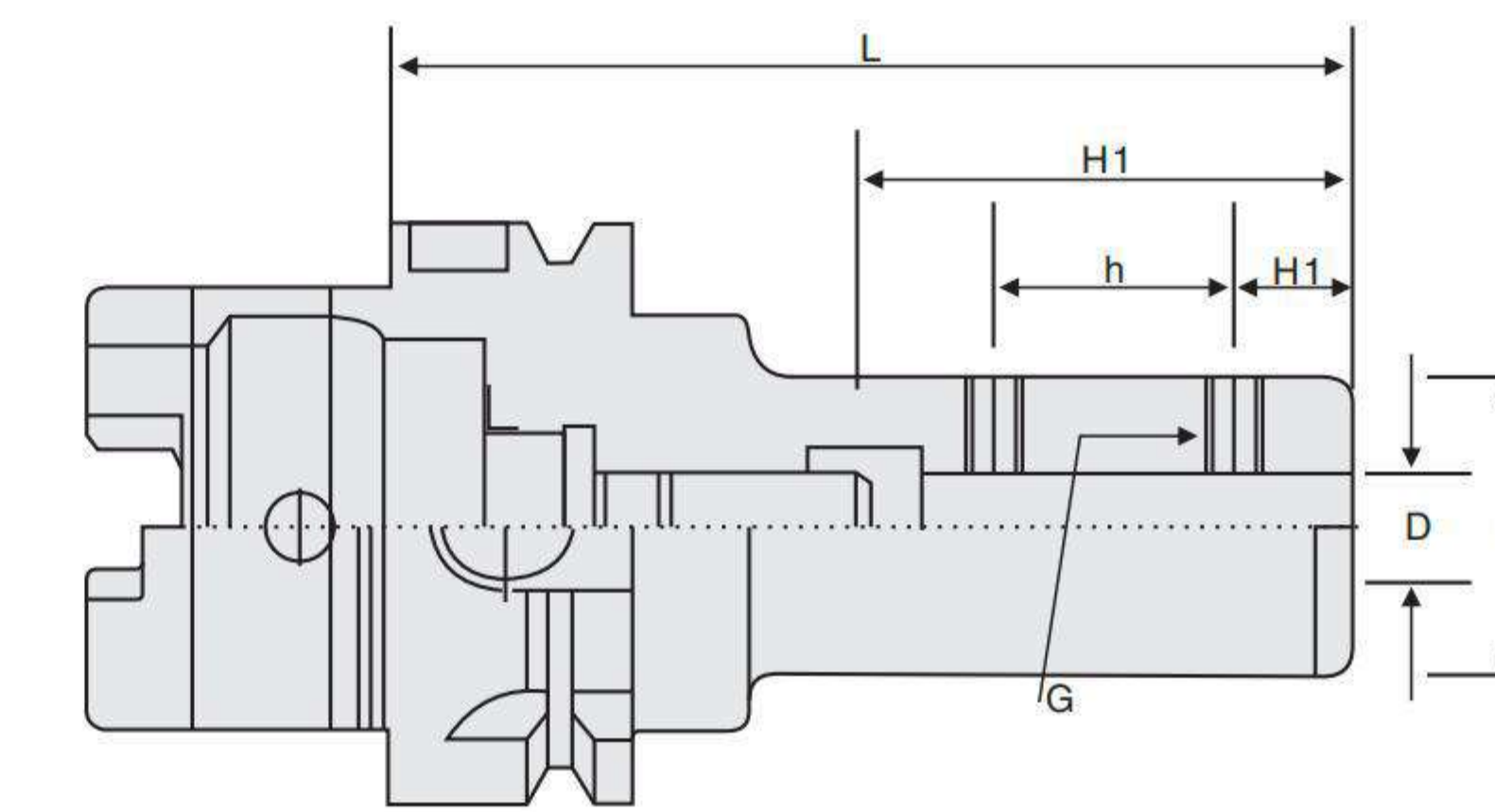
### 特點/Feature

- 1、刀柄精度高。 2、穩定的震動精度，提高精加工表面精度。
- 1、High precision. 2、Stable run-out accuracy to enhance fine machining surface roughness.

## PRECISION MILLING HOLDER 銑削夾持具



HSK-SLA WELDON TOOL HOLDER  
HSK-SLA 側固刀柄



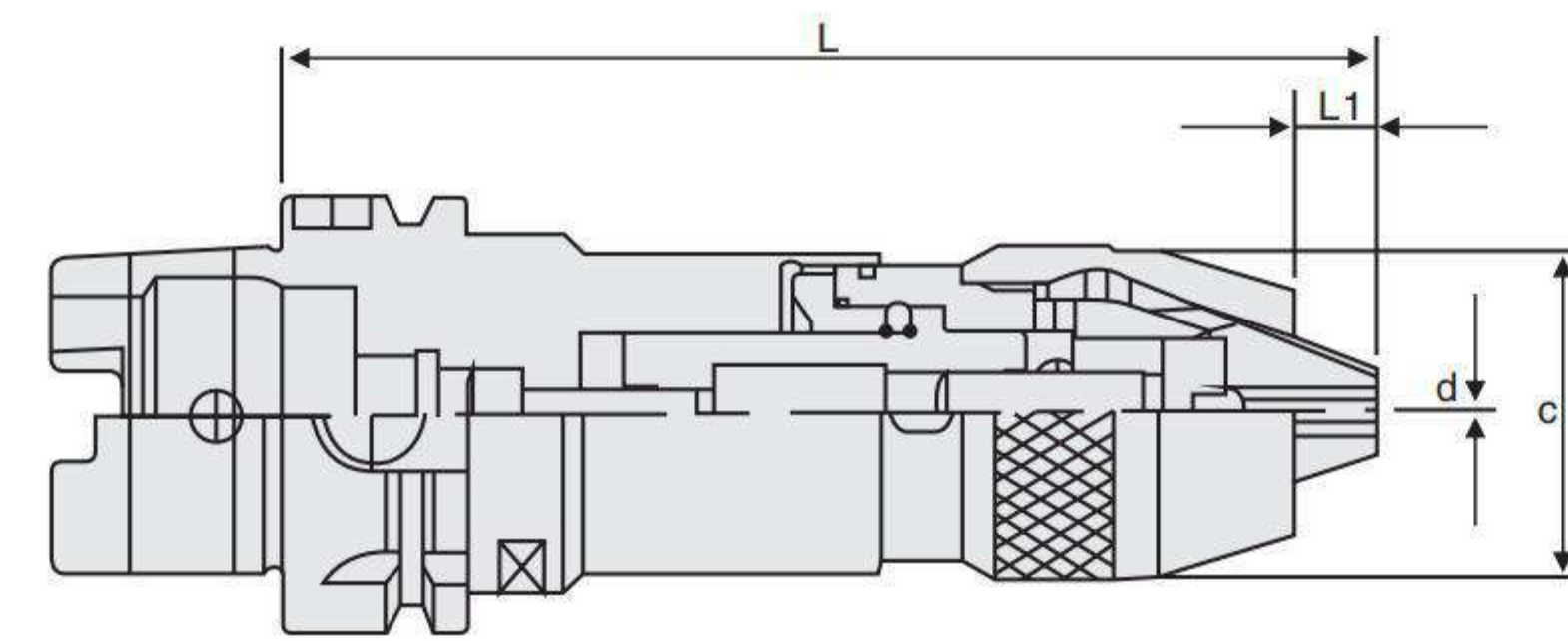
	型號 Specification	D	L	C	h	H	H1	G
HSK 63A	-SLA6-80	6	80	25		18	25	M6
	-SLA8-80	8	80	28		18	30	M8
	-SLA10-80	10	80	35		20	42	M10
	-SLA12-80	12	80	42		22.5	46	M12
	-SLA16-80	16	80	48		24	52	M14
	-SLA20-80	20	80	52		25	52	M16
	-SLA25-115	25	115	65	25	24	70	M18
	-SLA32-120	32	120	72	28	24	75	M20

### 特點/Feature

- 1、刀柄精度高。
- 2、穩定的震動精度，提高精加工表面精度。
- 1、High precision.
- 2、Stable run-out accuracy to enhance fine machining surface roughness.



## PRECISION MILLING HOLDER 銑削夾持具



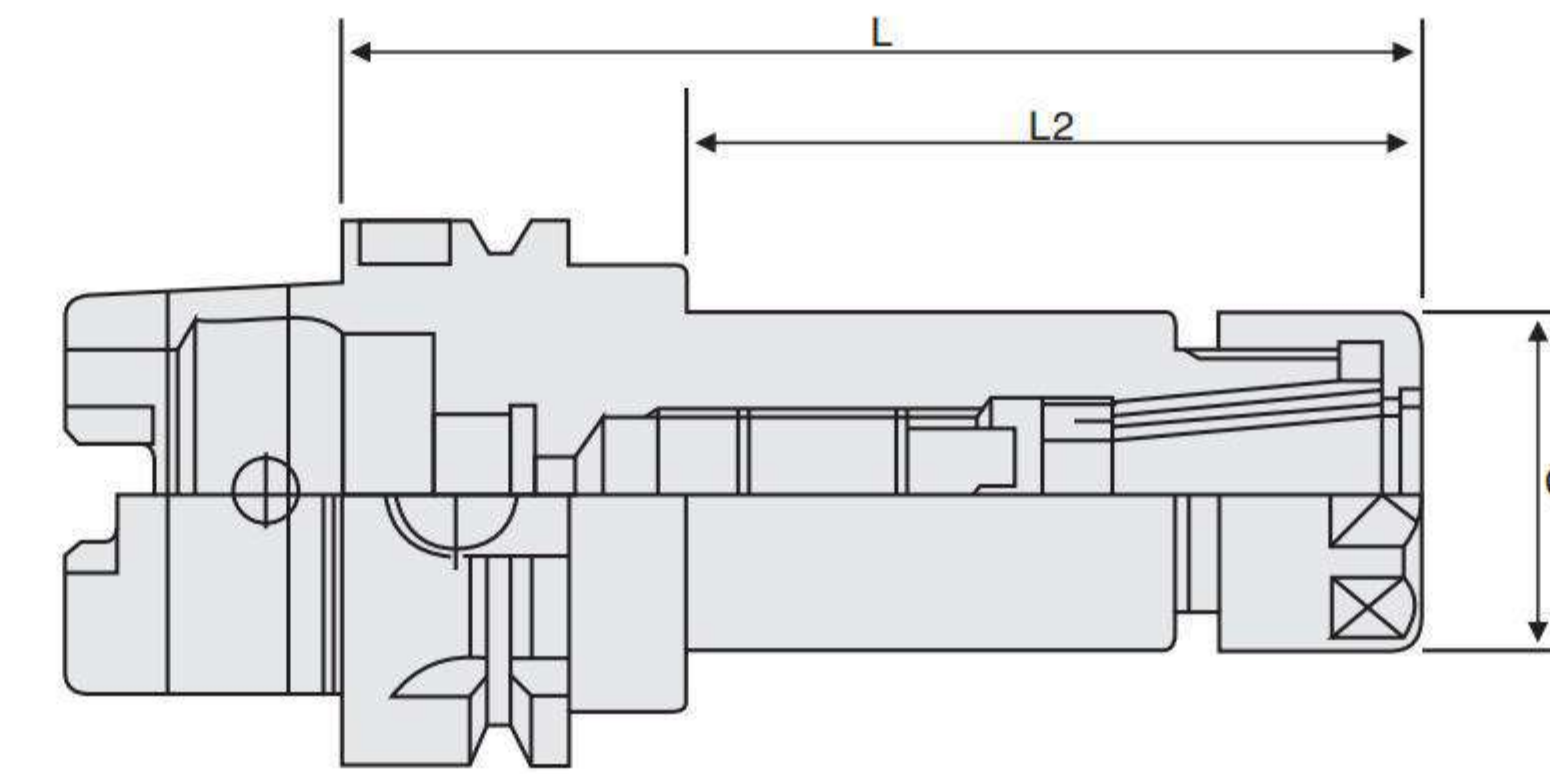
HSK-APU DRILL CHUCK HOLDER  
HSK-APU 鑽夾頭刀柄

	型號	D	L		夾持範圍
	Specification		min	max	
HSK 50A	-APU8-118	36.5	118	125	0.3~8
	-APU13-135	48	135	147	1.0~13
HSK63A	-APU8-118	36.5	120	127	0.3~8
	-APU13-135	48	135	147	1.0~13
HSK 100A	-APU8-130	36.5	130	137	0.3~8
	-APU13-145	48	145	157	1.0~13

### 特點/Feature

- 1、刀柄精度高。
- 2、穩定的震動精度，提高精加工表面精度。
- 1、High precision.
- 2、Stable run-out accuracy to enhance fine machining surface roughness.

## PRECISION MILLING HOLDER 銑削夾持具

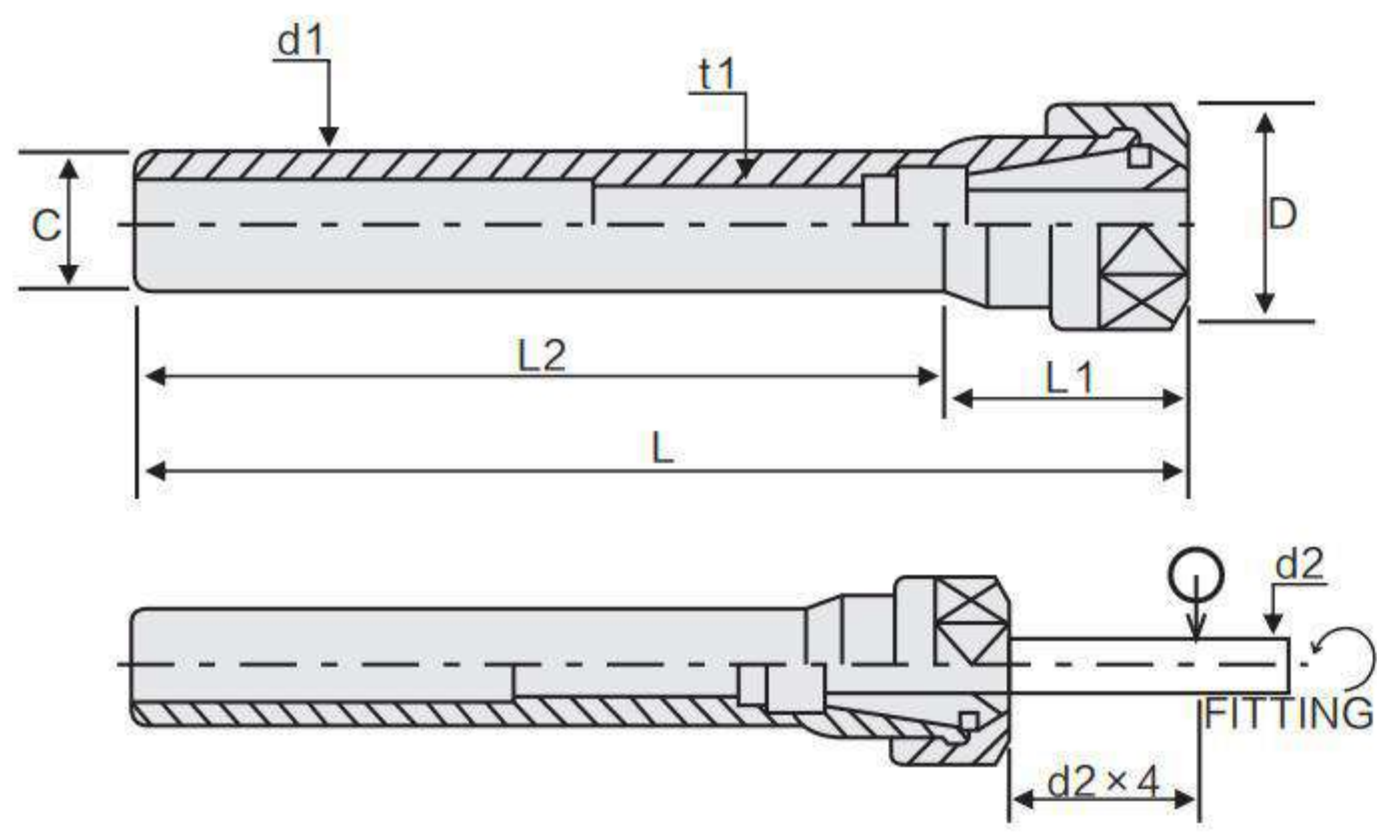


POWER CHUCK TOOL HOLDER  
HSK(A)-C 強力型刀柄

	型號	D1	C	L1	L	筒夾
	Specification					
HSK 40A	-C20-110	20	53	66.5	55	C20
HSK 50A	-C20-110	20	53	66.5	60	C20
	-C25-110	25	74	74.5	44	C25
HSK 63A	-C20-110	20	53	66.5	49	C20
	-C25-110	25	60	85	59	C25
	-C32-105	32	74	90	64	C32
	-C32-130	32	74	70	44	C32
HSK 100A	-C20-110	20	53	75	49	C20
	-C25-110	25	60	85	59	C25
	-C32-130	32	74	90	64	C32



## PRECISION MILLING HOLDER 銑削夾持具



ER EXTENSION HOLDER

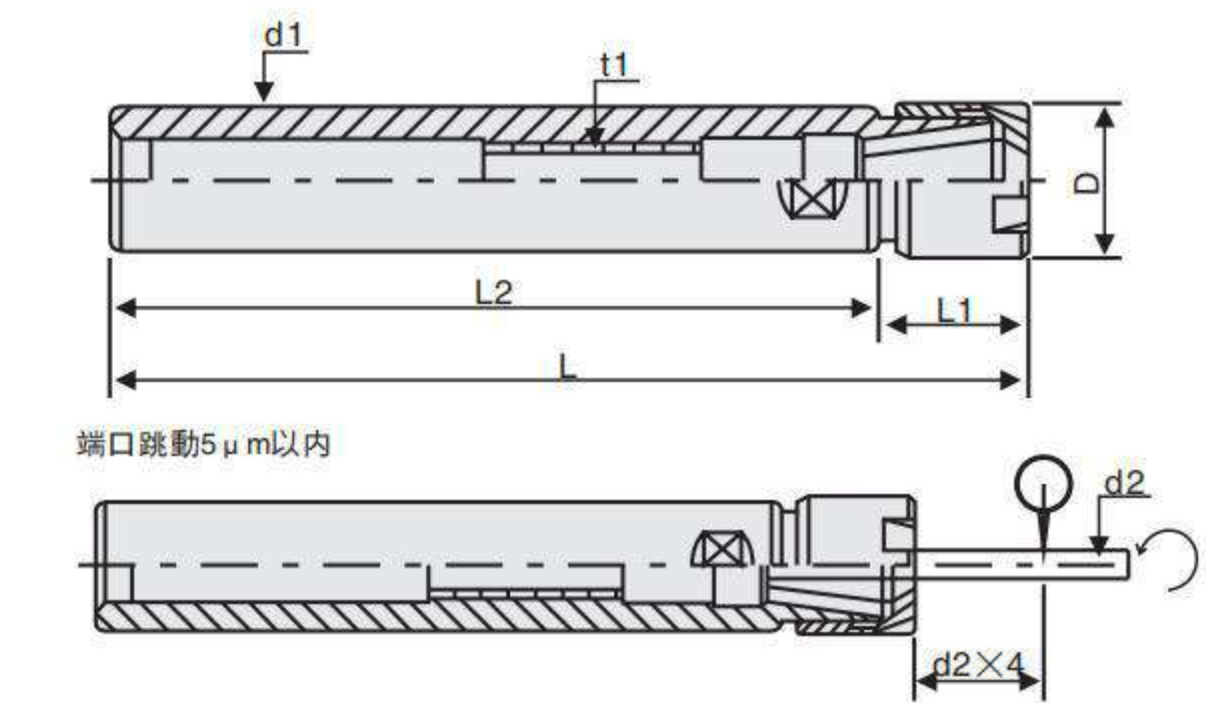
### ER 延長杆

	型號	夾持範圍	D	C	L1	L	螺帽 Nut	筒夾 Collet	扳手 Spanner
	Specification	Clamping range							
<b>C12</b>	-ER11-50	2.0~7	19	12	24.0	50	ER11A	ER11	0.55
	-ER11-100								
<b>C16</b>	-ER11-50	3.0~10	28	16	16.6	50	ER16A	ER16	1.85
	-ER11-100								
<b>C20</b>	-ER11-150	3.0~13	34	16	16.6	100	ER20A	ER20	1.2
	-ER16-100								
<b>C25</b>	-ER16-150	3.0~10	28	20	35.0	100	ER16A	ER16	1.65
	-ER16-200								
<b>C32</b>	-ER20-100	3.0~13	34	20	40.0	100	ER20A	ER20	3.15
	-ER20-150								
<b>C25</b>	-ER20-200	3.0~16	42	20	47.0	100	ER25UM	ER25	3.9
	-ER25-100								
<b>C32</b>	-ER25-150	3.0~20	50	25	50.0	100	ER32UM	ER32	1.65
	-ER25-200								
<b>C32</b>	-ER32-100	3.0~13	34	32	40.0	150	ER20A	ER20	3.15
	-ER32-150								
<b>C32</b>	-ER32-200	3.0~16	42	32	47.0	200	ER25UM	ER25	4.0
	-ER25-150								
<b>C32</b>	-ER25-200	3.0~20	50	32	50.0	150	ER32UM	ER32	2.95
	-ER32-200								

#### 特點/Feature

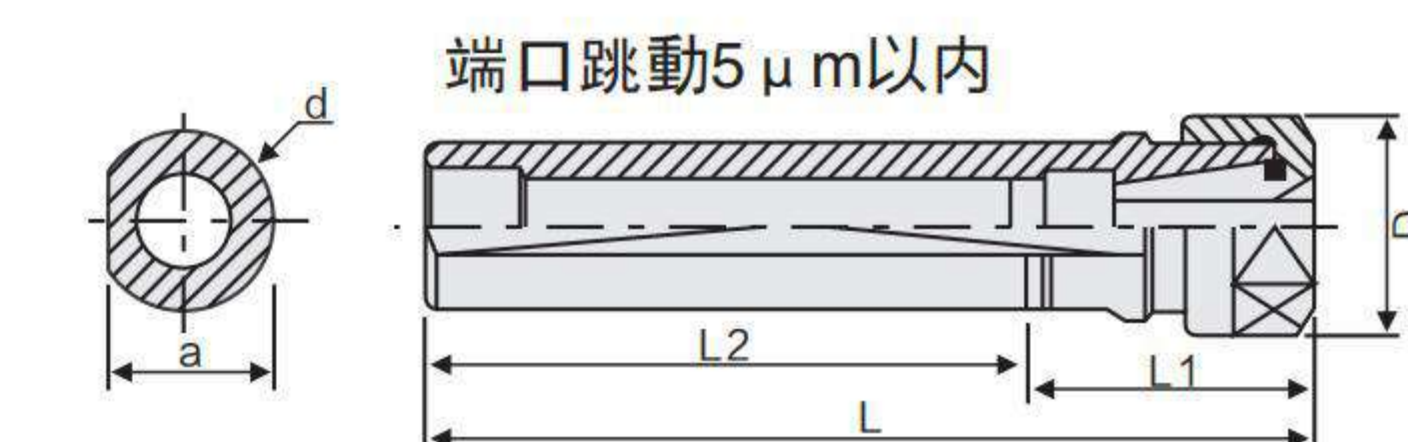
- 1、本體精度高。2、同心度高，穩定的震動精度，提高精加工表面精度。3、表面光潔舒適，耐磨。
- 1、 Tool body is high precision. 2、 High concentricity, stable run-out accuracy to enhance fine machining surface roughness.
- 3、 Finish surface with long durability.

## PRECISION MILLING HOLDER 銑削夾持具



ER EXTENSION HOLDER  
ER 延長杆 (M/UM型)

	型號	尺寸 Size				d1	夾持範圍 Clamping range
	Specification	L	L2	L1	D		
<b>C10</b>	-ER8-100M	115.5	100	15.5	12	10	0.5~5.0
	-ER8-150M	165.5	150				
<b>C12</b>	-ER11-100M	124	100	24	16	12	1.0~7.0
	-ER11-150	174	150				
<b>C16</b>	-ER16-100M	135	100	35	22	16	1.0~10.0
	-ER16-150M	185	150				
<b>C20</b>	-ER16-200M	235	200	40	28	20	1.0~13.0
	-ER16-100M	135	100				
<b>C25</b>	-ER16-150M	185	150	45	42	25	2.0~16.0
	-ER16-200M	235	200				
<b>C32</b>	-ER20-100M	140	100	50	50	32	3.0~20.0
	-ER20-150M	190	150				
<b>C32</b>	-ER20-200M	240	200	195	150	32	3.0~20.0
	-ER25-100UM	145	100				
<b>C32</b>	-ER25-150UM	295	150	150	100	32	3.0~20.0
	-ER25-100UM	145	100				
<b>C32</b>	-ER25-150UM	295	150	200	150	32	3.0~20.0
	-ER32-100UM	150	100				
<b>C32</b>	-ER32-150UM	200	150	250	200	32	3.0~20.0
	-ER32-200UM	250	200				



ER EXTENSION HOLDER  
ER 延長杆 (A型·車床用)

	型號	尺寸 Size				D	d
	Specification	L	L2	L1	a		
<b>B</b>	-ER16-70A/100A	100/130	70/130	30	19	28	20
	-ER20-70A/100A	100/130	70/130				
<b>B</b>	-ER20-70A/100A	100/130	70/130	30	24	34	20
	-ER11-70A/100A	100/130	70/130				
<b>B</b>	-ER11-70A/100A	100/130	70/130	30	29	19	20
	-ER11-70A/100A	100/130	70/130				
<b>B</b>	-ER16-70M/100M	100/130	70/130	30	19	22	20
	-ER20-70M/100M	100/130	70/130				
<b>B</b>	-ER20-70M/100M	100/130	70/130	30	24	28	20
	-ER20-70M/100M	100/130	70/130				

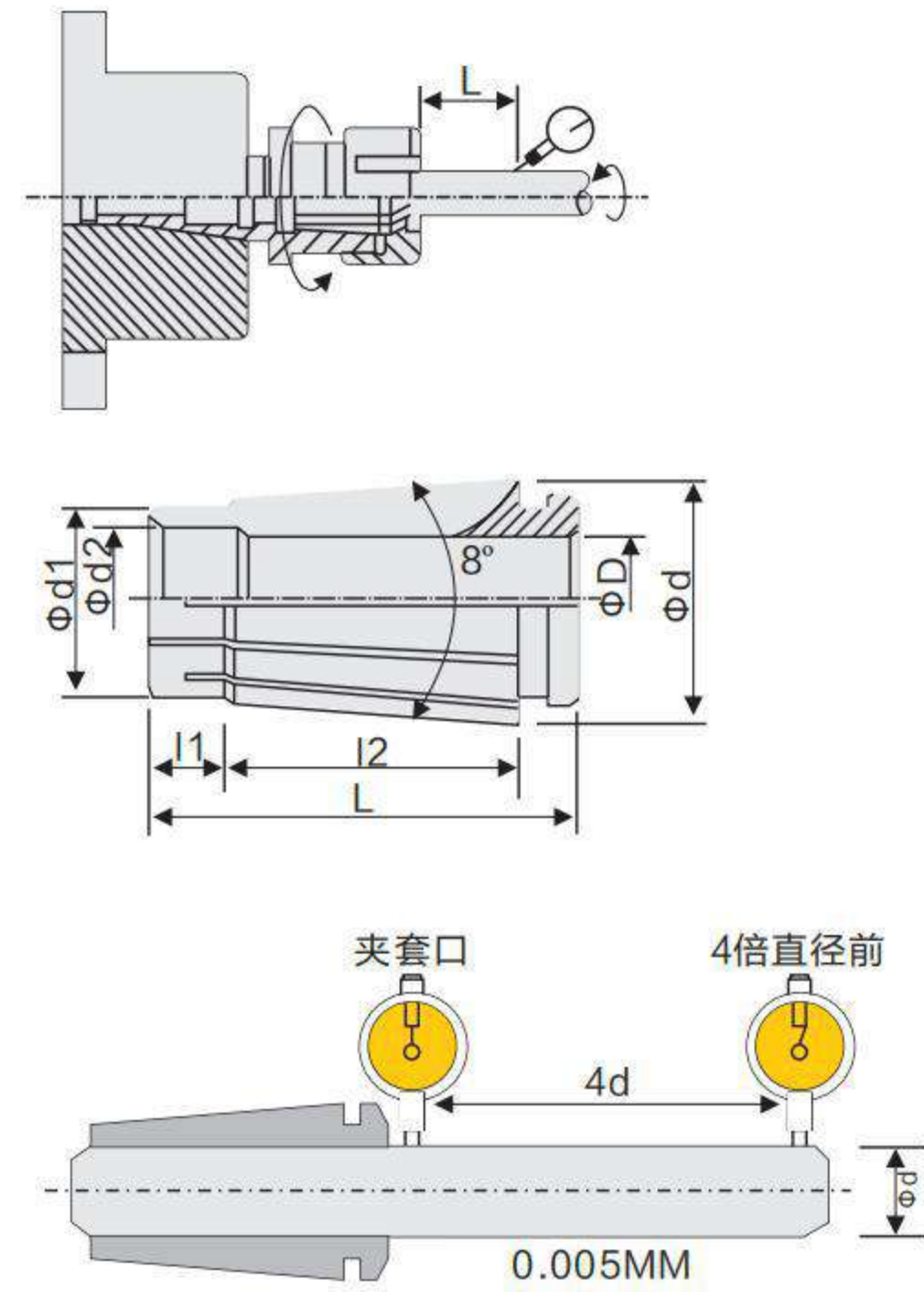
#### 特點/Feature

- 1、本體精度高。2、同心度高，穩定的震動精度，提高精加工表面精度。3、表面光潔舒適，耐磨。
- 1、 Tool body is high precision. 2、 High concentricity, stable run-out accuracy to enhance fine machining surface roughness.
- 3、 Finish surface with long durability.



PRECISION MILLING HOLDER 銑削夾持具

PRECISION MILLING HOLDER 銑削夾持具



SK HIGH PRECISION COLLET  
SK筒夾

型號 Specification	夾持範圍 Clamping range	
	SK6	-0.8
	-1	0.9~1.0
	-1.25	1.15~1.25
	-1.5	1.3~1.5
	-1.75	1.55~1.75
	-2	1.8~2.0
	-2.25	2.05~2.25
	-2.5	2.3~2.5
	-2.75	2.55~2.75
	-3	2.8~3.0
	-3.5	3.0~3.5
	-4	3.5~4.0
	-4.5	4.0~4.5
	-5	4.5~5.0
	-5.5	5.0~5.5
	-6	5.5~6.0
SK10	-2	1.75~2.0
	-2.25	2.0~2.25
	-2.5	2.25~2.5
	-2.75	2.5~2.75
	-3	2.75~3.0
	-3.5	3.0~3.5
	-4	3.5~4.0
	-4.5	4.0~4.5
	-5	4.5~5.0
	-5.5	5.0~5.5
	-6	5.5~6.0
	-6.5	6.0~6.5
	-7	6.5~7.0
	-7.5	7.0~7.5
	-8	7.5~8.0
	-8.5	8.0~8.5
	-9	8.5~9.0
	-9.5	9.0~9.5
	-10	9.5~10.0

型號 Specification	夾持範圍 Clamping range	
	SK16	-3
	-3.5	3.0~3.5
	-4	3.5~4.0
	-4.5	4.0~4.5
	-5	4.5~5.0
	-5.5	5.0~5.5
	-6	5.5~6.0
	-6.5	6.0~6.5
	-7	6.5~7.0
	-7.5	7.0~7.5
	-8	7.5~8.0
	-8.5	8.0~8.5
	-9	8.5~9.0
	-9.5	9.0~9.5
	-10	9.5~10.0
	-10.5	10.0~10.5
	-11	10.5~11.0
	-11.5	11.0~11.5
	-12	11.5~12.0
	-12.5	12.0~12.5
	-13	12.5~13.0
	-13.5	13.0~13.5
	-14	13.5~14.0
	-14.5	14.0~14.5
	-15	14.5~15.0
	-15.5	15.0~15.5
	-16	15.5~16.0

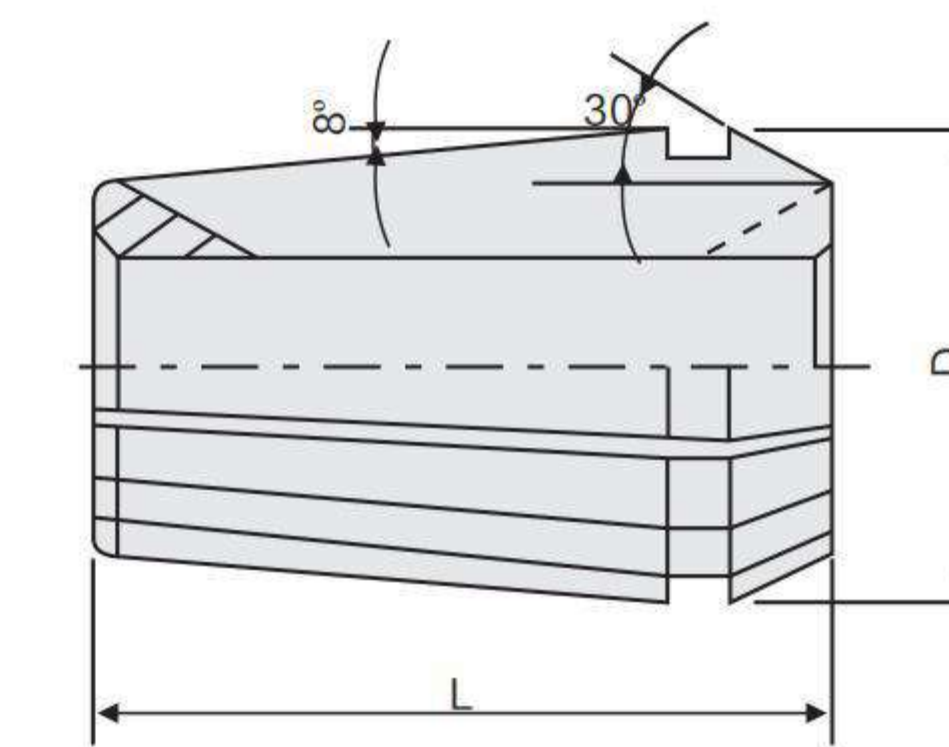
型號 Specification	夾持範圍 Clamping range	
	SK20	-3
	-4	3.0~3.5
	-5	3.5~4.0
	-6	4.0~4.5
	-7	4.5~5.0
	-8	5.0~5.5
	-9	5.5~6.0
	-10	6.0~6.5
	-11	6.5~7.0
	-12	7.0~7.5
	-13	7.5~8.0
	-14	8.0~8.5
	-15	8.5~9.0
	-16	9.0~9.5
	-17	9.5~10.0
	-18	10.0~10.5
	-19	10.5~11.0
	-20	11.0~11.5

型號 Specification	d	d1	L	L1	L2
SK6	10.4	7.5	25	3.8	17.4
SK10	15.5	12	30.5	5.0	21.3
SK16	24.6	18.8	45	8.0	32
SK20	29	22.5	54	8.0	46

特點/Feature

- 高精度，加持力強。
- 穩定的震動精度，提高精加工表面精度。
- 表面光潔舒適，耐磨。

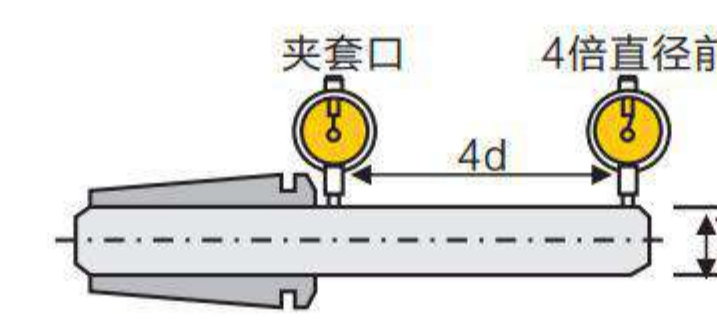
- High precision with powerful clamping force.
- Stable run-out accuracy to enhance fine machining surface roughness.
- Finish surface with long durability.



型號 Specification	D	L	RANGE
ER8	8.5	13.5	0.5
ER11	11.5	18	0.5
ER16	17	27.5	1.0
ER20	21	31.5	1.0
ER25	26	34	1.0
ER32	33	40	1.0
ER40	41	46	1.0

ER HIGH PRECISION COLLET

ER 彈性筒夾



夾套 等級	跳动精度 (MAX.mm)	
	夾套口	4倍直径前
AA級	0.005	0.01
普通級	0.01	0.02

型號 Specification	夾持範圍 Clamping range	
	ER8	0.5
	1.0	0.5~1.0
	1.5	1.0~1.5
	2.0	1.5~2.0
	2.5	2.0~2.5
	3.0	2.5~3.0
	3.5	3.0~3.5
	4.0	3.5~4.0
	4.5	4.0~4.5
	5.0	4.5~5.0

型號 Specification	夾持範圍 Clamping range	
	ER11	1.0
	2.0	1.0~2.0
	3.0	2.0~3.0
	4.0	3.0~4.0
	5.0	4.0~5.0
	6.0	5.0~6.0
	7.0	6.0~7.0

型號 Specification	夾持範圍 Clamping range	
	ER16	1.0
	2.0	1.0~2.0
	3.0	2.0~3.0
	4.0	3.0~4.0
	5.0	4.0~5.0
	6.0	5.0~6.0
	7.0	6.0~7.0
	8.0	7.0~8.0
	9.0	8.0~9.0
	10.0	9.0~10.0

型號 Specification	夾持範圍 Clamping range	
	ER20	1.0
	2.0	1.0~2.0
	3.0	2.0~3.0
	4.0	3.0~4.0
	5.0	4.0~5.0
	6.0	5.0~6.0
	7.0	6.0~7.0
	8.0	7.0~8.0
	9.0	8.0~9.0
	10.0	9.0~10.0
	11.0	10.0~11.0
	12.0	11.0~12.0
	13.0	12.0~13.0

型號 Specification	夾持範圍 Clamping range	
	ER25	2.0
	3.0	2.0~3.0
	4.0	3.0~4.0
	5.0	4.0~5.0
	6.0	5.0~6.0
	7.0	6.0~7.0
	8.0	7.0~8.0
	9.0	8.0~9.0
	10.0	9.0~10.0
	11.0	10.0~11.0
	12.0	11.0~12.0
	13.0	12.0~13.0
	14.0	13.0~14.0
	15.0	14.0~15.0
	16.0	15.0~16.0

型號 Specification	夾持範圍 Clamping range	
	ER32	2.0
	3.0	2.0~3.0
	4.0	3.0~4.0
	5.0	4.0~5.0
	6.0	5.0~6.0
	7.0	6.0~7.0
	8.0	7.0~8.0
	9.0	8.0~9.0
	10.0	9.0~10.0
	11.0	10.0~11.0
	12.0	11.0~12.0
	13.0	12.0~13.0
	14.0	13.0~14.0
	15.0	14.0~15.0
	16.0	15.0~16.0
	17.0	16.0~17.0
	18.0	17.0~18.0
	19.0	18.0~19.0
	20.0	19.0~20.0

型號 Specification	夾持範圍 Clamping range	
	ER40	2.0
	3.0	2.0~3.0
	4.0	3.0~4.0
	5.0	4.0~5.0
	6.0	5.0~6.0
	7.0	6.0~7.0
	8.0	7.0~8.0
	9.0	8.0~9.0
	10.0	9.0~10.0
	11.0	10.0~11.0
	12.0	11.0~12.0
	13.0	12.0~13.0
	14.0	13.0~14.0
	15.0	14.0~15.0
	16.0	15.0~16.0
	17.0	16.0~17.0
	18.0	17.0~18.0
	19.0	18.0~19.0
	20.0	19.0~20.0
	21.0	20.0~21.0
	22.0	21.0~22.0
	23.0	22.0~23.0
	24.0	23.0~24.0
	25.0	24.0~25.0
	26.0	25.0~26.0

特點/Feature

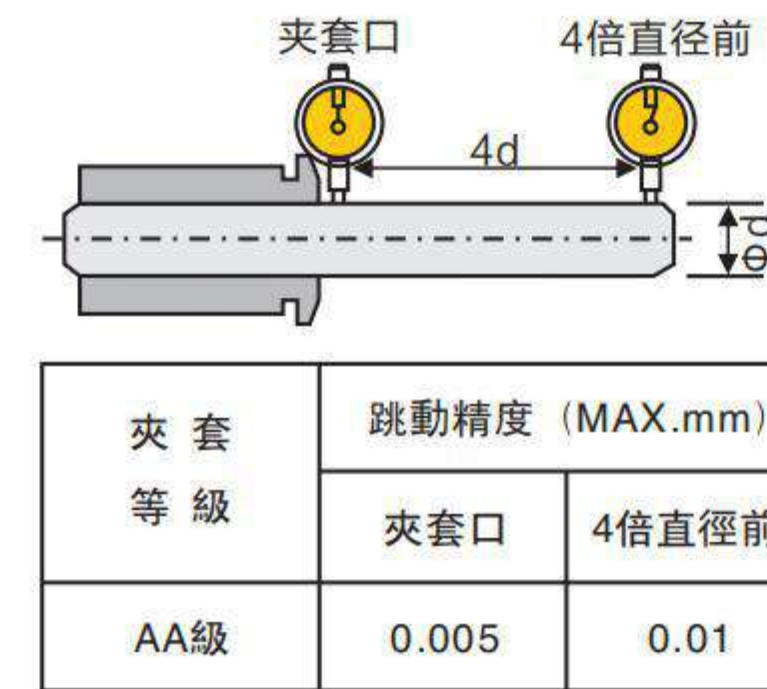
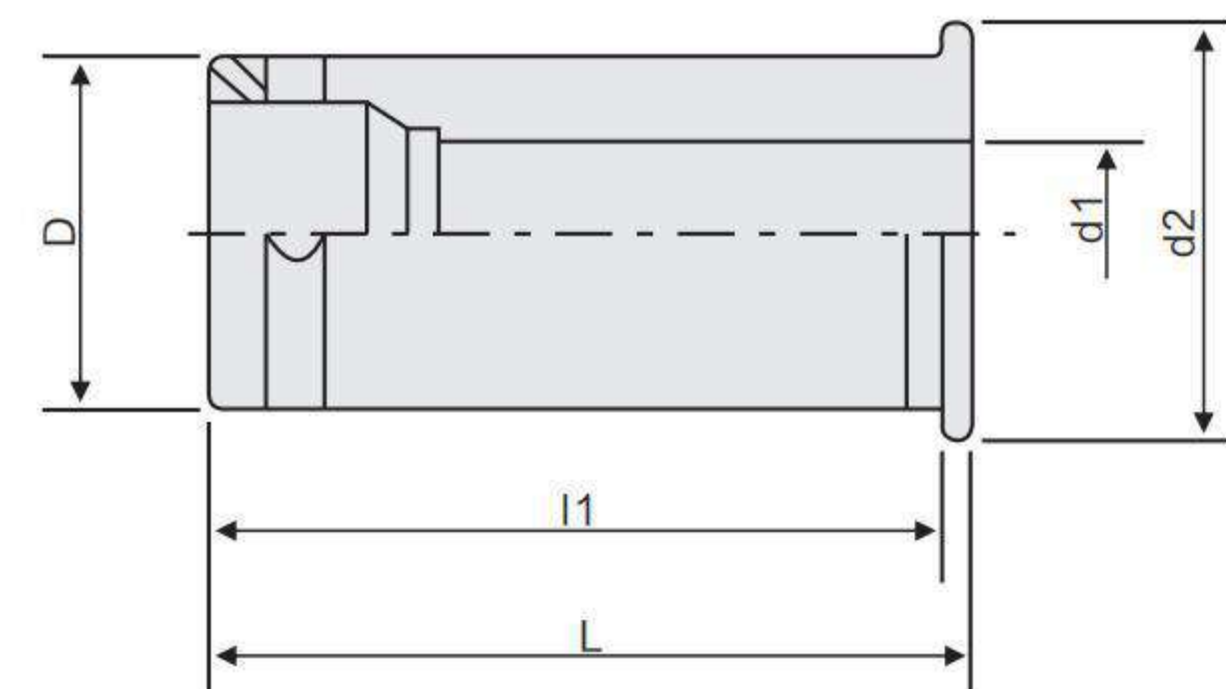
- 高精度，加持力強。
- 穩定的震動精度，提高精加工表面精度。
- 表面光潔舒適，耐磨。

- High precision with powerful clamping force.
- Stable run-out accuracy to enhance fine machining surface roughness.
- Finish surface with long durability.



PRECISION MILLING HOLDER 銑削夾持具

PRECISION MILLING HOLDER 銑削夾持具



夾套等級	跳動精度 (MAX.mm)	
	夾套口	4倍直徑前
AA級	0.005	0.01

C POWER CHUCK COLLET  
強力筒夾

型號 Specification	尺寸 Size			
	D	d2	L	L1
<b>C20</b> 3,4,5,6,8,10,12,16	20	25	52.5	49
<b>C25</b> 6,8,10,12,5,16,20	25	30	59	56
<b>C32</b> 6,8,10,12,16,20,25,15,19,24 1/4,5/16,3/8,1/2,3/4,5/8,1"	32	37.5	65	67.4
<b>C42</b> 6,8,10,12,16,20,25,32,15,19,24 1/4,5/16,3/8,1/2,5/8,3/4,1"	42	47	80	76

特點/Feature

1. 高精度，加持力強。
2. 穩定的震動精度，提高精加工表面精度。
3. 表面光潔舒適，耐磨。
1. High precision with powerful clamping force.
2. Stable run-out accuracy to enhance fine machining surface roughness.
3. Finish surface with long durability.



HIGH PRECISION CLAMPING NUT

精密螺帽

型號 Specification	D	L	M	鎖緊扳手
<b>ER-A</b> ER11A ER16A ER20A	19 28 34	11.5 17 19.0	M14X0.75 M22X1.5 M25X1.5	ER11A ER16A ER20A
<b>ER-M</b> ER8M ER11M HER16M	12 16 22	10.8 12.0 18	M10X0.75 M13X0.75 M19X1.0	ER8M ER11M ER16M
<b>ER-UM</b> ER20M ER25M HER25UM HER32UM ER40UM	28 35 42 50 63	19.0 20.0 20.0 23 26	M24X1.0 M30X1.0 M32X1.5 M40X1.5 M50X1.5	ER20M ER25M ER25U M ER32UM ER40UM
型號 Specification	D	L	M	鎖緊扳手
<b>GER</b> GER16 GER20 GER25 GER32 GER11MINI GER16MINI GER20MINI GER25MINI	30 35 40 48 16 22 30 35	24.7 25.5 25.9 26.6 11.3 20.5 21.8 23.0	TM22X1.5 TM26X1.5 TM32X1.5 TM40X1.5 M14X0.75 M19X1.0 M24X1.0 M30X1.0	GER16 GER20 GER25 GER32 GER11MINI GER16MINI GER20MINI GER25MINI
型號 Specification	D	L	M	鎖緊扳手
<b>ISO-ER</b> ER11MS ER16MS ER20MS ER25MS	16 22 28 35	11.3 17 19 23	M13X0.75 M19X1.0 M24X1.0 M30X1.0	ER11MS ER16MS ER20MS ER25MS

特點/Feature

1. 熱處理有效提高精度及其夾持穩定性。
2. 表面光潔度舒適，耐磨。
3. 可以預設動平衡處理，提高精度。
1. Thermal treatment process improve the clamping precision and stability.
2. Finish surface with long durability.
3. Pre-balanced is G2.5 25000rpm for enhanced run-out accuracy.



PRECISION MILLING HOLDER 銑削夾持具

PRECISION MILLING HOLDER 銑削夾持具

FITTING 配件



扳手 SPANNER

	型號 Specification	A	L	重量 (KGS)
<b>C</b>	C20	50-55	245	0.17
	C25	56-61	270	0.2
	C32	68-73	290	0.3
<b>OZ</b>	C42	88-96	340	0.42
	OZ25	55-60	250	0.24
	型號 Specification	A	L	重量 (KGS)
<b>A</b>	ER11A	17.2	120	0.10
	ER16A	25.2	140	0.15
	ER20A	30.3	160	0.19
<b>M</b>	ER8M	12	75	0.05
	ER11M	16	95	0.04
	ER16M	22	117	0.06
	ER20M	28	129	0.07
<b>UM</b>	ER25M	35	142	0.09
	ER25UM	42	210	0.15
	ER32UM	50	250	0.28
	ER40UM	64	290	0.42
	型號 Specification	A	L	重量 (KGS)
<b>GER</b>	GER16,GER16MINI	30,27	150	0.24
	GER20,GER20MINI	35,30	160	0.30
	GER25,GER25MINI	40,35	180	0.35
<b>GSK</b>	GER32	48	180	0.70
	GSK6	19.5	110	0.11
	GSK10	27	150	0.29
	GSK16	40	170	0.39
	GSK20	48	210	0.38
	型號 Specification	A	L	重量 (KGS)
<b>ISO</b>	ISO20	18.2	175	0.11
	ISO25	27	175	0.12
	ISO30	40	220	0.15

特點/Feature

- 1、熱處理有效提高精度及其夾持穩定性。2、表面光潔度舒適，耐磨。
- 1、Thermal treatment process improve the clamping precision and stability.
- 2、Finish surface with long durability.



產品名稱 product name	編號 Item	規格 Spec	高度 Height
光電式Z軸設定器 Z-axis Electro-optical Zero Setter	ZOP-50	Electro-optical	50

產品名稱 product name	編號 Item	規格 Spec	高度 Height
量表式Z軸設定器 Z-axis Scale Zero Setter(magnetic)	ZDI-50	Scale with magnetic	50

產品名稱 product name	編號 Item	長度 Length
主軸檢測棒 Spindle Test Bar	BT30 BT40 BT50	200L/250L 250L/300L/350L 315L/350/400L

產品名稱 product name	編號 Item	規格 Spec
三點組合模具 Modular Concentricity Test Gauge	BT30 BT40 BT50	MCT30 MCT40 MCT50

產品名稱 product name	編號 Item	柄徑 Shank Diameter	長度 Length	測頭 Gauge head
光電式尋邊器 Electro-optical Edge Finder	EOP-20	ø20	160	ø10

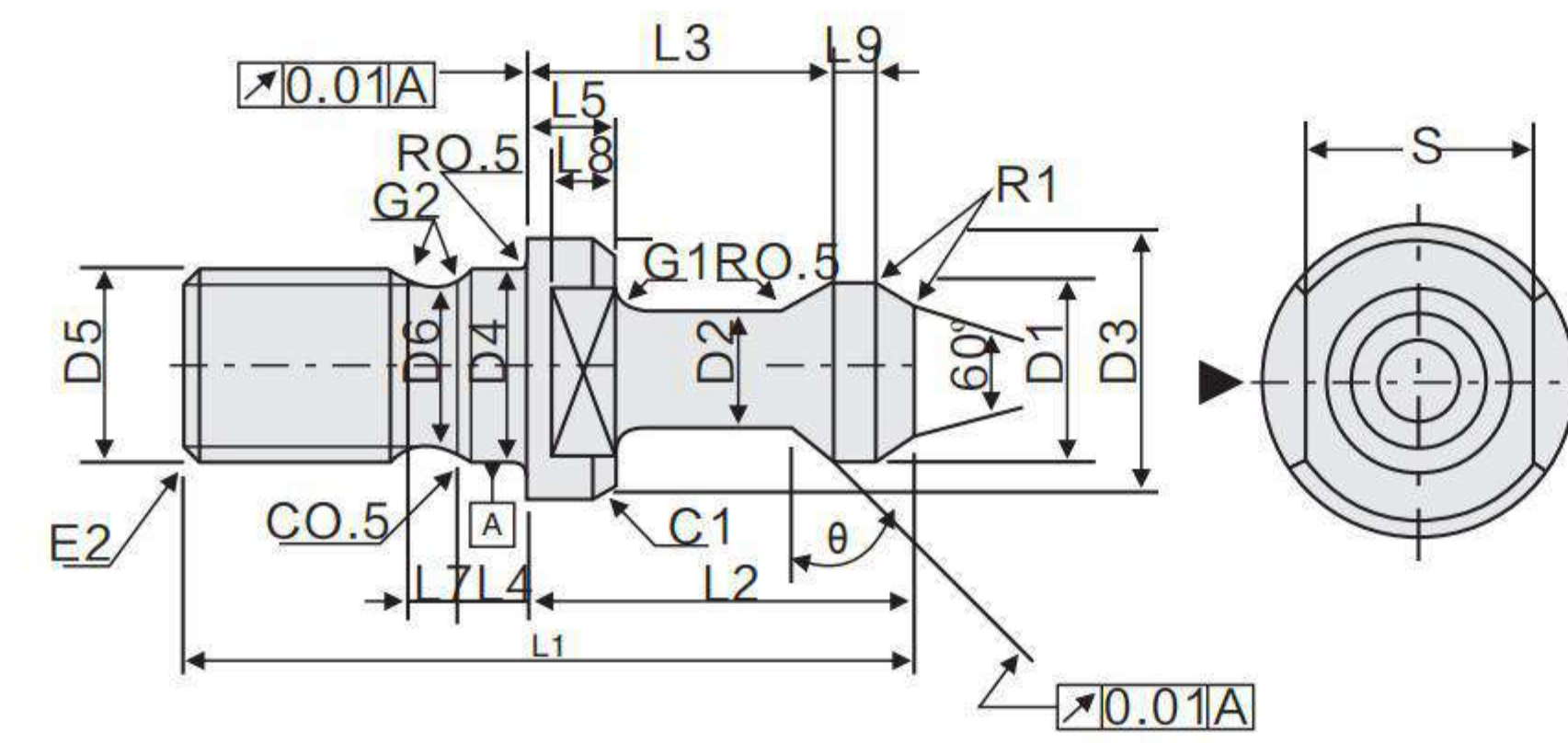
產品名稱 product name	編號 Item	柄徑 Shank Diameter	長度 Length	測頭 Gauge head
機械式尋邊器 Mechanical Edge Finder(Anti-Magnetic)	MOP-10	ø10	160	ø10

產品名稱 product name	編號 Item	柄徑 Shank Diameter	長度 Length	測頭 Gauge head
陶瓷尋邊器 Ceramic Edge Finder	COP-10	ø10	160	ø10



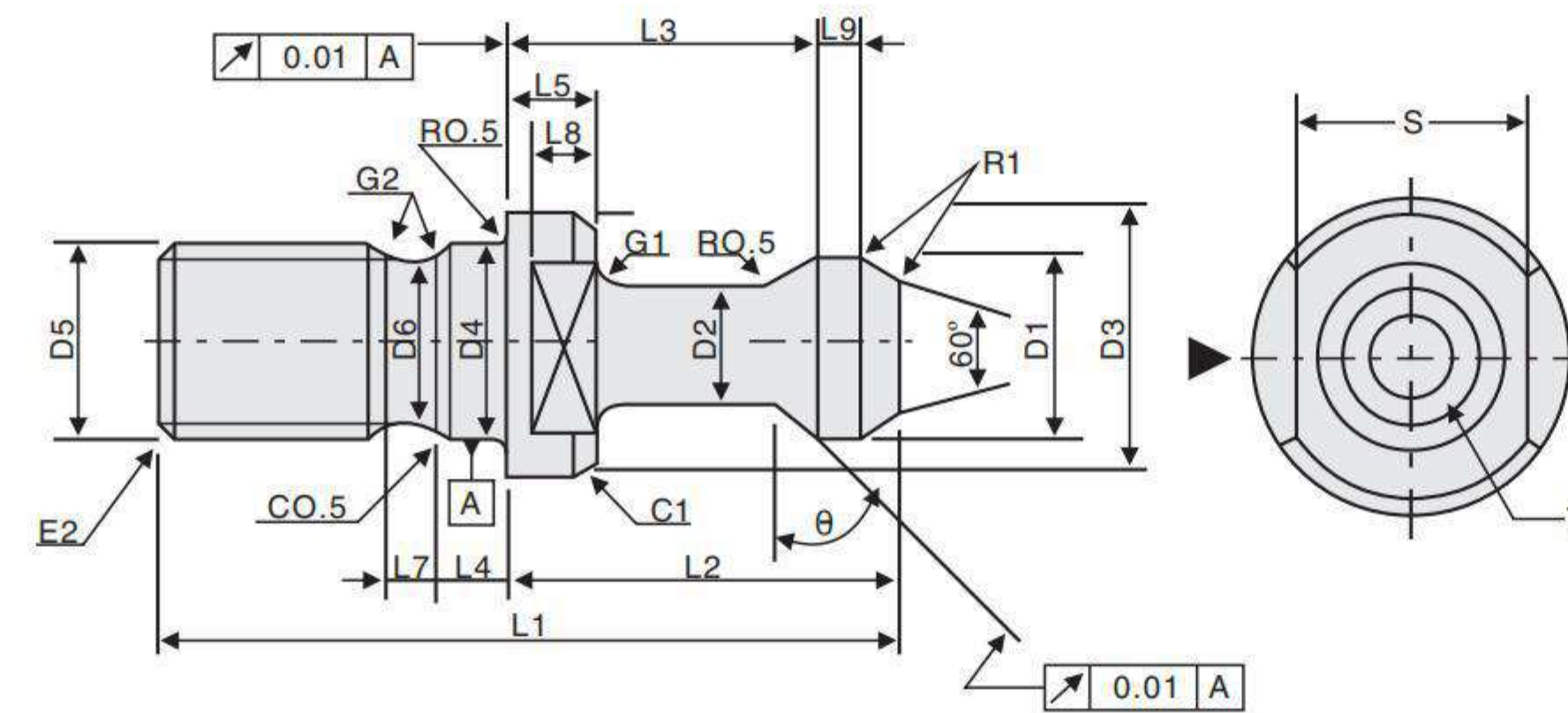
PRECISION MILLING HOLDER 銑削夾持具

PRECISION MILLING HOLDER 銑削夾持具



BT PULL STUD  
BT 拉杆、拉頭

型號 Specification	尺寸 Size																		
	L1	D4	D5	D6	E2	G2	L4	L7	D3	G1	L5	S	D1	D2	L2	L3	L9	θ	
BT30	30	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	30
	45	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	45
	60	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	60
	90	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	90
BT40	30	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	30
	45	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	45
	60	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	60
	90	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	90
BT50	30	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	30
	45	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	45
	60	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	60
	90	71	25	M24	20	3	1.5	8	5	36	5	10	30	24	18	31	35	5	90
	90L	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	90

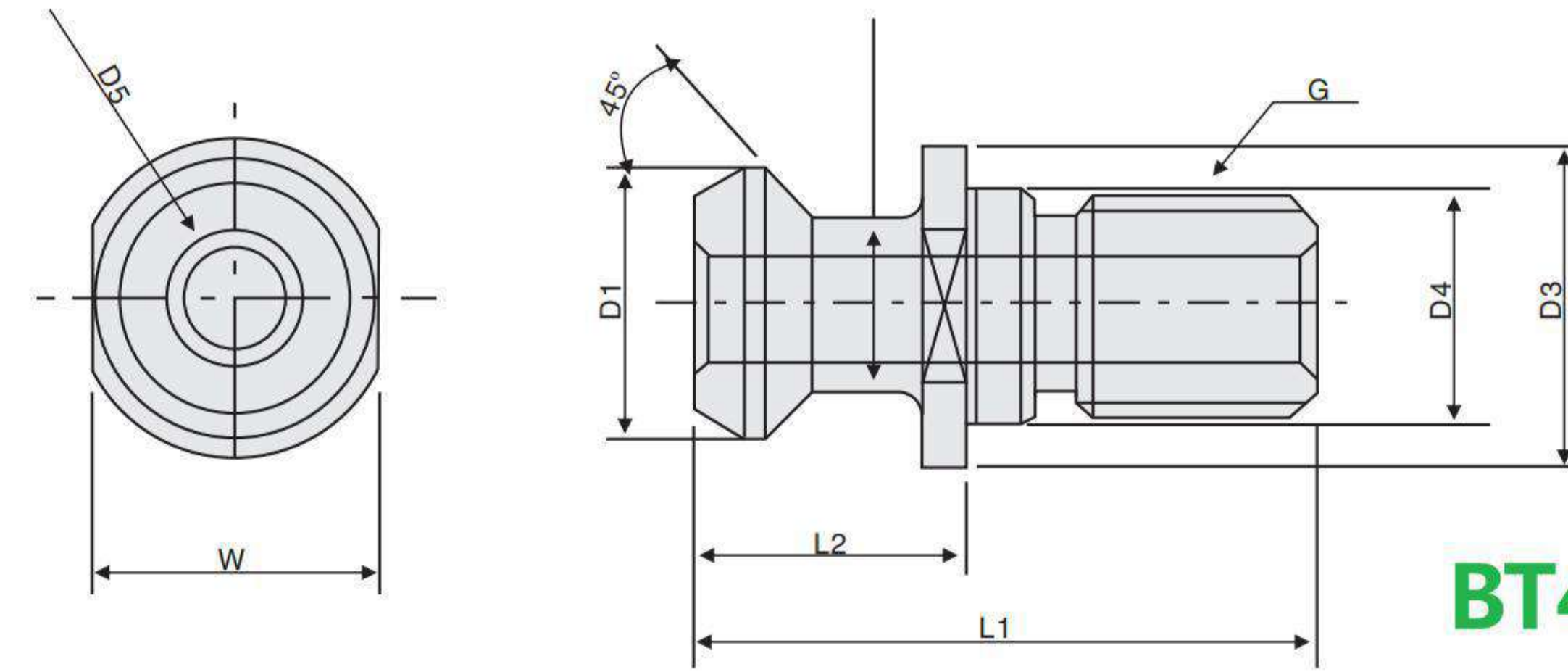


BT PULL STUD WITH COOLANT HOLE  
BT 拉杆、拉頭中心出水

型號 Specification	尺寸 Size																		
	L1	D4	D5	D6	E2	G2	L4	L7	D3	G1	L5	S	D1	D2	L2	L3	L9	θ	
BT30	30 COOLANT	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	30
	45 COOLANT	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	45
	60 COOLANT	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	60
	90 COOLANT	43	12.5	M12	9.5	1.75	1	4	3	16.5	2	5	13	11	7	23	18	2.5	90
BT40	30 COOLANT	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	30
	45 COOLANT	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	45
	60 COOLANT	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	60
	90 COOLANT	60	17	M16	13	2	1	5	4	23	3	6	19	15	10	35	28	3	90
BT50	30 COOLANT	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	30
	45 COOLANT	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	45
	60 COOLANT	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	60
	90 COOLANT	71	25	M24	20	3	1.5	8	5	36	5	10	30	24	18	31	35	5	90
	90L COOLANT	85	25	M24	20	3	1.5	8	5	38	5	10	30	23	17	45	35	5	90

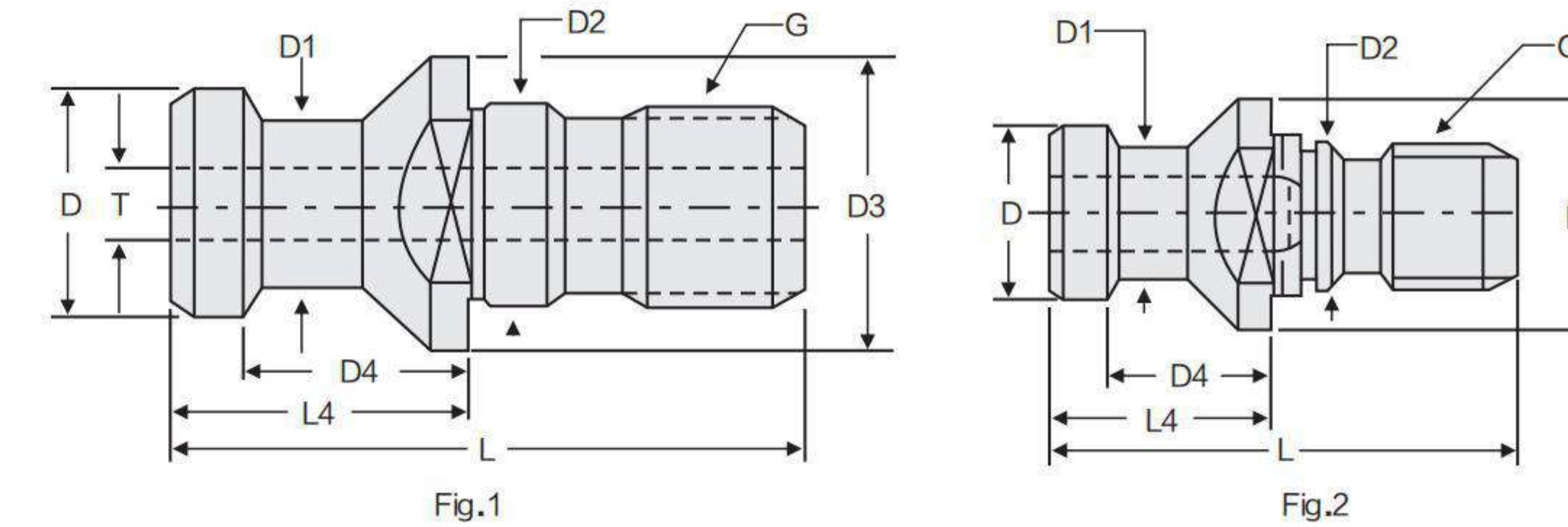
特點/Feature

- 熱處理有效提高精度及其夾持穩定性。
  - 表面光潔度舒適，耐磨。
- 1、Thermal treatment process improve the clamping precision and stability. 2、Finish surface with long durability.



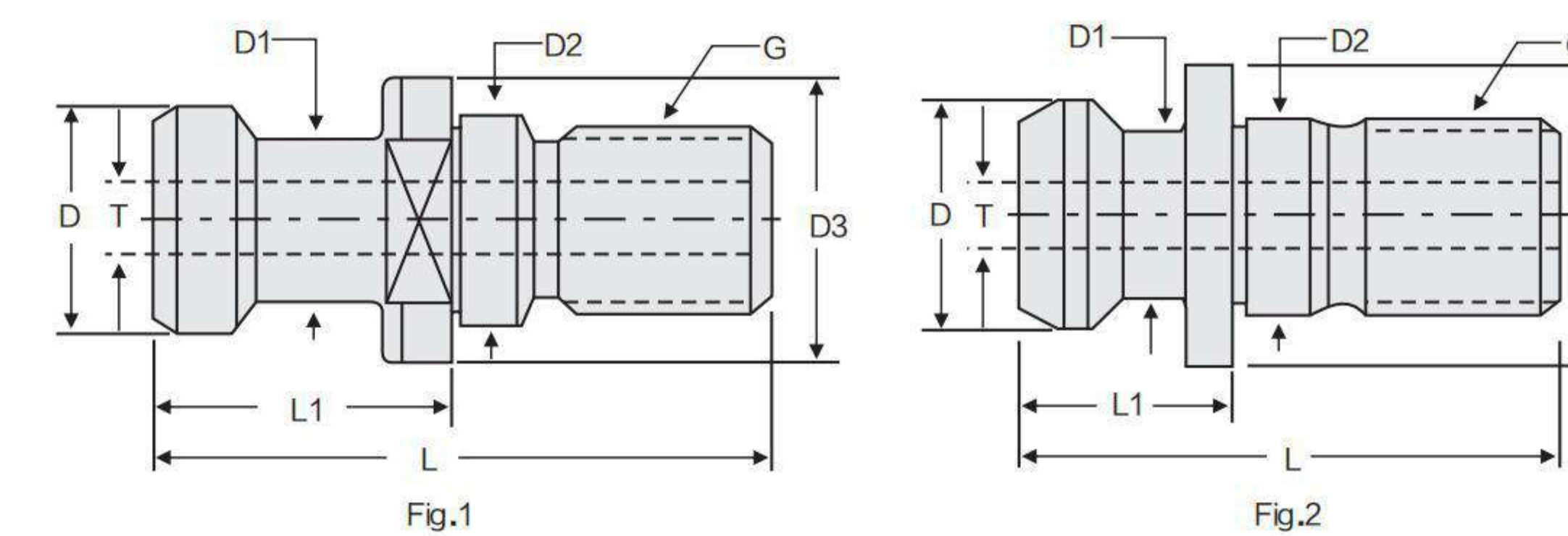
PULL STUD  
BT40/BT50 MAZAK 拉杆、拉頭

型號 Specification	尺寸 Size									
	L1	L2	D1	D2	D3	D4	D5	W	G	
BT40	MAZAK	44.1	19.1	18.8	12.45	22	17	7	19	M16
BT50	MAZAK	65.2	25.2	29	20.83	36	25	10	30	M24



PULL STUD  
DIN69872A/B 拉杆、拉頭

型號 Specification	圖示 Fig	尺寸 Size							
		L	L4	D	D1	D2	D3	D4	T
DIN69872A-P16D	A	54	26	19	14	17	23	20	7.5
DIN69872A-P24D	A	74	34	28	21	25	36	25	11.5
DIN69872B-P16D	B	57	26	19	14	17	23	20	-
DIN69872B-P24D	B	74	34	28	21	25	36	25	-



PULL STUD  
DIN69872A/B 拉杆、拉頭

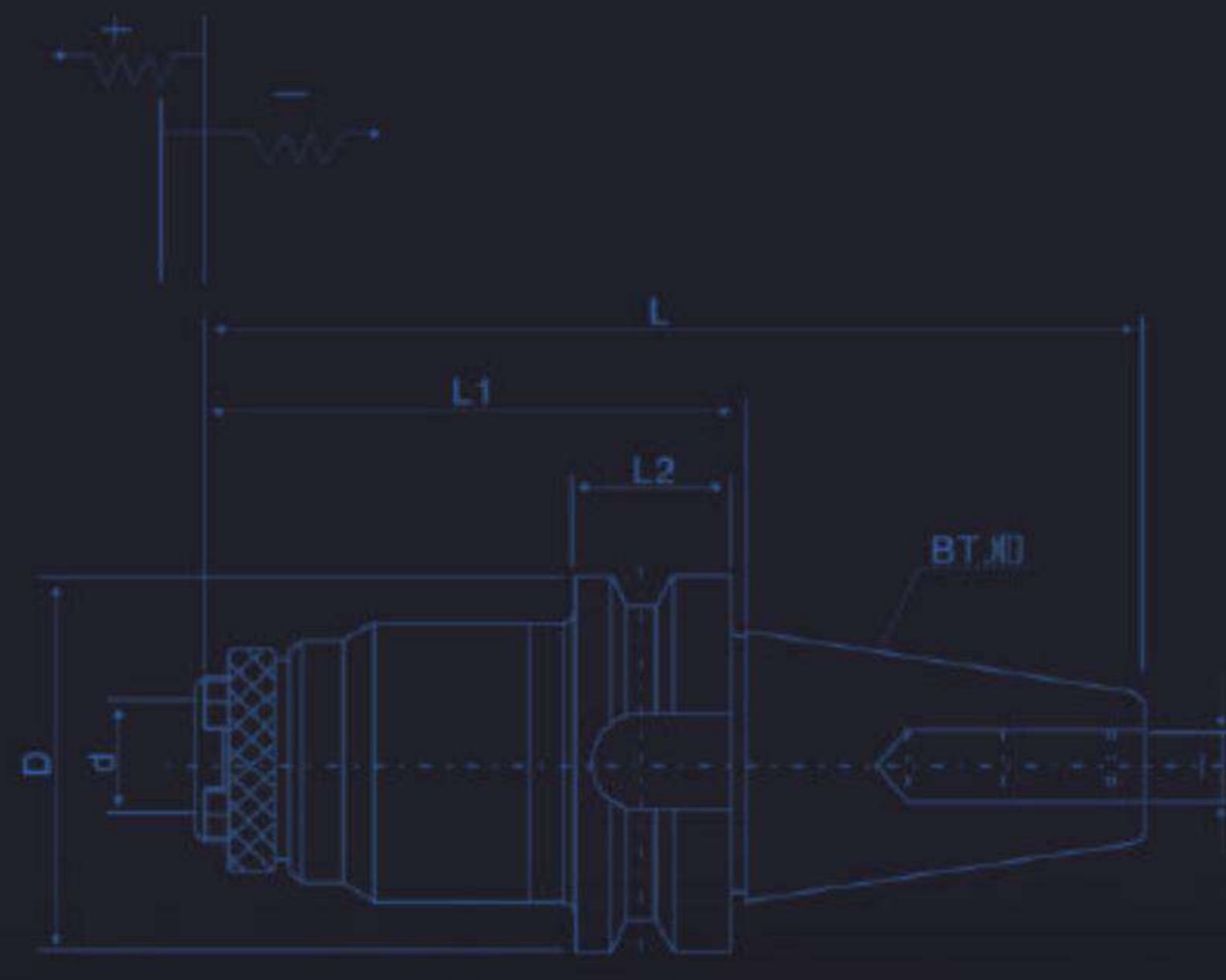
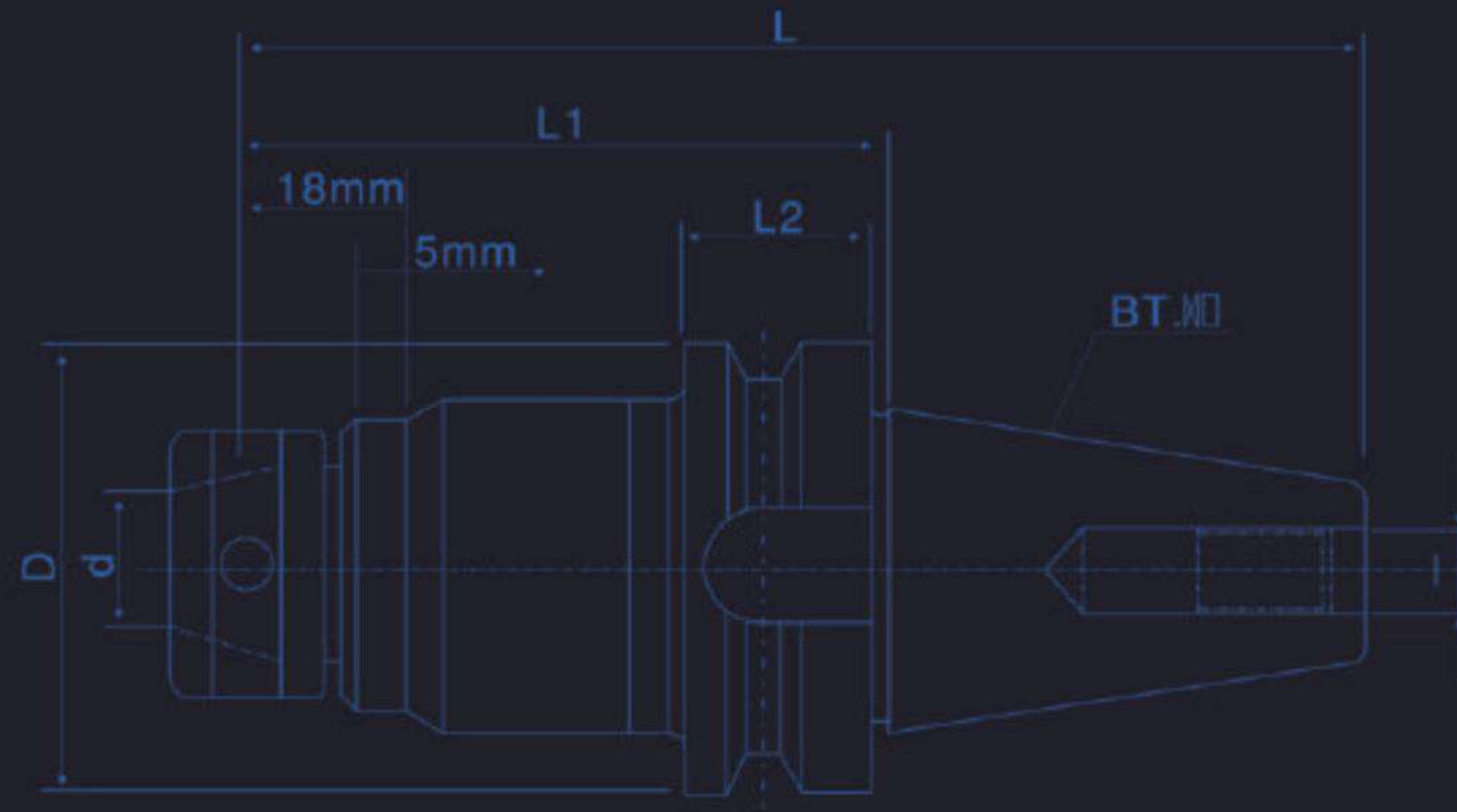
型號 Specification	圖示 Fig	尺寸 Size						
		L	D	D1	D2	D3	T	G
ISO7388/2A-P16D	A	54	19	14	17	23	7.5	M16
ISO7388/2A-P24D	A	74	28	21	25	36	11.5	M24
ISO7388/2B-P16D	B	44.5	18.9	12.9	17	22.5	7.5	M16
ISO7388/2B-P24D	B	65.5	29.1	19.6	25	36	11.5	M24

特點/Feature

- 熱處理有效提高精度及其夾持穩定性。
  - 表面光潔度舒適，耐磨。
- 1、Thermal treatment process improve the clamping precision and stability. 2、Finish surface with long durability.



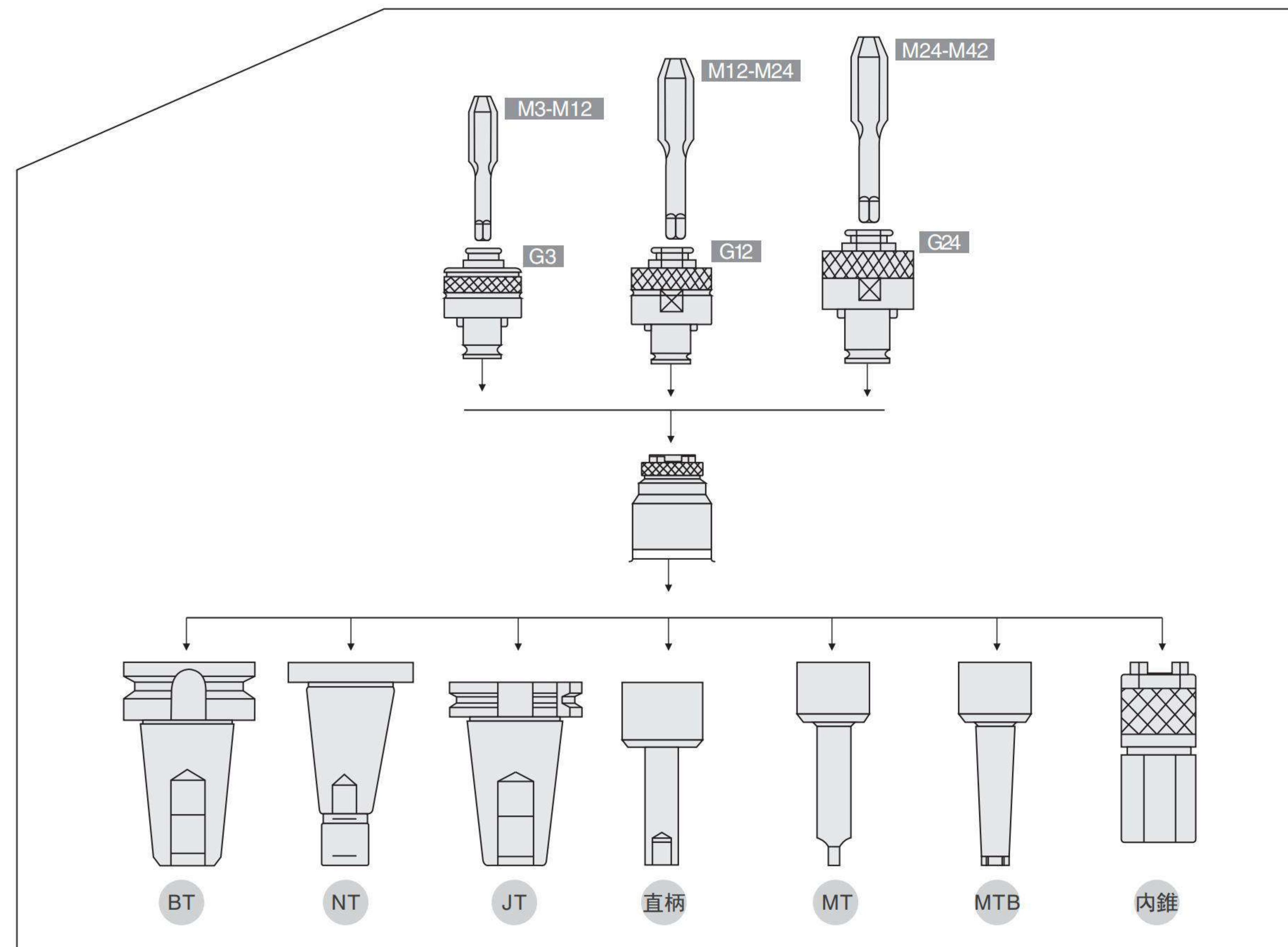
# High Precision Casting



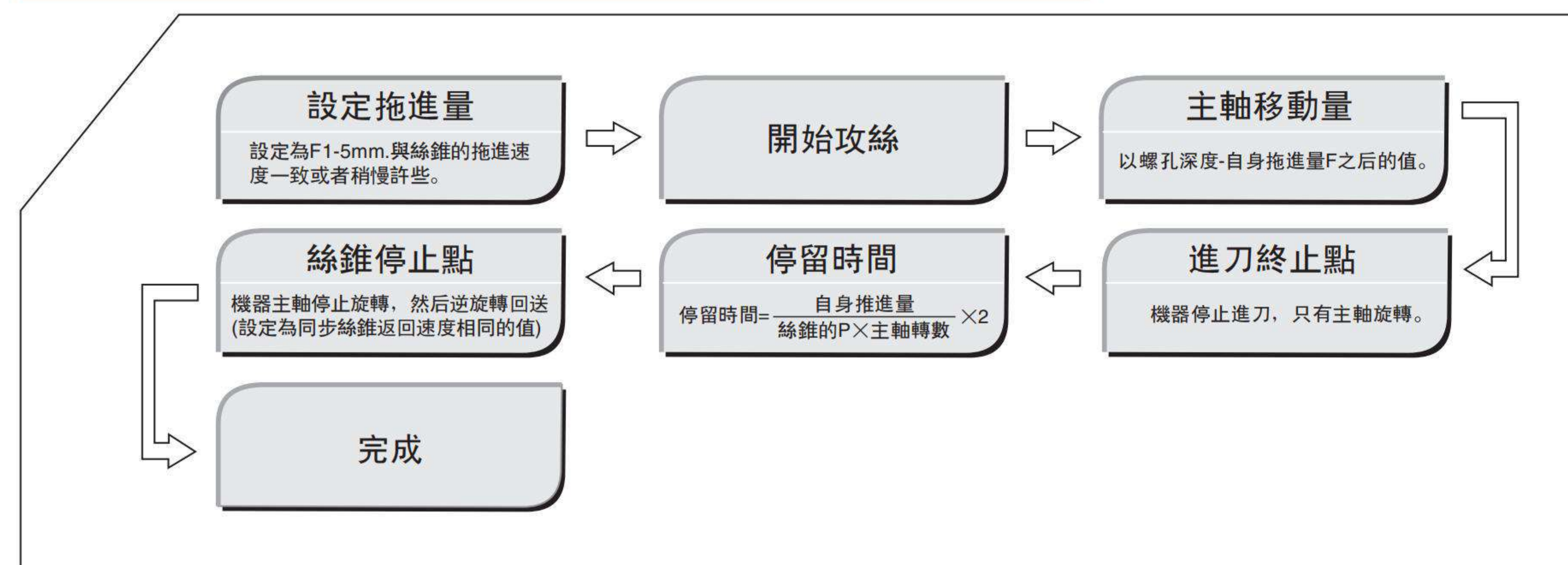


TAPPING TOOL HOLDER

攻牙本體系統



限制螺孔深度設定方案及操作注意事項



TAPPING TOOL HOLDER

伸縮扭力攻絲刀柄

- 攻絲刀柄伸縮機構  
攻絲刀柄本身自己自帶伸縮的伸縮機構。這是防止變螺絲及絲錐的牙距與機械進給能圓滑的同步進行。必須在伸縮量的的範圍內使用。  
①.伸長過量: 超過伸長界限時, 黑色標記會出來, 請加快機床進給量。  
②.壓縮過量: 機床進給比絲錐進刀快, 壓縮機構動作, 請減少機床進給量, 不密着。
- 底孔較小時(難削材等的加工時,底孔不夠的現象較多), 扭矩保護機構, 使絲錐空轉。這種情況下, 不要調整扭矩ZK攻絲套筒的場合, 請擴大底孔。
- 盲孔攻絲時, 程序的Z軸指令偏深時, 主軸回轉停止時, 孔底在回轉力的作用下, 因碰到底部, 無法伸長。反轉時, 在出口時無法恢復的原長, 絲錐容易碰盲孔口部。這種情況下, 請加深下底孔或減淺指令值。
- Z型攻絲刀柄的場合, 機器的固定進給, Z點反轉開始Z上升, 攻絲刀柄是在縮短的狀態Z軸上升, 孔口容易與絲錐碰到, 這種情況, Z點進入停頓, 攻絲刀柄在伸長的狀態下, 隨Z軸一起上升。
- 攻絲刀柄和攻絲套筒的修理費, 人為損壞及保修期后, 修復及檢測均需收費(基本費用)。



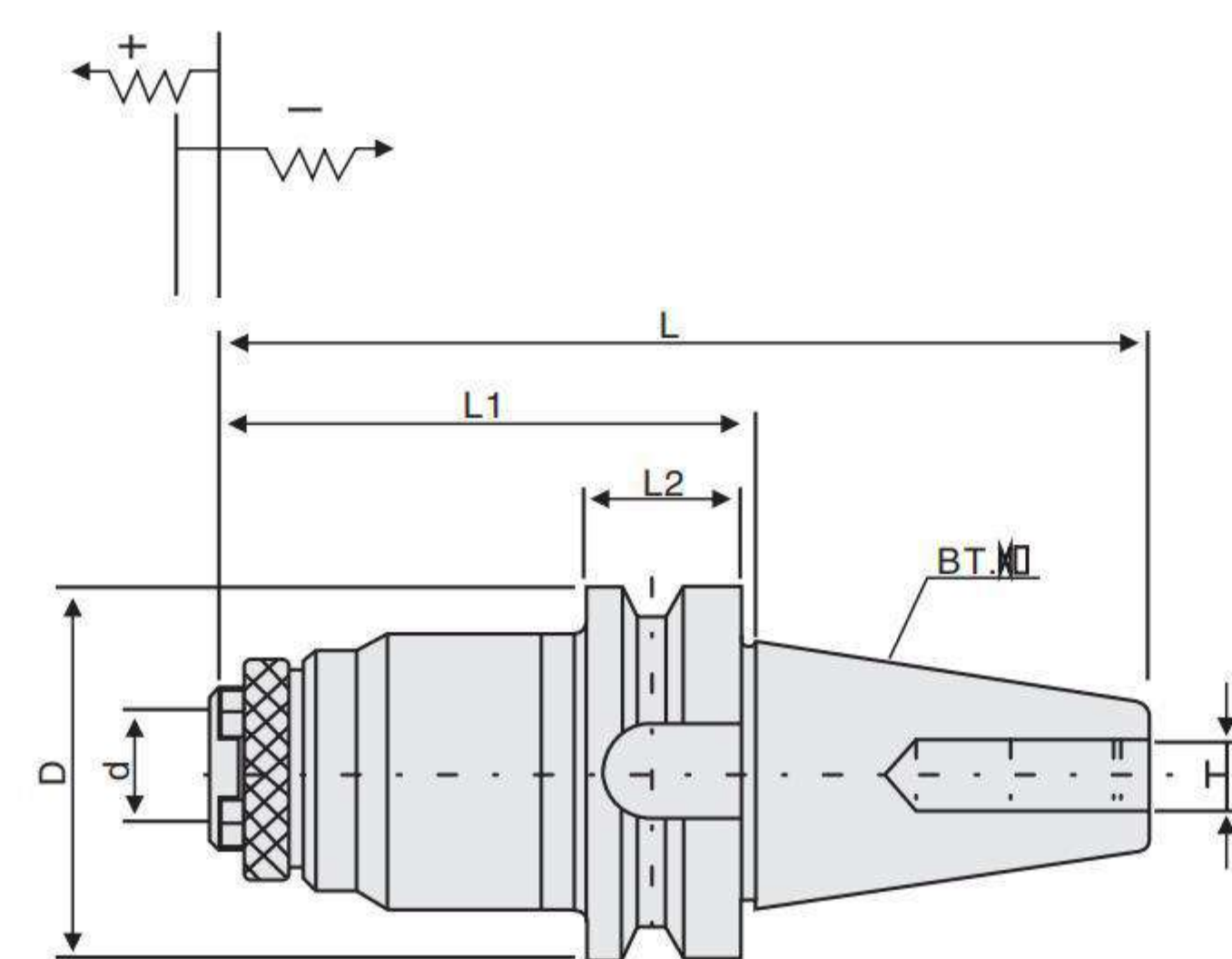
1 TENSION AND COMPRESSION TAPER HOLDER  
Tension and compression function can prove screw and tap tooth space moving sleekly and synchronously with machine.It should be used in the scope of designed tension and compression.  
①.Over tension  
The black mark can be seen at this time.Please speed up the working speed of axis.  
②.Over compression  
Reduce the moving speed of axis.  
2 In case of small hole in tapping model,torque protection function makes taps idling. Don't adjust the torque instead of large one.  
3 When blind hole tapping,Z axis programmed with slant depth and under the gyroscopic force and touch the bottom part,in case of reduce programmed Z axis data instruction.  
4.When Z system tapping chuck in use, in other case of orifice touched,please stop the Z point, tapping chuck run up with Zaxis in the state of elongation.  
5 In case of artificial damage or after warranty period,The cost for evaluating and remanding should be charged.

常見直槽高速絲錐的切削扭矩參考值

絲錐尺寸	最小攻絲扭矩	最大攻絲扭矩	絲錐折斷扭矩	絲錐折斷扭矩	所需功率	攻絲夾頭的調整值	攻絲夾頭的調整值	攻絲夾頭的調整值
	N.m	N.m	(低強度)N.m	(高強度)N.m		N.m	N.m	N.m
M5	2.26	3.39	4.52	4.78	0.247	2.28	2.26	4.52
M6	3.39	4.78	5.65	11.3	0.373	4.52	3.39	6.78
M8	4.52	9.04	8.48	17	0.373	6.78	5.65	11.3
M10	11.3	22.6	20.3	28.3	0.56	14.7	12.4	24.9
M12	11.3	22.6	20.3	33.9	0.746	22.6	20.3	33.9
M14	22.6	67.8	56.5	90.4	0.93	39.5	39.5	73.4
M16	28.3	67.8	72.5	123	0.56	51	51	73.4
M20	56.5	113	113	170	1.3	73.4	73.4	107



## TAPPING TOOL HOLDER 銑削攻牙夾持具



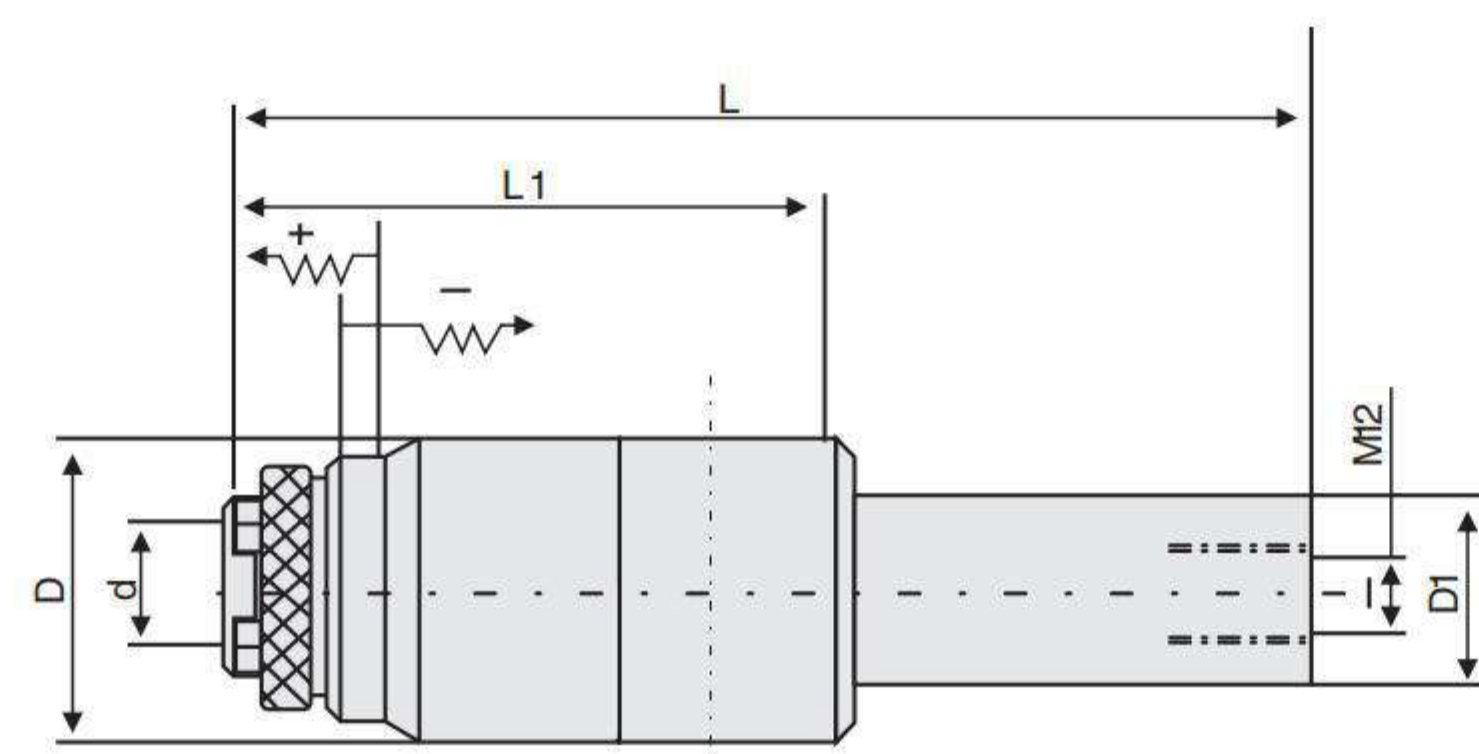
BT TENSION AND COMPRESSION TAPPING HOLDER

### BT 扭力伸縮攻牙刀柄

	型號 Specification	攻牙範圍 Tapping range	D	d	L	L1	L2	T	筒夾 Collet
BT30	G0312	M3-M12	46	19	141	87.6	20	M12	G3
BT40	G0312	M3-M12	63	19	153	92.6	25	M16	G3
	G1224	M12-M24	63	30	200	134.6	25	M16	G12
BT50	G0312	M3-M12	100	19	199	97.2	35	M24	G3
	G1224	M12-M24	100	30	246	142.2	35	M24	G12
	G2442	M24-M42	100	45	276	174.2	35	M24	G24

#### 特點/Feature

1. 具有扭矩過載保護，可以防止絲錐斷裂。
  2. 具有浮動和伸縮功能，快速更換刀具。
  3. 適合CNC 加工中心、數控銑床等機床設備。
  4. 攻絲範圍：M3-M42。
1. Overload protection to avoid breakage of taps.
  2. Floating chuck with tension and compression function, tools can be changed quickly.
  3. Suitable for CNC machine center, drilling machine, lathes.
  4. Tapping range: M3-M42.



TENSION AND COMPRESSION TAPPING HOLDER WITH STRAIGHT SHANK

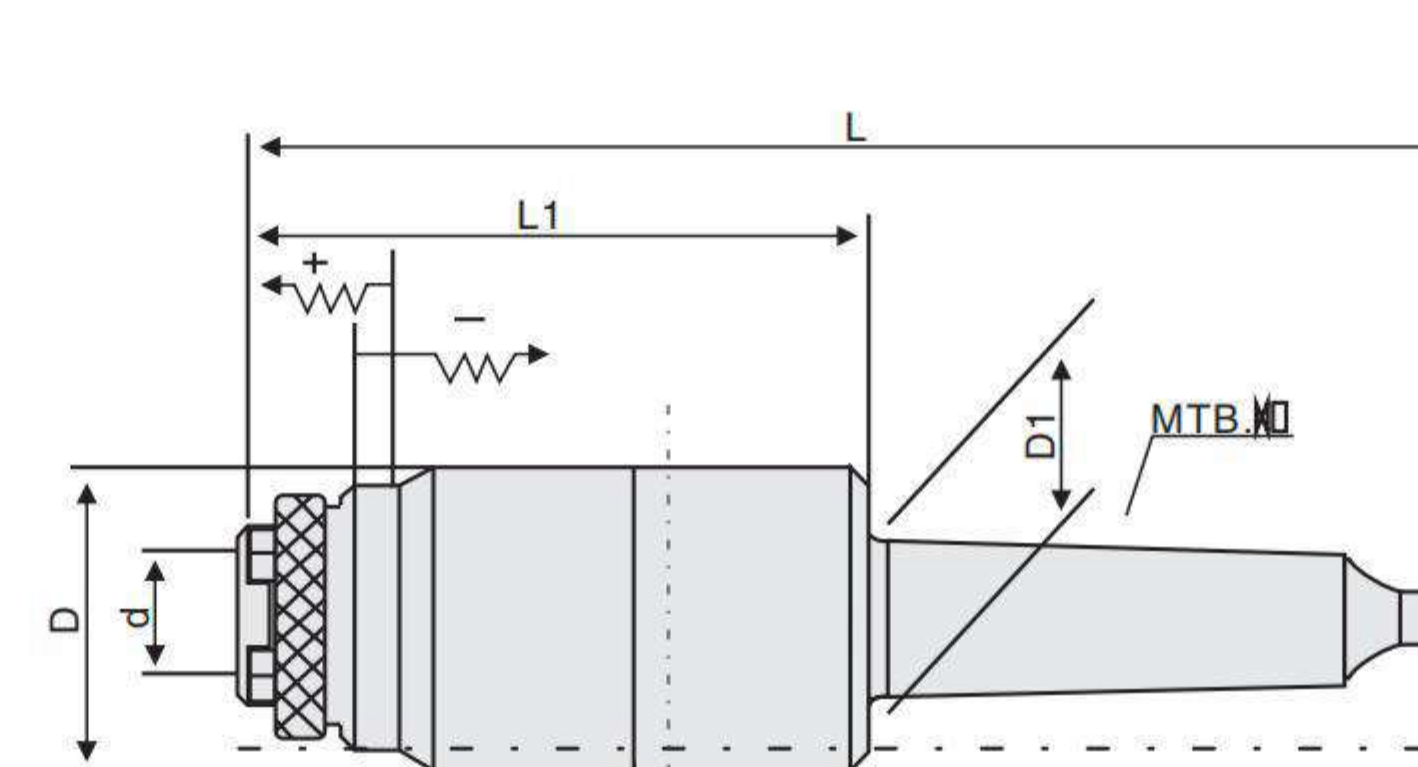
### 直柄扭力伸縮攻牙刀柄

	型號 Specification	攻牙範圍 Tapping range	D	d	L	L1	D1	筒夾 Collet
C20	50-G0312	M3-M12	46	19	149	89	20	G3
	100-G0312	M3-M12	46	19	189	89	20	
C25	50-G0312	M3-M12	46	19	149	89	25	G3
	100-G0312	M3-M12	46	19	189	89	25	
C32	100-G1224	M12-M24	66	30	220	120	25	G12
	100-G1224	M12-M24	66	30	220	120	32	

#### 特點/Feature

1. 具有扭矩過載保護，可以防止絲錐斷裂。
  2. 具有浮動和伸縮功能，快速更換刀具。
  3. 適合各種夾頭加長和各種攻牙機床設備。
  4. 攻絲範圍：M3-M24。
1. Overload protection to avoid breakage of taps.
  2. Floating chuck with tension and compression function, tools can be changed quickly.
  3. Suitable for drilling machine, lathes, tapping machines.
  4. Tapping range: M3-M42.

## TAPPING TOOL HOLDER 銑削攻牙夾持具



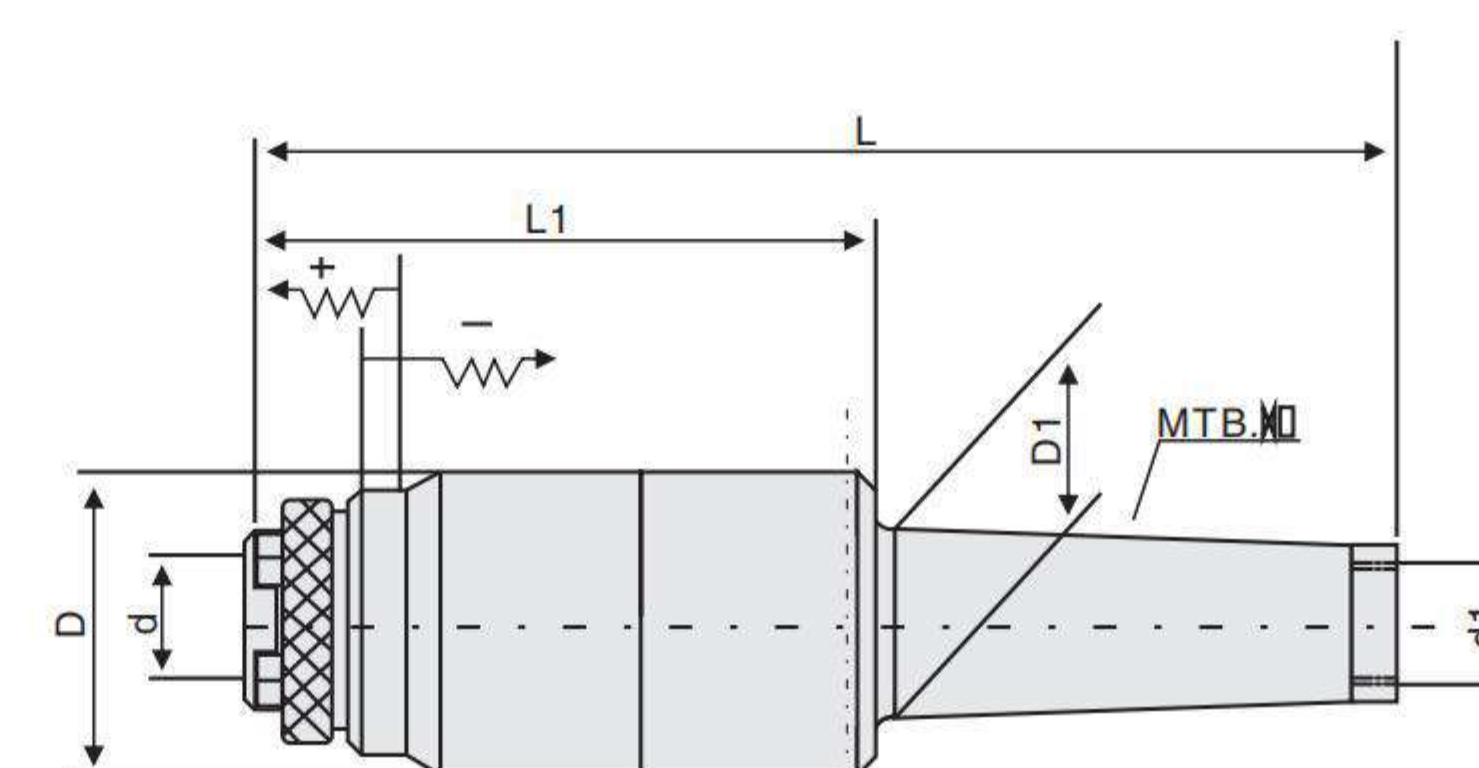
MTA MORSE FLOATING TAPPING HOLDER

### MTA 莫氏扭力伸縮攻牙刀柄

	型號 Specification	攻牙範圍 Tapping range	D	d	d1	D1	L	L1	筒夾 Collet
MTA3	G0312	M3-M12	46	19	M12	23.825	176	89	G3
	G1224	M12-M24	66	30	M12	23.825	206	120	G12
MTA4	G0312	M3-M12	46	19	M16	31.267	199	89	G3
	G1224	M12-M24	66	30	M16	31.267	229	120	G12

#### 特點/Feature

1. 具有扭矩過載保護，可以防止絲錐斷裂。
  2. 具有浮動和伸縮功能，快速更換刀具。
  3. 適合鑽床，攻牙機、車床、數控銑床等機床設備。
  4. 攻絲範圍：M3-M24。
1. Overload protection to avoid breakage of taps.
  2. Floating chuck with tension and compression function, tools can be changed quickly.
  3. Suitable for drilling machine, lathes, Milling machines.
  4. Tapping range: M3-M42.



MTB MORSE TAPPING HOLDER

### MTB 莫氏無扁尾扭力伸縮攻牙刀柄

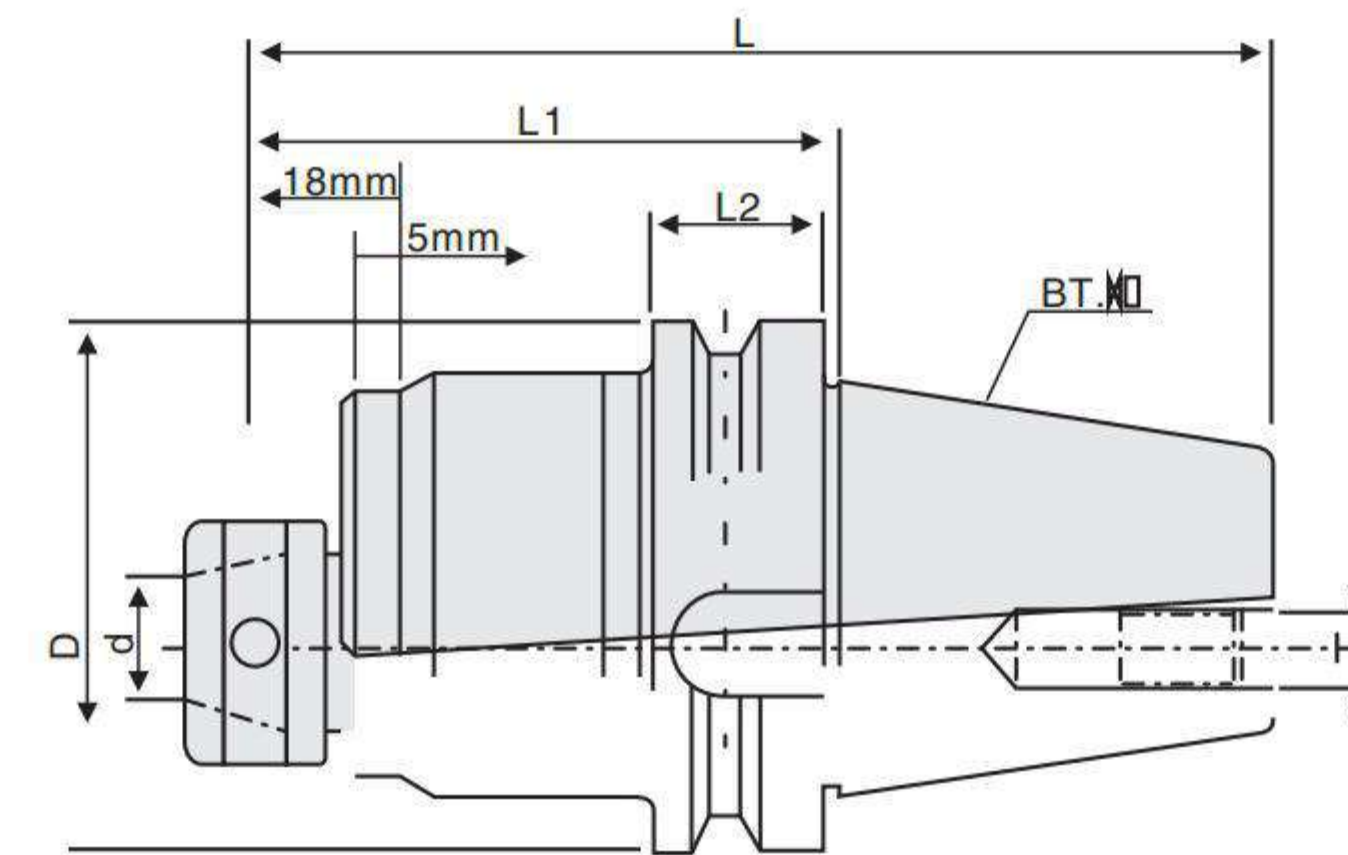
	型號 Specification	攻牙範圍 Tapping range	D	d	d1	D1	L	L1	筒夾 Collet
MTB3	G0312	M3-M12	46	19	M12	23.825	176	89	G3
	G1224	M12-M24	66	30	M12	23.825	206	120	G12
MTB4	G0312	M3-M12	46	19	M16	31.267	199	89	G3
	G1224	M12-M24	66	30	M16	31.267	229	120	G12

#### 特點/Feature

1. 具有扭矩過載保護，可以防止絲錐斷裂。
  2. 具有浮動和伸縮功能，快速更換刀具。
  3. 適合鑽床，攻牙機、車床、數控銑床等機床設備。
  4. 攻絲範圍：M3-M24。
1. Overload protection to avoid breakage of taps.
  2. Floating chuck with tension and compression function, tools can be changed quickly.
  3. Suitable for drilling machine, lathes, Milling machines.
  4. Tapping range: M3-M42.



## TAPPING TOOL HOLDER 銑削攻牙夾持具



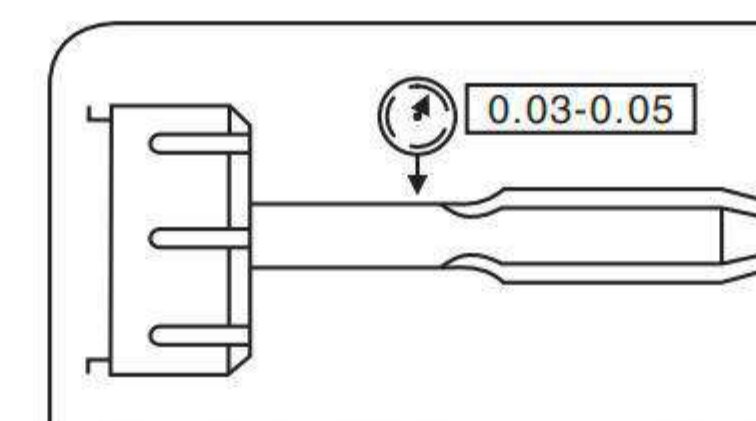
BT RIGID TAPPING TOOL HOLDER

### BT 剛性伸縮攻牙刀柄

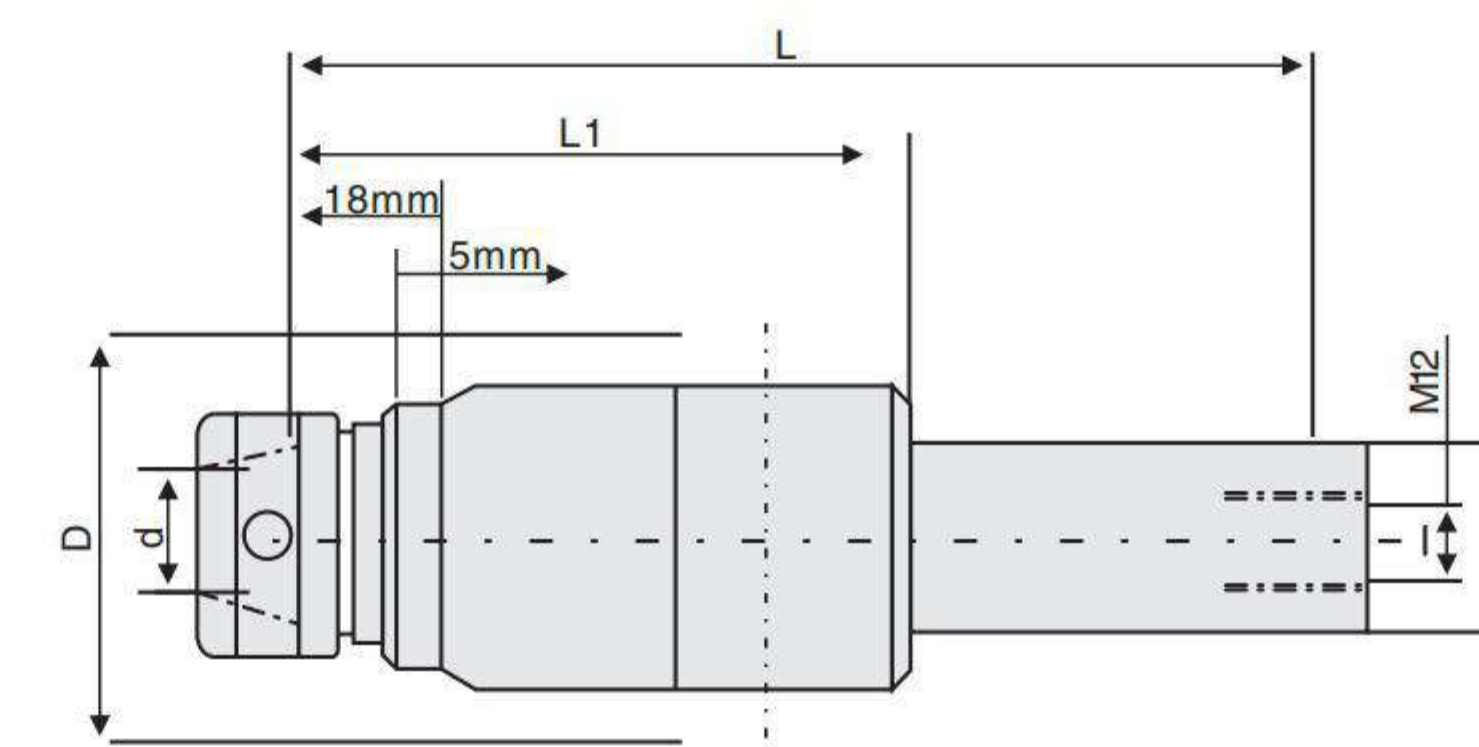
	型號	攻牙範圍	D	L	L1	L2	T	筒夾
	Specification	Tapping range						Collet
<b>BT30</b>	TER16	M2-M12	46	149	100.6	20	M12	ER16
	TER20	M2-M16	46	151	102.6	20	M12	ER20
	TER25	M2-M22	46	153	104.6	20	M12	ER25
	TER32	M2-M30	46	156	107.6	20	M12	ER32
<b>BT40</b>	TER16	M2-M12	63	161	95.6	25	M16	ER16
	TER20	M2-M16	63	163	97.6	25	M16	ER20
	TER25	M2-M22	63	165	99.6	25	M16	ER25
	TER32	M2-M30	63	168	102.6	25	M16	ER32
<b>BT50</b>	TER16	M2-M12	100	207	105.2	35	M24	ER16
	TER20	M2-M16	100	209	107.2	35	M24	ER20
	TER25	M2-M22	100	211	109.2	35	M24	ER25
	TER32	M2-M30	100	214	112.2	35	M24	ER32

#### 特點/Feature

1. 剛性功能確保加工中心主軸轉動同進給精確同步。
  2. 鋼性攻牙刀柄可使用ER筒夾，夾持鑽頭、鉸刀和銑刀等刀具。
  3. 使用時螺帽請勿過度鎖緊，以免造成損壞。
1. The rigidity design ensures precision synchronization between spindle rotation and cutting feed.  
 2. ER collet can be used for gripping drill bits,reaming cutters and milling cutters.  
 3. Do not lock the clamping nut too tight in order to avoid damage.



## TAPPING TOOL HOLDER 銑削攻牙夾持具



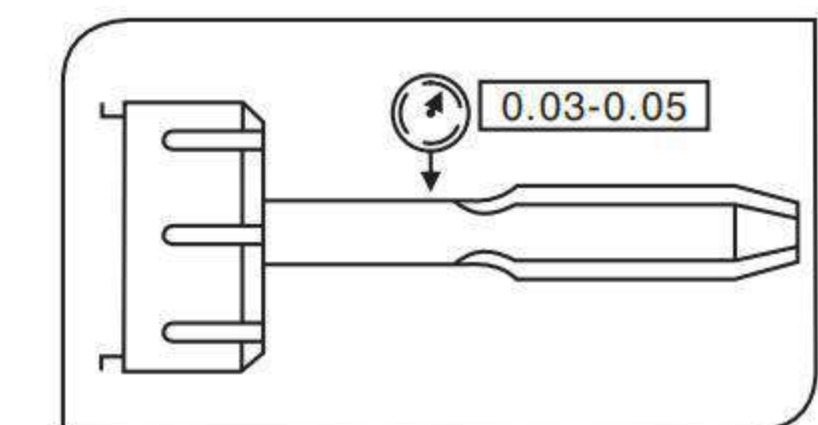
RIGID TAPPING TOOL HOLDER WITH STRAIGHT SHANK

### 直柄剛性伸縮攻牙刀柄

	型號	攻牙範圍	D	L	L1	D1	筒夾
	Specification	Tapping range					Collet
<b>C20</b>	50/100-TER16	M2-M12	46	147/197	97	20	ER16
	50/100-TER20	M2-M16	46	149/199	99	20	ER20
	50/100-TER25	M2-M22	46	161/201	101	20	ER25
	50/100-TER32	M2-M30	46	164/204	104	20	ER32
<b>C25</b>	50/100-TER16	M2-M12	46	147/197	97	25	ER16
	50/100-TER20	M2-M16	46	149/199	99	25	ER20
	50/100-TER25	M2-M22	46	161/201	101	25	ER25
	50/100-TER32	M2-M30	46	164/204	104	25	ER32

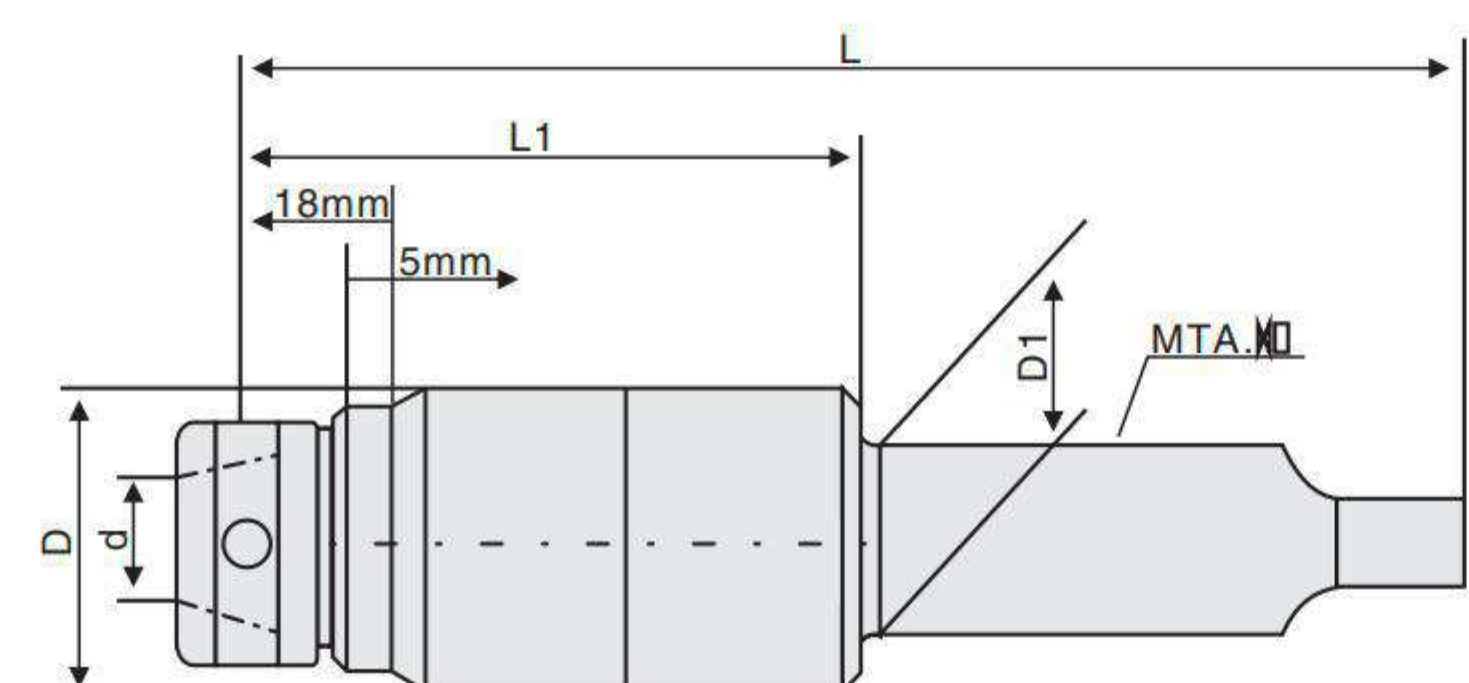
#### 特點/Feature

1. 剛性功能確保加工中心主軸轉動同進給精確同步。
  2. 鋼性攻牙刀柄可使用ER筒夾，夾持鑽頭、鉸刀和銑刀等刀具。
  3. 使用時螺帽請勿過度鎖緊，以免造成損壞。
1. The rigidity design ensures precision synchronization between spindle rotation and cutting feed.  
 2. ER collet can be used for gripping drill bits,reaming cutters and milling cutters.  
 3. Do not lock the clamping nut too tight in order to avoid damage.





## TAPPING TOOL HOLDER 銑削攻牙夾持具

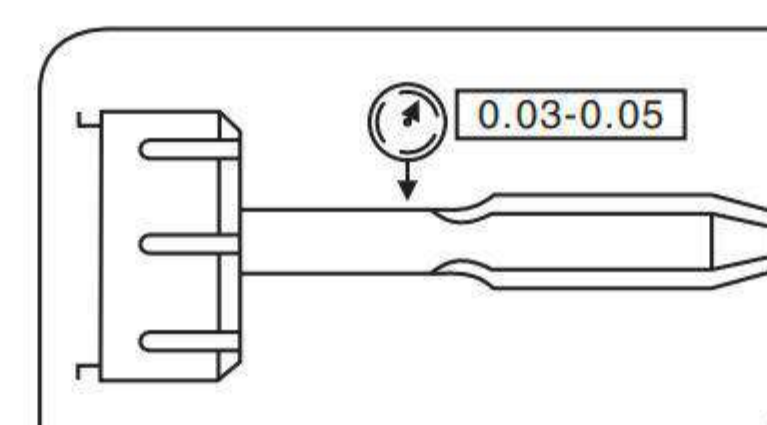


MTA MORSE RIGID TAPPING TOOL HOLDER  
莫氏扁尾剛性伸縮攻牙刀柄

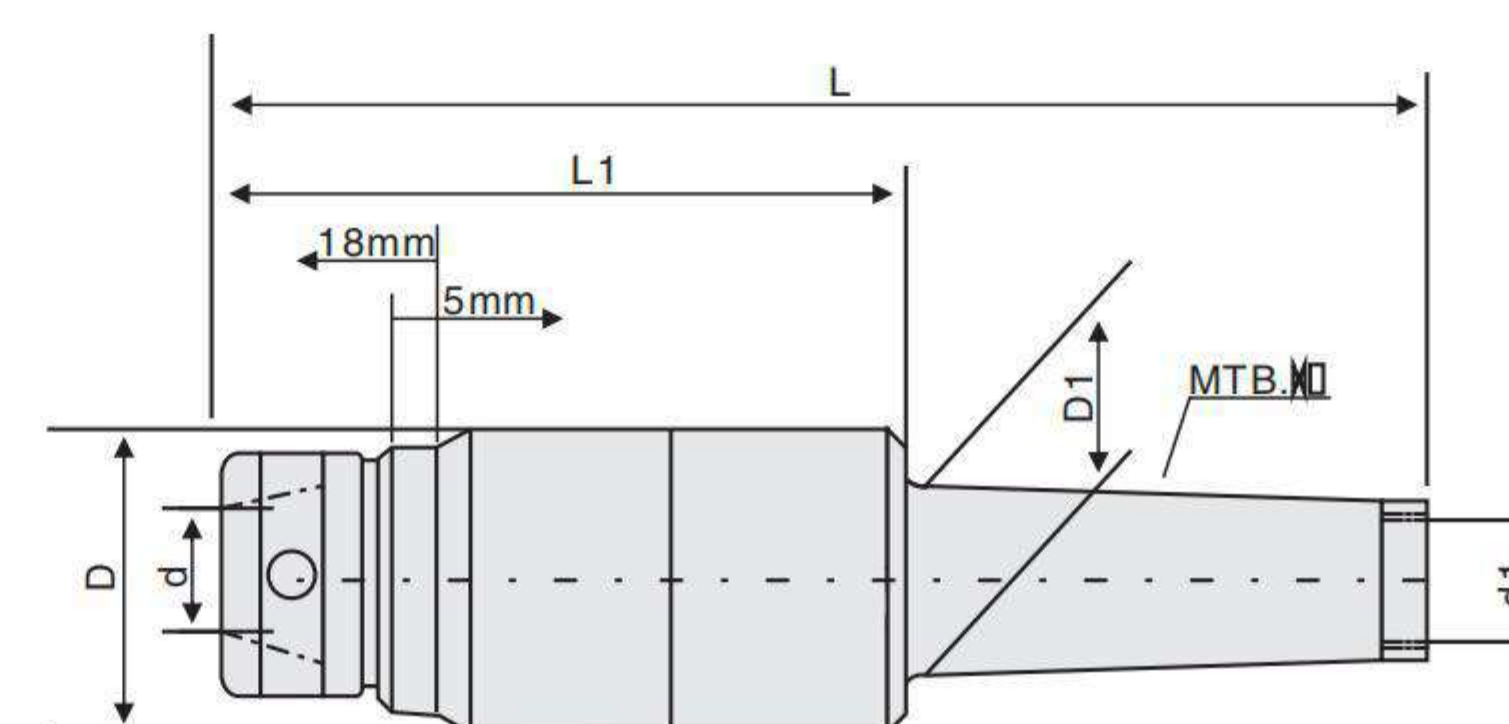
	型號	攻牙範圍	D	L	L1	D1	筒夾 Collet
	Specification	Tapping range					
MTA2	TER16	M2-M12	46	177	97	17.78	ER16
	TER20	M2-M16	50	198	99	23.825	ER20
	TER25	M2-M22	46	181	101	17.78	ER25
MTA3	TER16	M2-M12	50	196	97	23.825	ER16
	TER20	M2-M16	50	198	99	23.825	ER20
	TER25	M2-M22	50	200	101	23.825	ER25
MTA4	TER32	M2-M30	50	203	104	23.825	ER32
	TER16	M2-M12	66	221	97	31.267	ER16
	TER20	M2-M16	66	223	99	31.267	ER20
MTA5	TER25	M2-M22	66	225	101	31.267	ER25
	TER32	M2-M30	66	228	104	31.267	ER32
	TER32	M2-M30	66	260	104	44.339	ER32

### 特點/Feature

- 剛性功能確保加工中心主軸轉動同進給精確同步。
  - 鋼性攻牙刀柄可使用ER筒夾，夾持鑽頭、銼刀和銑刀等刀具。
  - 使用時螺帽請勿過度鎖緊，以免造成損壞。
1. The rigidity design ensures precision synchronization between spindle rotation and cutting feed.  
2. ER collet can be used for gripping drill bits, reaming cutters and milling cutters.  
3. Do not lock the clamping nut too tight in order to avoid damage.



## TAPPING TOOL HOLDER 銑削攻牙夾持具

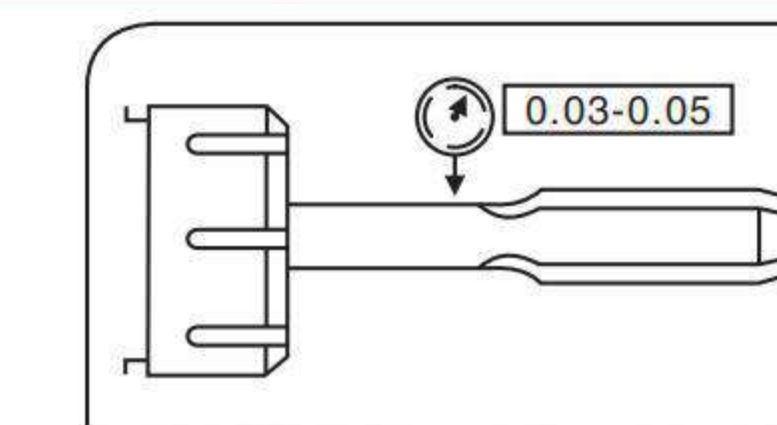


MTB MORSE RIGID TAPPING TOOL HOLDER  
莫氏無扁尾剛性伸縮攻牙刀柄

	型號	攻牙範圍	D	d1	D1	L	L1	筒夾 Collet
	Specification	Tapping range						
MTB3	TER16	M2-M12	46	M12	23.825	176	89	ER16
	TER20	M2-M24	46	M12	23.825	206	120	ER20
	TER25	M2-M22	46	M12	23.825	176	89	ER25
MTB4	TER32	M2-M30	46	M12	23.825	206	120	ER32
	TER16	M2-M12	46	M16	31.267	199	89	ER16
	TER20	M2-M24	46	M16	31.267	229	120	ER20
	TER25	M2-M22	46	M16	31.267	199	89	ER25
	TER32	M2-M30	46	M16	31.267	229	120	ER32

### 特點/Feature

- 剛性功能確保加工中心主軸轉動同進給精確同步。
  - 鋼性攻牙刀柄可使用ER筒夾，夾持鑽頭、銼刀和銑刀等刀具。
  - 使用時螺帽請勿過度鎖緊，以免造成損壞。
1. The rigidity design ensures precision synchronization between spindle rotation and cutting feed.  
2. ER collet can be used for gripping drill bits, reaming cutters and milling cutters.  
3. Do not lock the clamping nut too tight in order to avoid damage.





TAPPING TOOL HOLDER 銑削攻牙夾持具

TAPPING TOOL HOLDER 銑削攻牙夾持具

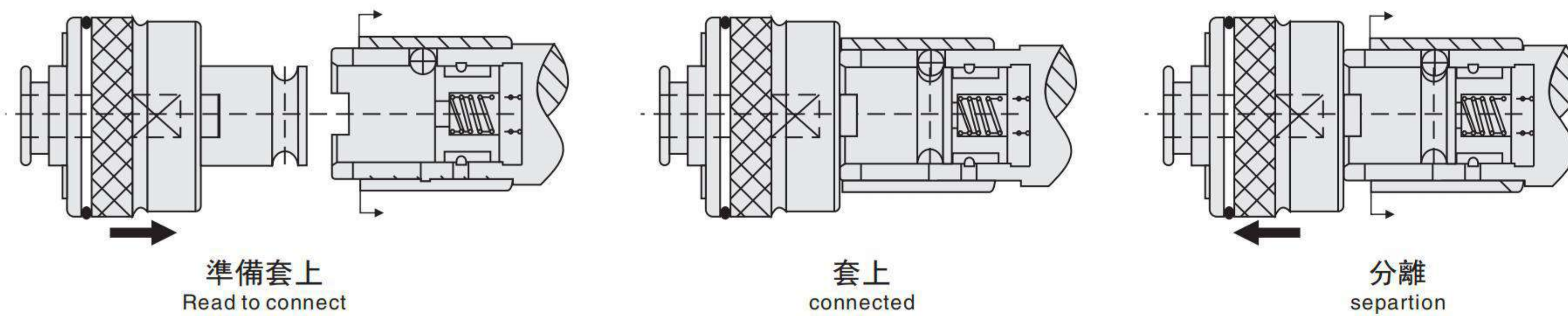


FITTING

G 扭力過載保護攻絲筒夾

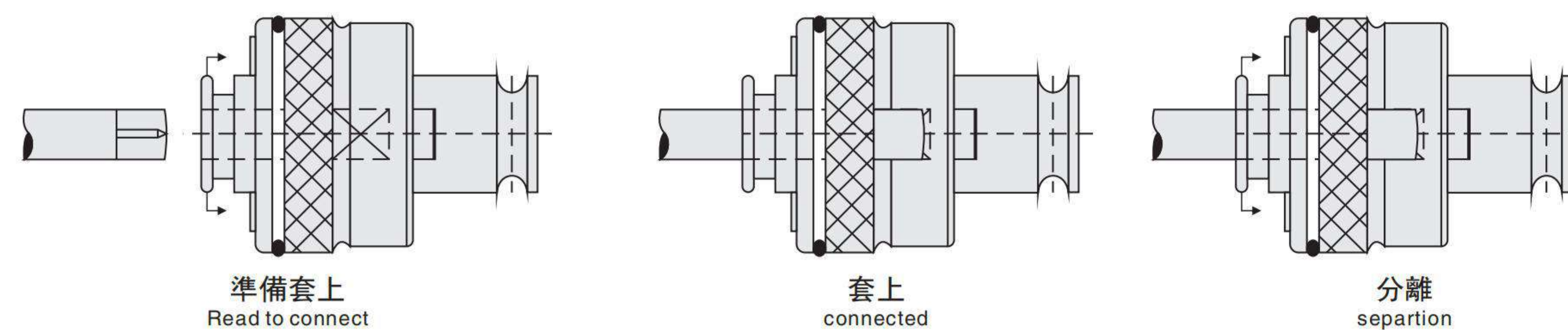
攻牙本體與攻絲筒夾連接操作方法

QUICK CHANGE PROTECT TAP COLLET G SYSTEM



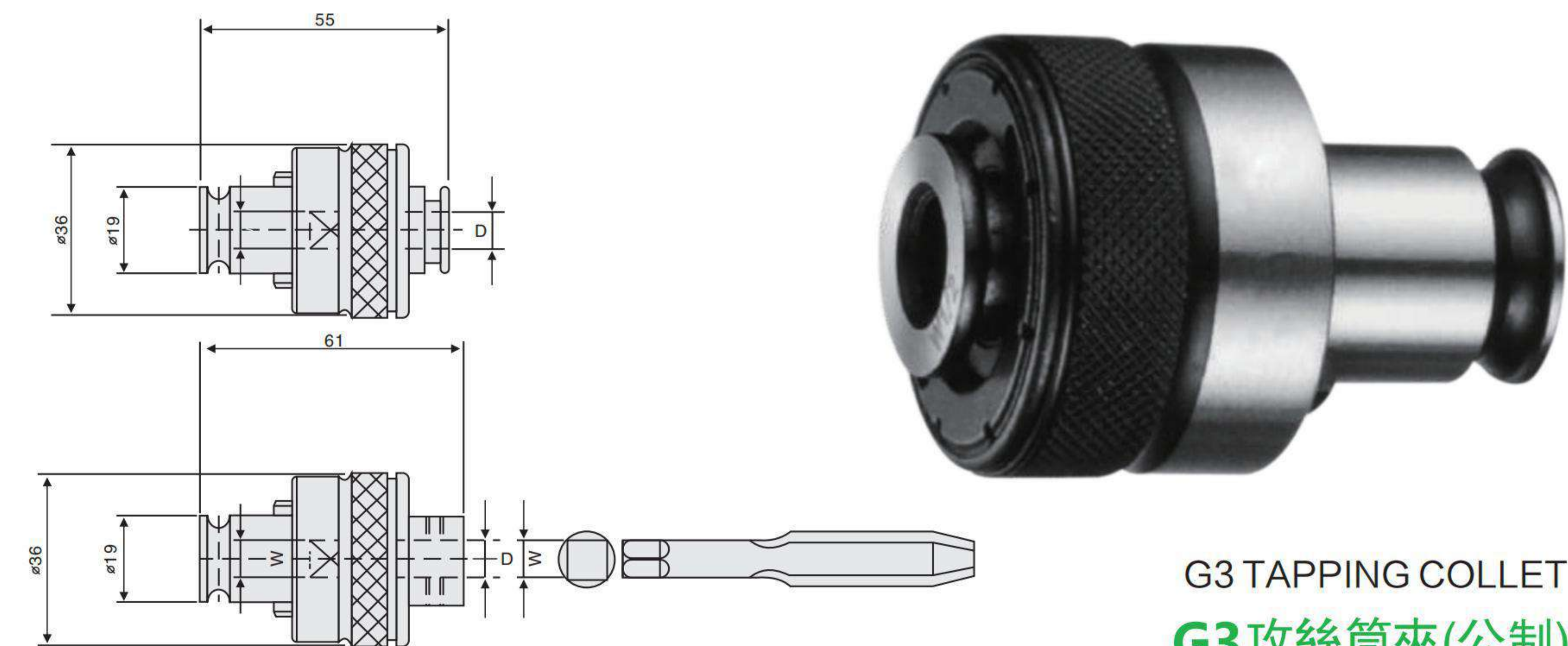
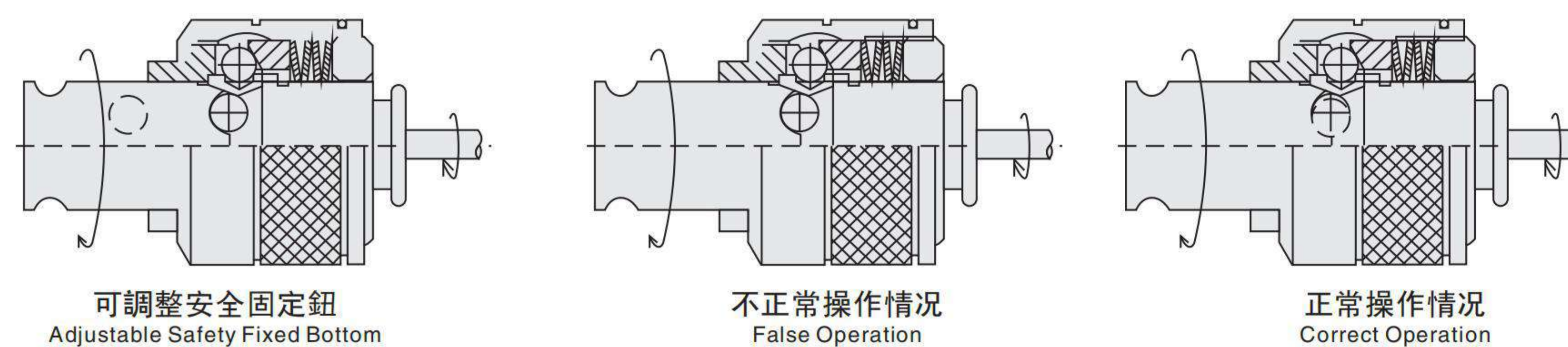
攻絲筒夾與刀具連接操作方法

SCREW TAP AND COLLET CONNECTING



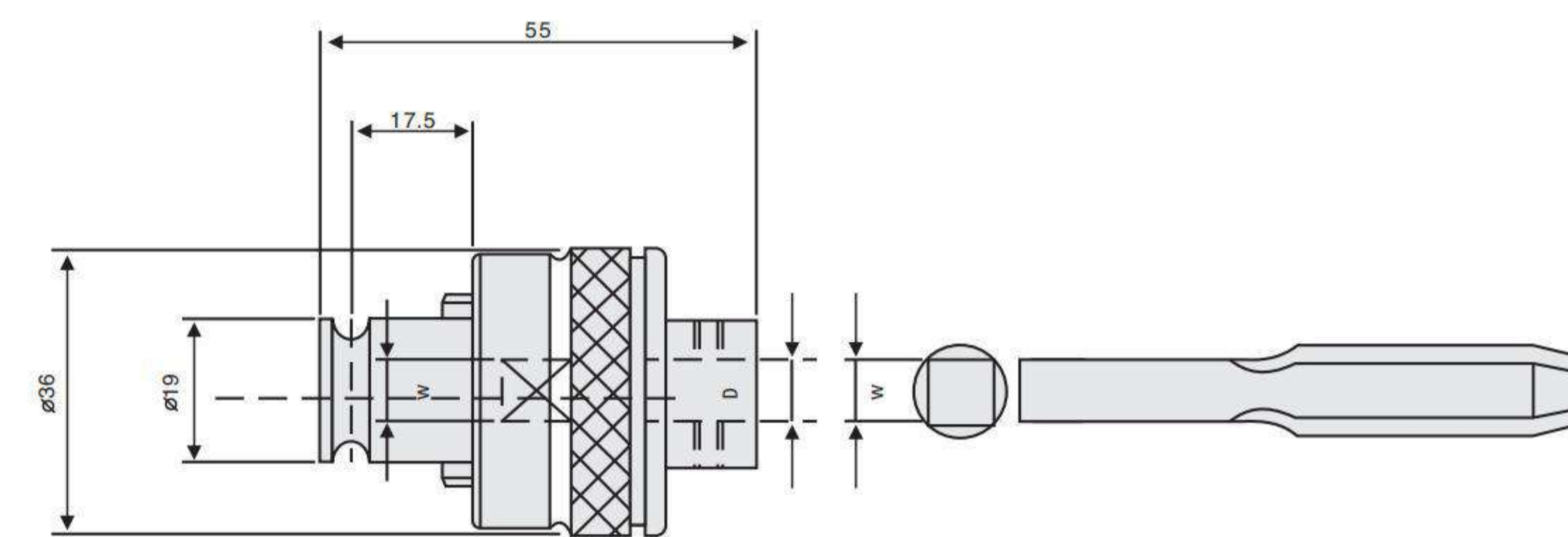
可調整安全固定鈕操作方法

SAFETY FIXED BOTTO ADJUSTING



G3 TAPPING COLLET  
G3攻絲筒夾(公制)

型號 Specification	規格 (公制) Specification	D +0.08	W +0.08	圖示 Photo
G3	M3	3.15	2.5	F1
G3	M4	4	3.15	F1
G3	M5	5	4	F1
G3	M6-8	6.3	5	F1
G3	M10	8	6.3	F1
G3	M12	9	7.1	F1
G3	M14	11.2	9	F2
G3	M16	12.5	10	F2



G3 TAPPING COLLET  
G3攻絲筒夾(英制/JIS)

型號 Specification	規格 (JIS) Specification	規格 (JIS) Specification	D +0.08	W +0.05
G3	M3	1/8	4	3.2
G3	M4	5/32	5	4
G3	M5	3/16	5.5	4.5
G3	M6	1/4	6	4.5
G3	M8	5/16	6.1	5
G3	M10	3/8	7	5.5
G3	M12	7/16	8	6
G3		1/16	8.5	6.5
G3			9	7

特點/Feature

1. 具有扭力過載保護功能，高精度和靈敏度，使用壽命長。
2. 扭矩的變動反應靈敏，可以根據不同材質設定相應的扭矩。
3. 適用於各種攻牙機床設備。

1. Overload protection with high precision and sensitivity, which can promise increased tool life.
2. Sensitive response to torque change and adjustable according to different work piece material.
3. Suitable for various tapping tools and machines.



## TAPPING TOOL HOLDER 銑削攻牙夾持具



### DT24/DT33 旋臂鑽床攻牙組

型號 Specification	筒夾持具 Tapper Holder	筒夾 Collet	套筒 Tap Sleeve
DT24 MTA□-10PCDS/SET	DT24-MT2 Holder DT24-MT2 Holder DT24-MT2 Holder DT24-MT2 Holder	M4,M5,M6,M8,M10,M12,M14,M16,M18,M20,M22,M24 W3/16,W1/4,W5/16,W3/8,W7/16,W1/2,W5/8,W3/4,W7/8,W1" PT1/8,PT1/4,PT3/8,PT1/2	T24-MT1 T24-MT2 T24-MT3
DT33 MTA□-10PCDS/SET	DT33-MT3 Holder DT33-MT4 Holder DT33-MT5 Holder	M8,M10,M12,M14,M16,M18,M20,M22,M24,M27,M30,M33,M36 W3/16,W1/4,W5/16,W3/8,W7/16,W1/2,W5/8,W3/4,W7/8,W1" PT1/8,PT1/4,PT3/8,PT1/2	T33-MT1 T33-MT2 T33-MT3 T33-MT4

DT24/DT33 旋臂鑽床攻牙組:

1. 旋臂攻牙本體×1PC
2. DT24/DT33+JTA6+1/2普通鑽夾頭×1SET
3. DT24/DT33攻絲套筒×2PCS
3. DT24/DT33攻絲筒夾×6PCS
4. L型調整扳手×1PCS

### 標準型

型號 Specification	標準尺寸 standard
DT24 MTA□-10PCDS/SET DT33 MTA□-10PCDS/SET	DT24 MTA□HOLDER,JTA6+1/2,DT24-M4,M6,M8,M10,M12,M16,DT24-MT1,DT24-MT2 DT33 MTA□HOLDER,JTA6+1/2,DT33-M8,M10,M12,M16,M20,M24,DT33-MT2,DT33-MT3

1. DT24/DT33攻牙組可調整組購買也可以依照你的需求分別購買。
2. DT24/DT33攻牙組使用簡單、方便、快速；
3. DT24/DT33本體有調整扭力功能。并可依照攻牙需求做扭力強 (H) 和弱 (L) 之調整操作。

## TAPPING TOOL HOLDER 銑削攻牙夾持具



### DT52 旋臂鑽床攻牙系列

型號 Specification	筒夾 Collet	套筒 Tap Sleeve
DT52-MTA5 Holder	M20,M22,M24,M27,M30,M33,M36,M39,M42,M45,M48,M52 W7/8,W1",W1-1/8,W1-1/4,W1-3/8,W1-1/2,W1-5/8,W1-3/4,W1-7/8,W2"	DT52-MT2 DT52-MT3 DT52-MT4 DT52-MT5

1. DT52攻牙系列可以依照你的需求分別購買。
2. DT52攻牙刀杆使用簡單、方便、快速。
3. DT52本體有調整扭力功能。并可依照攻牙需求做扭力強 (H) 和弱 (L) 之調整操作。

### DT52 攻絲筒夾規格表

JIS	φd □
DT52 M20	15 12
DT52 M22 W7/8	17 13
DT52 M24 M25	19 15
DT52 M27 W1 PT5/8	20 15
DT52 M30 PT3/4	23 17
DT52 M32 W1-14 PT7/8	24 19
DT52 M33	25 19
DT52 M34 M35 W1-3/8 PT1	26 21
DT52 M36 PT1-1/8	28 21
DT52 M39 M40 W1-1/2	30 23
DT52 M42 W1-5/8	32 26
DT52 M45 M46 W1-3/4 PT1-3/8	35 26
DT52 M48 W1-7/8 PT1-1/2	38 29
DT52 M50 W2	40 32
DT52 M52	42 32
DT52 W1-1/8	22 17

ISO	φd □
DT52 M20	14 11.2
DT52 M22	16 12.5
DT52 M24	18 14
DT52 M27 M30	20 16
DT52 M33	22.4 18
DT52 M36	25 20
DT52 M39 M42	28 22.4
DT52 M45 M48	31.5 25
DT52 M52	35.5 28

DIN376	φd □
DT52 M20	16 12
DT52 M22 M24 W1"	18 14.5
DT52 M27	20 16
DT52 M30	22 18
DT52 M33	25 20
DT52 M36	28 22
DT52 M39 M42	32 24
DT52 M45 M48	26 29
DT52 M52	40 32



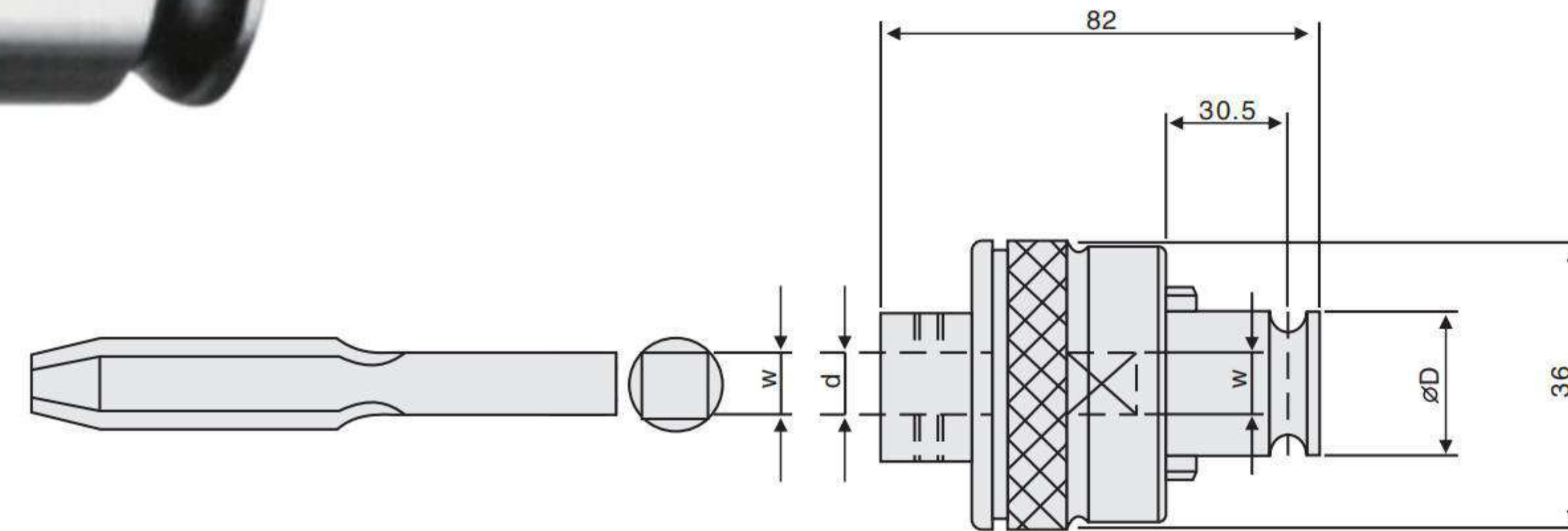
# TAPPING TOOL HOLDER 銑削攻牙夾持具

# TAPPING TOOL HOLDER 銑削攻牙夾持具



G12 TAPPING COLLET

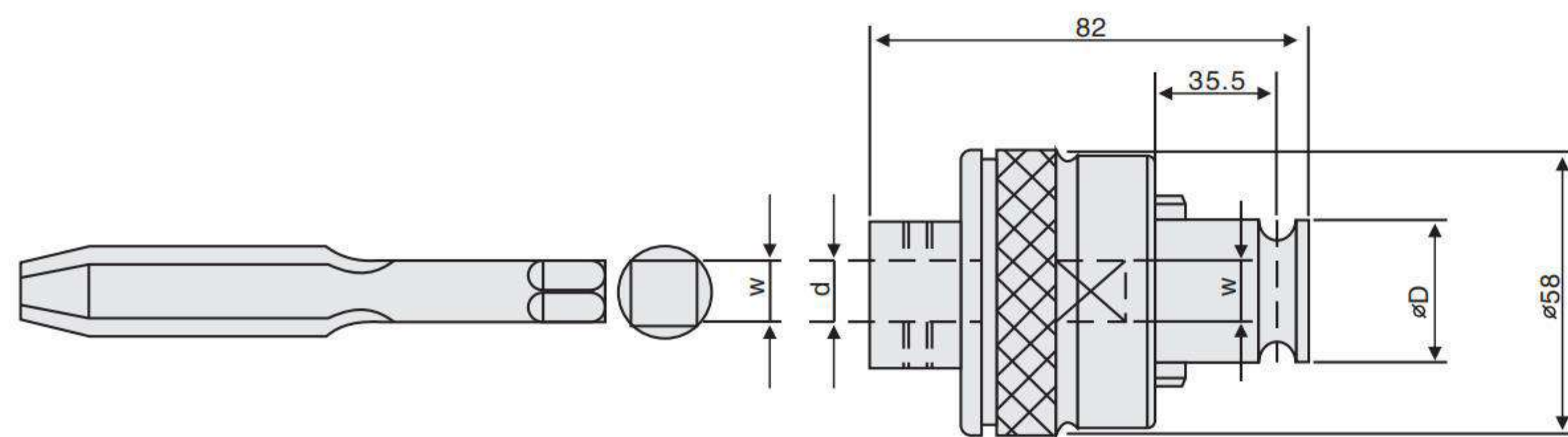
## G12 攻絲筒夾(公制)



型號 Specification	規格 (公制) Specification	d +0.10	w +0.15	D
G3	M6-8	6.3	5	30
G3	M10	8	6.3	30
G3	M12	9	7.1	30
G3	M14	11.2	9	30
G3	M16	12.5	10	30
G3	M18-20	14	11.2	30
G3	M22	16	12.5	30
G3	M24	18	14	30

G12 TAPPING COLLET

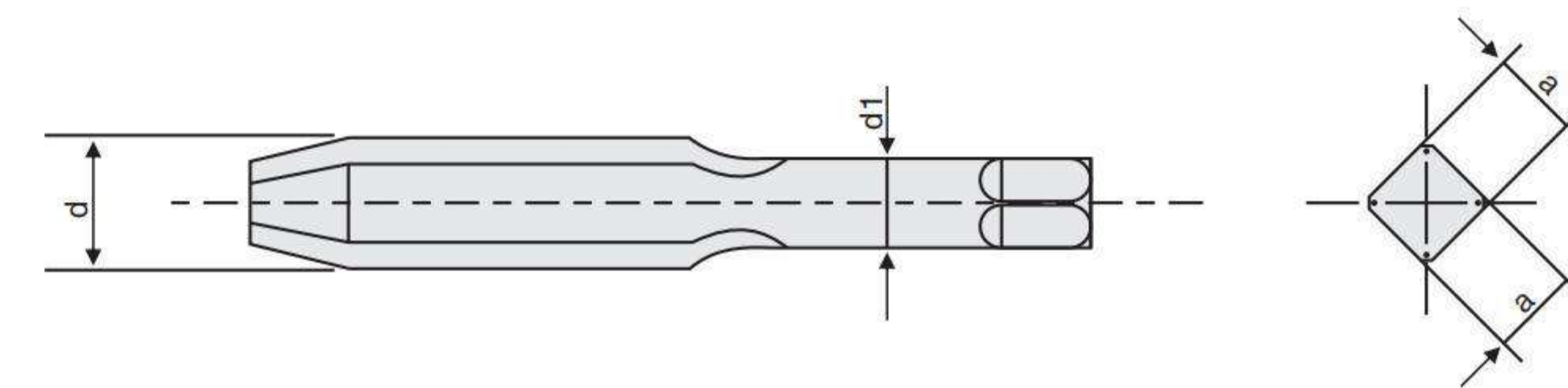
## G12 攻絲筒夾(JIS)



型號 Specification	規格 (公制) Specification	d +0.10	W +0.15	D
G3	M6	6	4.5	31
G3	M8	6.1	5	31
G3	M10	7	5.5	31
G3	M12	8.5	6.5	31
G3	M14	10.5	8	31
G3	M16	12	9	31
G3	M18	14	11	31
G3	M20	15	12	31
G3	M22	17	13	31

### 特點/Feature

1. 具有扭矩過載保護功能，高精度和靈敏度，使用壽命長。
  2. 扭矩的變動反應靈敏，可以根據不同材質設定相應的扭矩。
  3. 適用於各種攻牙機床設備。
1. Overload protection with high precision and sensitivity, which can promise increased tool life.
  2. Sensitive response to torque change and adjustable according to different work piece material.
  3. Suitable for various tapping tools and machines.



SPECIFICATIONS

## 絲錐標準

規格d (公制/日制)	公制		日制		規格d (英制)	英制	
	柄徑d1	四方a*a	柄徑d1	四方a*a		柄徑d1	四方a*a
M3	3.15	2.5	4	3.2	W1/8	4	3.2
M4	4	3.15	5	4	W5/32	5	4
M5	5	4	5.5	4.5	W3/16	5.5	4.5
M6	6.3	5	6	4.5	W1/4	6	4.5
M8	6.3	5	6.2	5	W5/16	6.1	5
M10	8	6.3	7	5.5	W3/8	7	5.5
M12	9	7.1	8.5	6.5	W7/16	8	6
M14	11.2	9	10.5	8	W1/2	9	7
M16	12.5	10	12	9	W9/16	10.5	8
M18	14	11.2	14	11	W5/8	12	9
M20	14	11.2	15	12	W3/4	14	11
M22	16	12.5	17	13	W7/8	17	13
M24	18	14	19	15	W1	20	15
M27	20	16	20	15	W11/8	22	17
M30	20	16	23	17	W11/4	24	19
M33	22.4	18	25	19	W13/8	26	21
M36	25	20	28	21	W11/2	30	23
M39	28	22.4	30	23	W15/8	32	26
M42	28	22.4	32	26	W13/4	35	26
M45	31.5	25	35	26	W17/8	38	29
M48	31.5	25					
M52	35.5	28					
M56	35.5	28					
M60	40	32.5					
M64	40	32.5					
M68	45	35.5					
M70	45	35.5					
M72	45	35.5					
M76	50	40					
M80	50	40					
M90	50	40					
M95	56	45					
M100	56	45					

以上表格參數僅供參考



# TAPPING TOOL HOLDER 銑削攻牙夾持具

## PROBLEM AND SOLUTIONS IN TAPPING PROCESS

### 攻絲中常見問題原因與解決方法

序號	發生的問題	產生原因	解決方法
1	絲錐折斷	① 螺紋底孔選擇偏小 ② 排屑不好，切削堵塞在絲錐槽內 ③ 攻不通孔螺紋，鑽孔深度不夠 ④ 攻螺紋切削速度太高 ⑤ 攻螺紋絲錐與底孔不同軸 ⑥ 絲錐刃磨參數選擇不適合 ⑦ 工作硬件不穩定 ⑧ 絲錐過度磨損	① 尽可能加大底孔直徑 ② 刃磨刃傾角或選用螺尖絲錐，盲孔則選用螺旋槽絲錐 ③ 加大鑽孔深度 ④ 適當降低切削速度 ⑤ 校正夾具，選用浮動螺絲夾頭 ⑥ 增大絲錐前角，縮短切削錐長度 ⑦ 控制工作硬度，選用保險夾頭 ⑧ 及時更換絲錐
2	絲錐崩齒	① 絲錐前角選擇過大 ② 絲錐每齒切削厚度太大 ③ 絲錐硬度過高 ④ 絲錐磨損	① 適當減小前角 ② 適當增加切削錐長度 ③ 適當降低硬度 ④ 及時更換絲錐
3	絲錐磨損太快	① 攻螺紋切削速度太高 ② 絲錐刃磨參數選擇不適合 ③ 切削液選擇不適合 ④ 工件材料硬度太高 ⑤ 絲錐刃磨時燒傷	① 適當降低切削速度 ② 適當減小前角，加長切削錐長度 ③ 選用潤滑性好的切削液 ④ 工件進行適當熱處理 ⑤ 正確刃磨絲錐
4	螺紋中徑過大	① 絲錐精度選擇不當 ② 切削液選擇不當 ③ 切削速度太高 ④ 絲錐與工件螺紋底孔不同軸 ⑤ 絲錐刃磨參數選擇不適合 ⑥ 刃磨絲錐中產生毛刺 ⑦ 絲錐切削長度太短	① 選擇適宜精度的絲錐 ② 選擇適宜的切削液 ③ 適當降低切削速度 ④ 校正夾具，選用浮動攻夾頭 ⑤ 適當減小前角與切削錐後角 ⑥ 消除刃磨絲錐產生的毛刺 ⑦ 適當增加切削錐長度
5	螺紋中徑過小	① 絲錐精度選擇不當 ② 絲錐刃磨參數選擇不適合 ③ 切削液選擇不適合	① 選擇適宜精度的絲錐 ② 適當加大絲錐前角與切削錐角 ③ 選用潤滑性好的切削液
6	螺紋表面不光滑，有波紋	① 絲錐刃磨參數選擇不適合 ② 工件材料太軟 ③ 絲錐刃磨不良 ④ 切削液選擇不適合 ⑤ 攻螺紋切削速度太高 ⑥ 絲錐磨損	① 適當加大前角，減小切削錐角 ② 進行熱處理，適當提高工件硬度 ③ 保證絲錐前刀面有較細的表面粗糙度 ④ 選擇潤滑好的切削液 ⑤ 適當降低切削速度 ⑥ 更換也磨損的絲錐

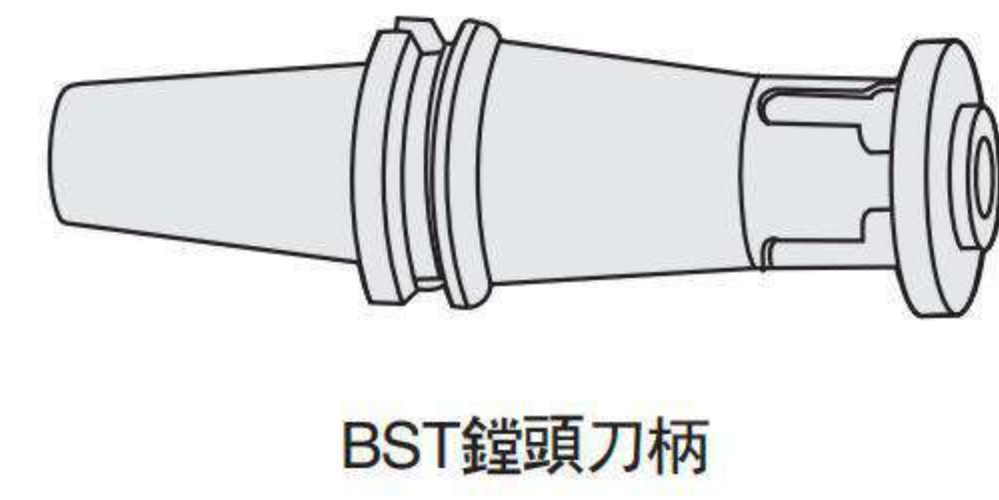
以上表格參數僅供參考



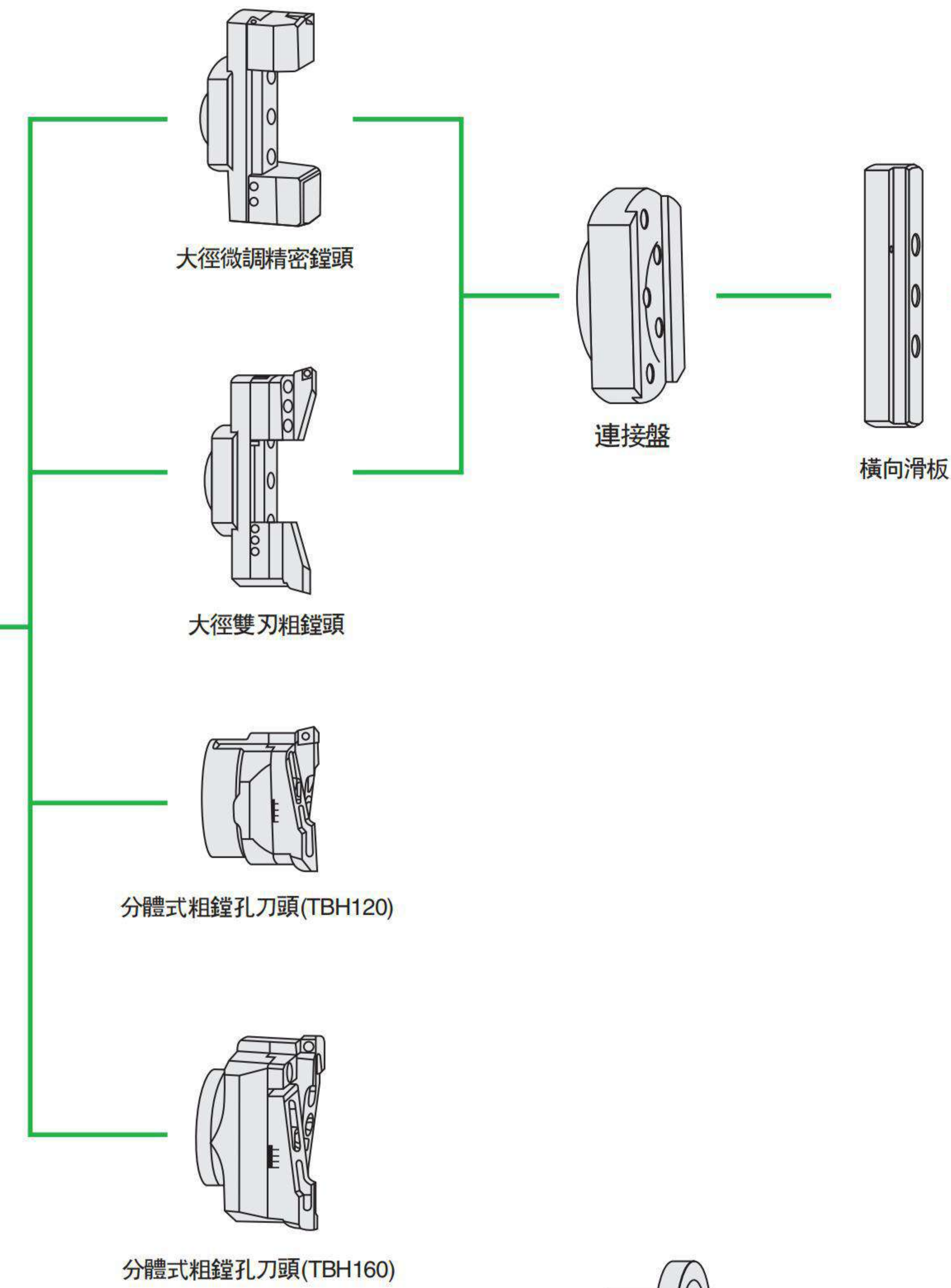


**BORING TOOL SYSTEM 孔加工刀具**

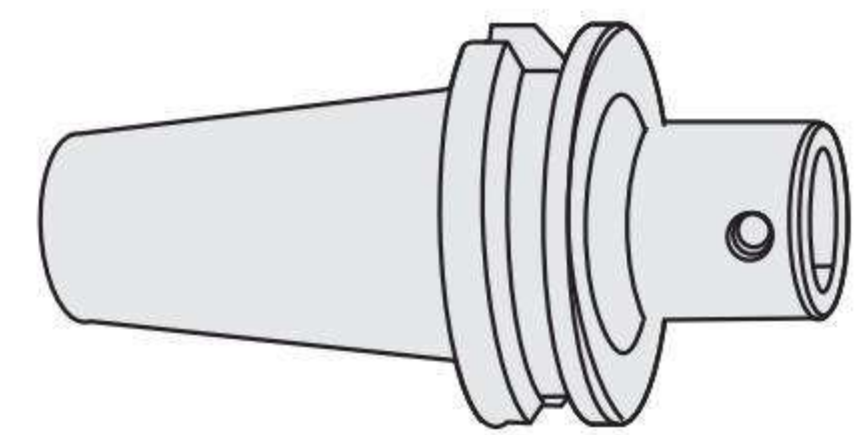
**BST系列  
BST BORING SYSTEM**



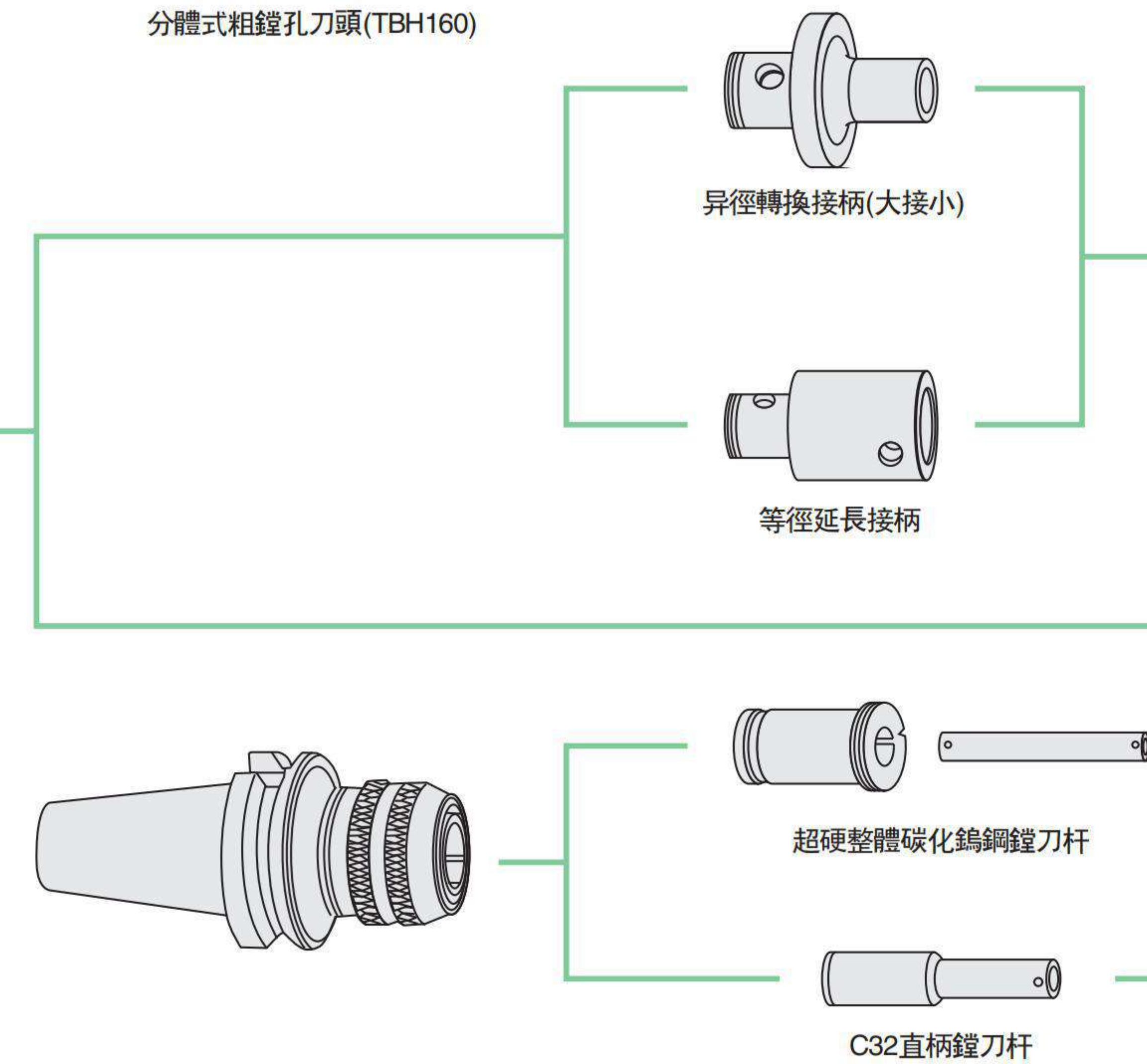
BST鏢頭刀柄



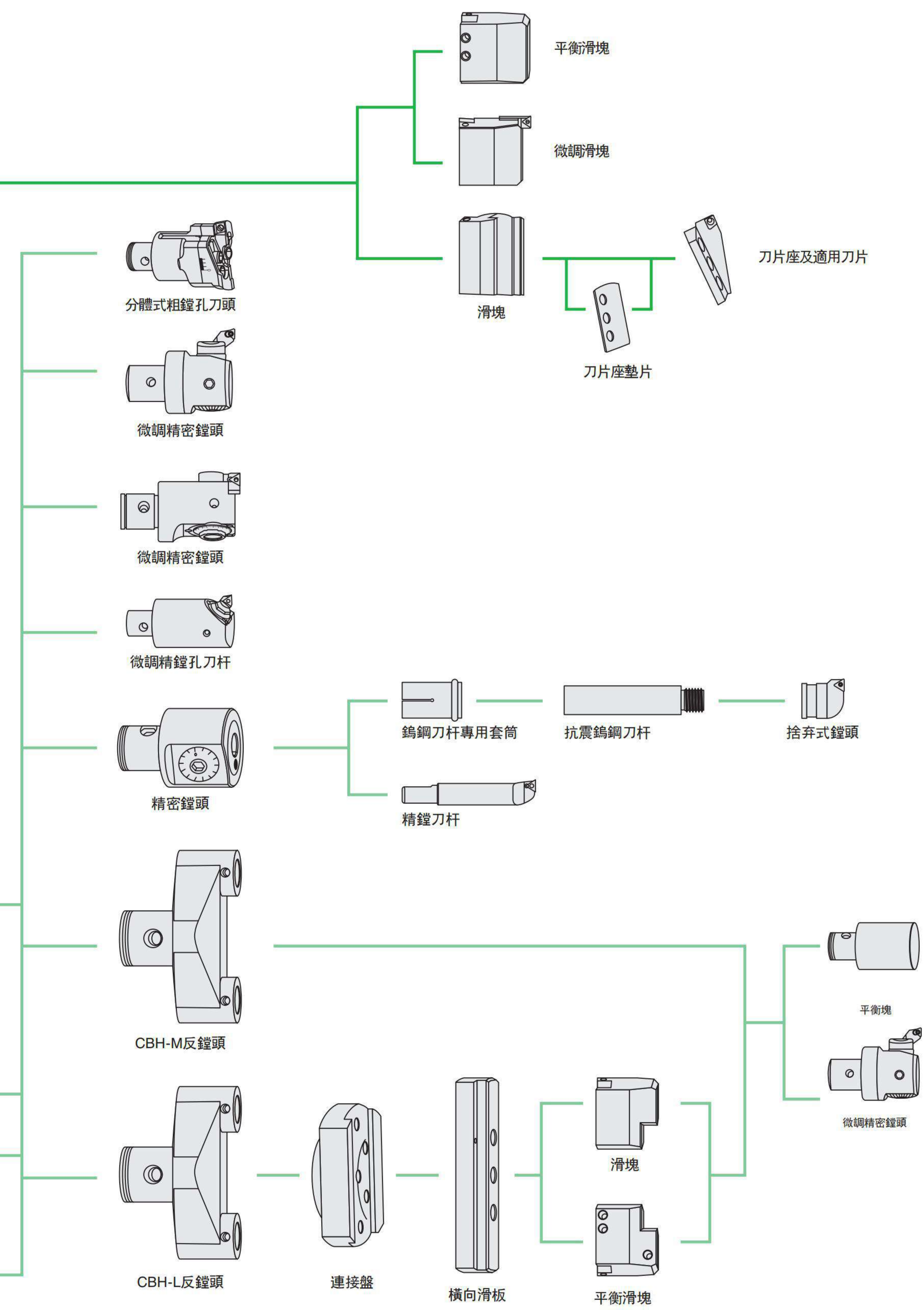
**TCK系列  
TCK BORING SYSTEM**



鏢頭刀柄



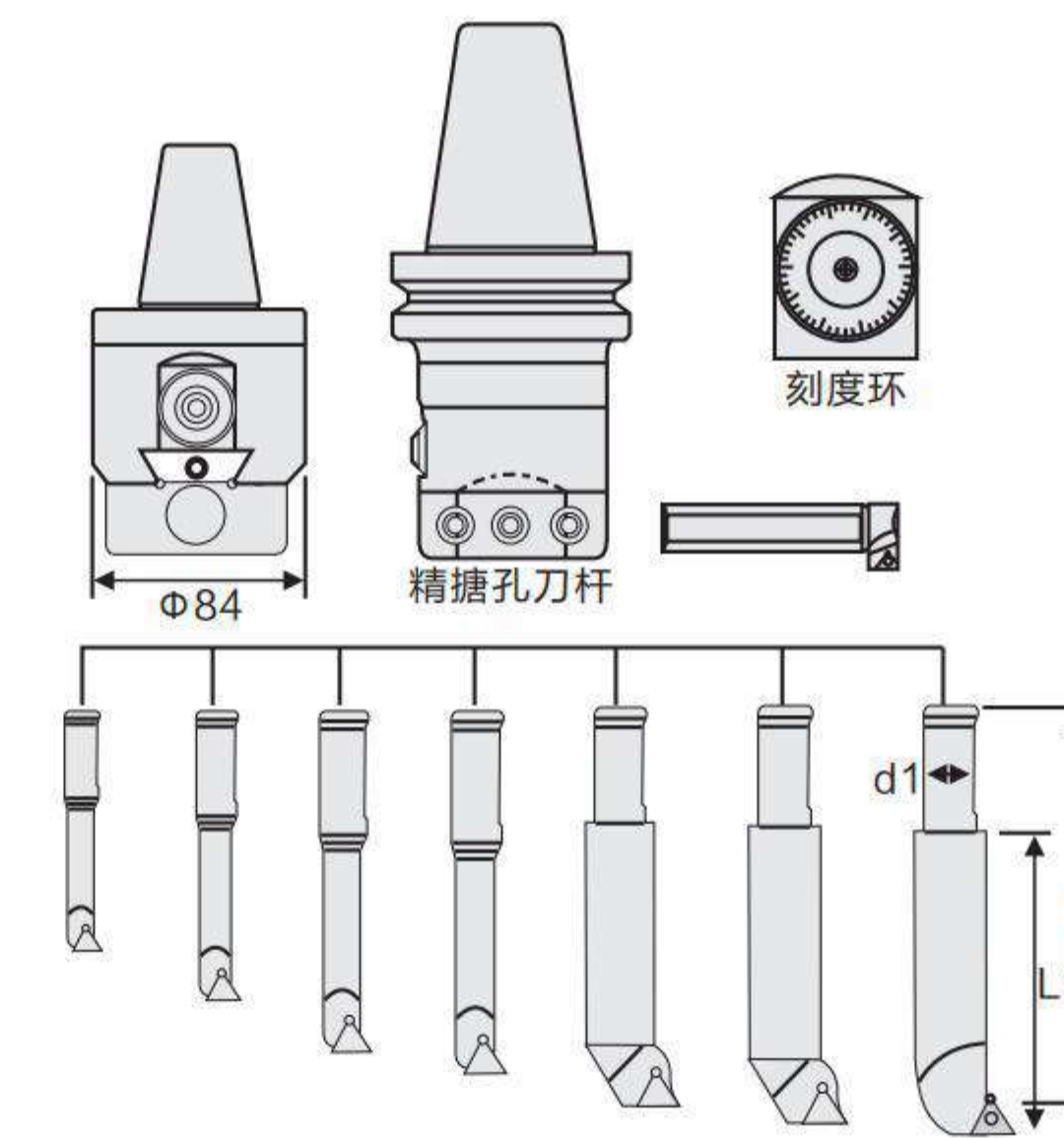
**BORING TOOL SYSTEM 孔加工刀具**





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NBH2084 MICRO BORING TOOL SYSTEM  
NBH2084 微調精鏜孔系統 (套裝)

型號 Specification	鏜孔範圍 Boring Range	調整精度 Turning precision	調整行程 Stroke	重量 Weight(KG)
NBH2084	φ8~φ280	φ0.01mm/格	28.0mm	3.0

型號 Specification	鏜孔範圍 Boring Range	d1	L1	L	適用刀片 Applicable inserts	螺釘 Clamp screw	扳手 spanner	重量 Weight(KG)
<b>SBJ</b> -2008-32	8~11	20	32	80	TBGT0601..L	M2.0×5	T6	0.095
-2010-40	10~13	20	40	87	TBGT0601..L	M2.0×5	T6	0.095
-2012-53	12~17	20	53	98	TPGH0902..L	M2.5×6	T8	0.12
-2016-68	16~21	20	68	110	TPGH0902..L	M2.5×6	T8	0.16
-2020-83	20~130	20	83	123	TPGH1103..L	M3.0×7	T8	0.22
-2025-96	25~135	20	96	137	TPGH1103..L	M3.0×7	T8	0.34
-2030-115	30~140	20	115	152	TPGH1103..L	M3.0×7	T8	0.54
-2020-L	120~280	20	84+BTL1	100	TPGH1103..L	M3.0×7	T8	0.23

標準搪杆孔有效深度為4倍徑，孔徑20以上，加長6倍徑搪杆備有現貨，SKD61材質。

### 特點/Feature

- 1、可調節精密鏜頭，鏜孔範圍8-280mm，每一刻度調整尺寸為0.01mm。
  - 2、配備8支鏜刀杆，方便選擇不同的鏜孔範圍。
  - 3、鏜孔穩定。
- 1、 Precision adjustable boring head with boring range 8-280mm, 0.01mm for each changing dimension.
- 2、 8 piece boring bar for free selection of different boring range.
- 3、 Stable boring.



NBH2084 微調精鏜孔系統(套裝)

型號 Specification	鏜孔範圍 Boring Range	主軸柄規格 Spindle model	鏜頭型號 Head Spec	鏜刀杆 Boring bar	重量 Weight(KG)	
<b>BT40</b>	NBH2084-8P	08~280	BT40-NBH-50	NBH2084	SBJ-20..	9.5
<b>BT50</b>	NBH2084-8P	08~280	BT50-NBH-55	NBH2084	SBJ-20..	12.0
<b>NT40</b>	NBH2084-8P	08~280	NT40-NBH-50	NBH2084	SBJ-20..	9.3
<b>NT50</b>	NBH2084-8P	08~280	NT50-NBH-55	NBH2084	SBJ-20..	10.8
<b>SK40</b>	NBH2084-8P	08~280	SK40-NBH-50	NBH2084	SBJ-20..	9.5
<b>SK50</b>	NBH2084-8P	08~280	SK50-NBH-55	NBH2084	SBJ-20..	12.0
<b>R8</b>	NBH2084-8P	08~280	R8-NBH-50	NBH2084	SBJ-20..	10.0



**BORING TOOL SYSTEM 孔加工刀具**

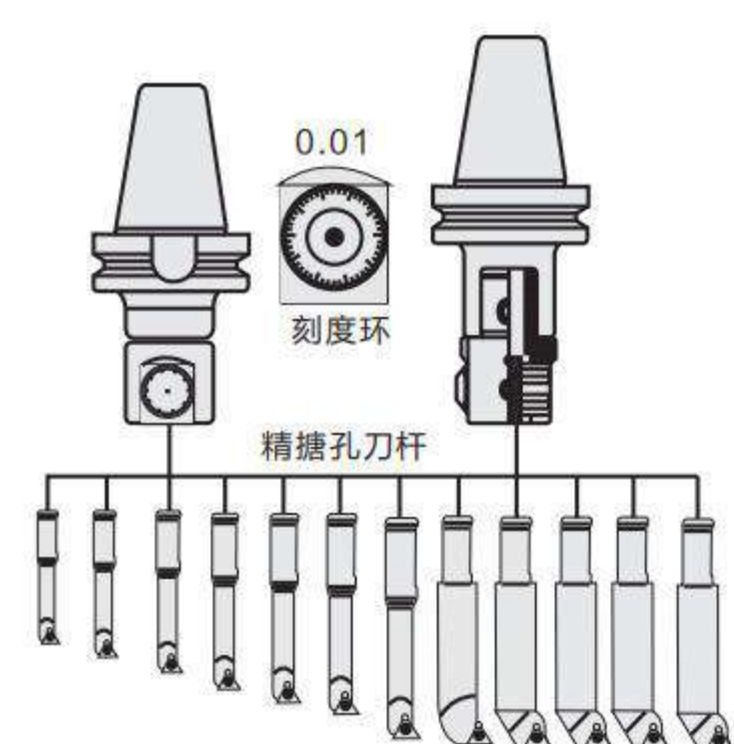


**NBJ16 MICRO BORING TOOL SYSTEM  
NBJ16 微調精鏜孔系統 (套裝)**

型號 Specification	鏜孔範圍 Boring Range	調整精度 Turning precision	調整行程 Stroke	重量 Weight(KG)
SBJ16	Φ6~Φ51	Φ0.01mm/格	6.0mm	1.2

型號 Specification	鏜孔範圍 Boring Range	d1	L1	L	適用刀片 Applicable inserts	螺絲 Clamp screw	扳手 spanner	重量 Weight(KG)	
<b>SBJ</b>	-1606-24 *	6~9	16	24	73	WBGT0601..L	M2.0×4	T6	0.014
	-1608-32	8~11	16	32	80	TBGT0601..L	M2.0×5	T6	0.077
	-1610-40	10~13	16	40	87	TPGH0601..L	M2.0×5	T6	0.082
	-1612-53	12~15	16	53	98	TPGH0902..L	M2.5×6	T8	0.095
	-1614-60 *	14~17	16	60	103	TPGH0902..L	M2.5×6	T8	0.101
	-1616-68	16~21	16	68	110	TPGH0902..L	M2.5×6	T8	0.143
	-1620-83	20~26	16	83	125	TPGH1103..L	M3.0×7	T8	0.203
	-1625-90	25~31	16	90	128	TPGH1103..L	M3.0×7	T8	0.275
	-1630-90	30~36	16	90	128	TPGH1103..L	M3.0×7	T8	0.275
	-1635-90 *	35~41	16	90	128	TPGH1103..L	M3.0×7	T8	0.280
	-1640-90	40~46	16	90	128	TPGH1103..L	M3.0×7	T8	0.280
	-1645-90 *	45~51	16	90	128	TPGH1103..L	M3.0×7	T8	0.211

注：帶有星號規格的鏜杆不在8支杆套裝的範圍內。



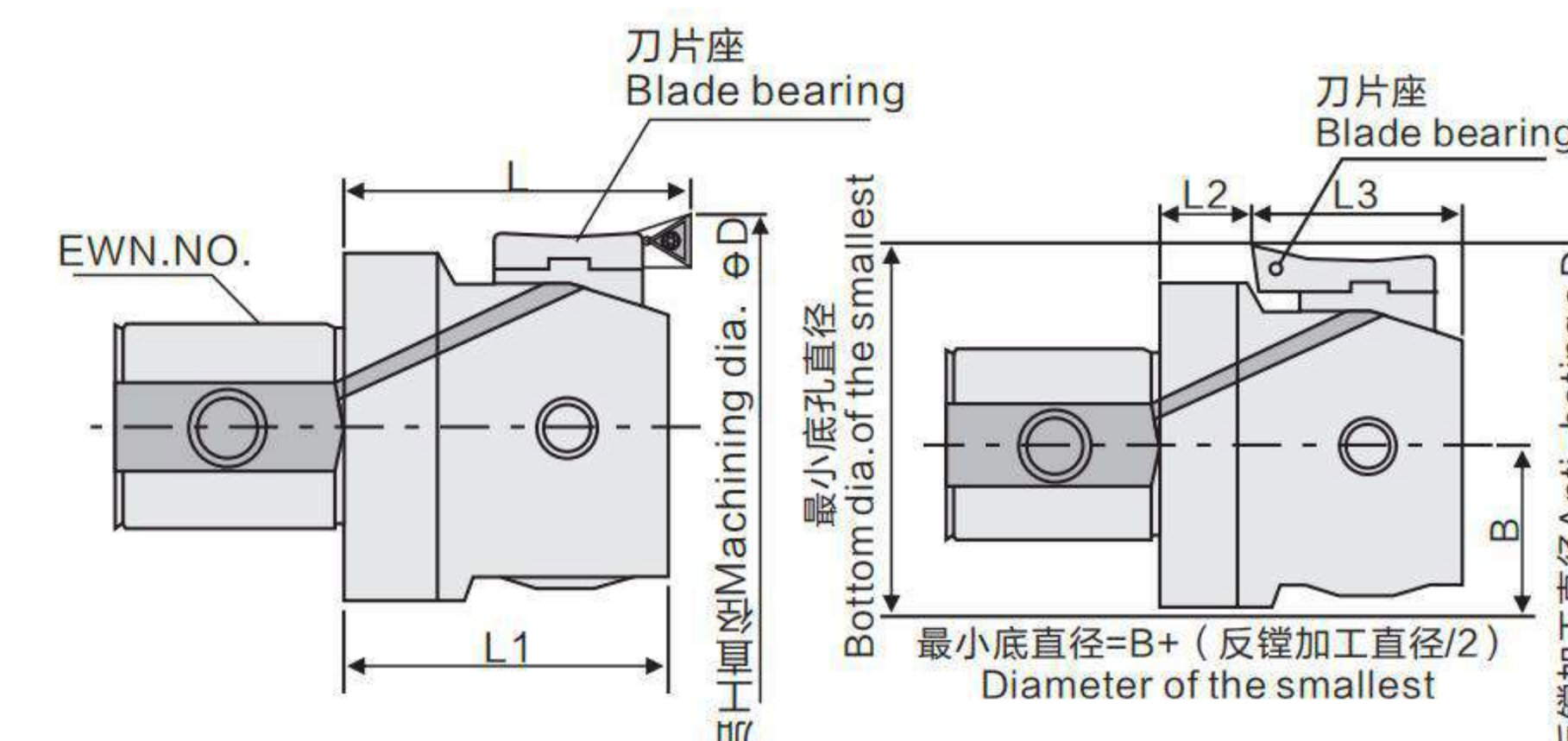
**NBJ16 MICRO BORING TOOL SYSTEM  
NBJ16 微調精鏜孔系統 (套裝)**

型號 Specification	鏜孔範圍 Boring Range	主軸柄規格 Spindle handle models	鏜頭型號 Head NO	鏜刀杆 Bar keep out	重量 Weight(KG)	
<b>BT40</b>	NBJ16-12P	6~51	BT40-CK6-55	NBJ16	SBJ-16..	9.1
<b>BT50</b>	NBJ16-12P	6~51	BT50-CK6-65	NBJ16	SBJ-16..	11.7
<b>NT40</b>	NBJ16-12P	6~51	NT40-CK6-55	NBJ16	SBJ-16..	8.5
<b>NT50</b>	NBJ16-12P	6~51	NT50-CK6-65	NBJ16	SBJ-16..	10.3
<b>SK40</b>	NBJ16-12P	6~51	SK40-CK6-55	NBJ16	SBJ-16..	8.9
<b>SK50</b>	NBJ16-12P	6~51	SK50-CK6-65	NBJ16	SBJ-16..	10.5

**特點/Feature**

1. 可調節精密鏜頭，鏜孔範圍6-51mm，每一刻度調整尺寸為0.01mm。
2. 配備8支鏜刀杆，方便選擇不同的鏜孔範圍。
3. 鏜孔穩定。

**BORING TOOL SYSTEM 孔加工刀具**



**EWN MICRO BORING HEAD  
EWN 微調精密鏜頭**

型號 Specification	正鏜Boring L1	反鏜Counter boring L	範圍Range	B	L2	L3	範圍Range	組合刀片 Modular holder	刀片座 Blade bearing	刀片 Insert	螺絲 Screw	扳手 Wrench	重量 Weight	
<b>CK</b>	EWN20-36	29.5	32.5	20-26 25-31 30-36	10	10.5	19	- 30-36	CK1 LBK1	ENH1-1 ENH1-2 ENH1-3	TPGH 080202	M2.2	T8	0.07
	EWN25-47	32.5	35.5	25-33 32-40 39-47	12.5	11.5	21	- 36-40 39-47	CK2 LBK2	ENH2-1 ENH2-2 ENH2-3	TPGH 080202	M2.2	T8	0.12
	EWN32-60	35	40	32-42 41-51 50-60	16	10	25	- 46-51 50-60	CK3 LBK3	ENH3-1 ENH3-2 ENH3-3	TPGH 080202	M2.2	T8	0.21
	EWN41-74	43	47	41-54 50-63 61-74	20	14	29	- 53-63 61-74	CK4 LBK4	ENH4-1 ENH4-2 ENH4-3	TCMT 110204	M2.5	T8	0.40
	EWN53-95	53	57	53-70 65-82 78-95	25.5	19	34	53-70 65-82 78-95	CK5 LBK5	ENH5-1 ENH5-2 ENH5-3	TCMT 110204	M2.5	T8	1.10
	EWN68-150	67.2	71	68-100 94-126 118-150	32.5	22	45.2	80-100 94-126 118-150	CK6 LBK6	ENH6-1 ENH6-2 ENH6-3	TCMT 110204	M2.5	T8	1.47
	EWN100-203	67.2	71	100-153 126-179 150-203	45.5	22	45.2	112-153 126-179 150-203	CK6 LBK6	ENH6-1 ENH6-2 ENH6-3	TCMT 110204	M2.5	T8	2.46

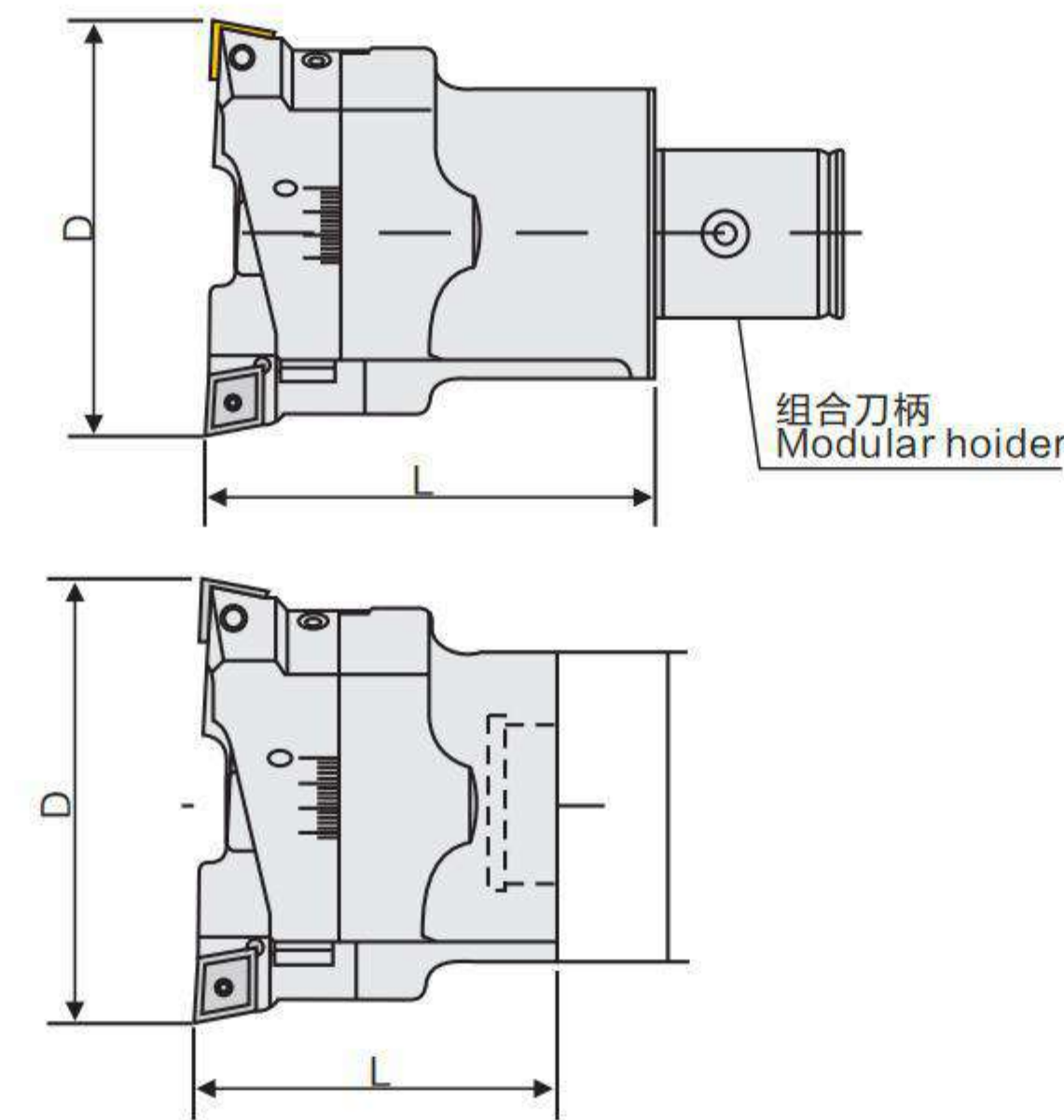
型號 Specification	形狀圖 Drawing of shape	對應鏜頭 Boring head	型號 Specification	形狀圖 Drawing of shape	對應鏜頭 Boring head	型號 Specification	形狀圖 Drawing of shape	對應鏜頭 Boring head
<b>EWN</b>	1-1 1-2 1-3	SCK1- EWN20-36	4-1 4-2 4-3		SCK4- EWN41-74	4-1 4-2 4-3		SCK4- EWN41-74
	2-1 2-2 2-3	SCK2- EWN25-47	5-1 5-2 5-3		SCK5- EWN53-95	5-1 5-2 5-3		SCK5- EWN53-95
	3-1 3-2 3-3	SCK3- EWN32-60	6-1 6-2 6-3		SCK6- EWN68-150 SCK6- EWN100-203	6-1 6-2 6-3		SCK6- EWN68-150 SCK6- EWN100-203

**特點/Feature**

1. 用于精鏜孔，鏜孔範圍20-203mm，每一刻度調整尺寸為0.01mm。
2. 中心內冷，加工中刀尖直接冷卻，刀片壽命長。
3. 動平衡結構，鏜孔精密穩定。



**BORING TOOL SYSTEM 孔加工刀具**



RBH ADJUSTABLE ROUGH BORING HEAD

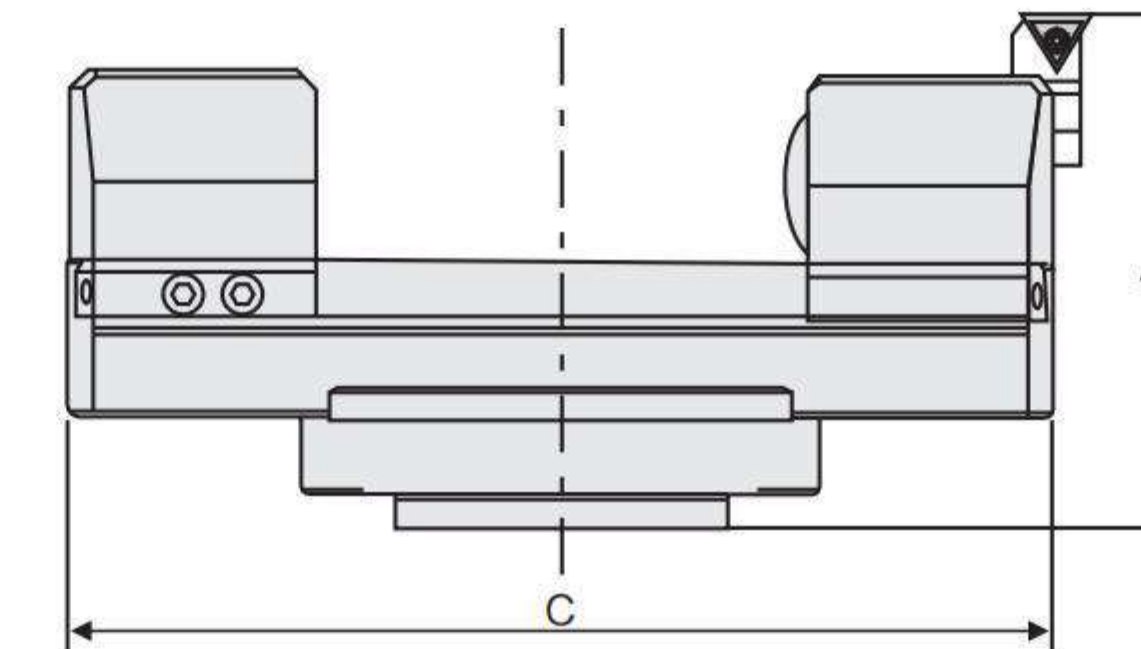
**RBH 可調式雙韌粗鏜頭**

	型號 Specification	圖示 Figure	外形尺寸 (mm) Size C L		鏜孔範圍 Boring range D	組合刀柄 Modular holder	刀片型號 Insert	螺絲 Screw	扳手 Wrench	重量 Weight
<b>LBK</b>	RBH19-25-C	A	19	40	19-25	LBK1	CCMT0602	M2.5	T8	0.10
	RBH25-33-C	A	24	45	25-33	LBK2	CCMT0602	M2.5	T8	0.15
	RBH32-42-C	A	31	55	32-42	LBK3	CCMT0602	M2.5	T8	0.30
	RBH40-55-C	A	39	65	40-55	LBK4	CCMT09T3	M4	T15	0.50
	RBH52-70-C	A	50	75	52-70	LBK5	CCMT09T3	M4	T15	1.00
	RBH68-92-C	A	64	85	68-92	LBK6	CCMT1204	M5	T20	2.00
<b>BST</b>	RBH90-122-C	A	64	100	90-122	LBK6	CCMT1204	M5	T20	2.90
	RBH120-164-C	B	95	95	120-164	BST	CCMT1204	M5	T20	3.80
	RBH160-204-C	B	95	95	160-204	BST	CCMT1204	M5	T20	4.80

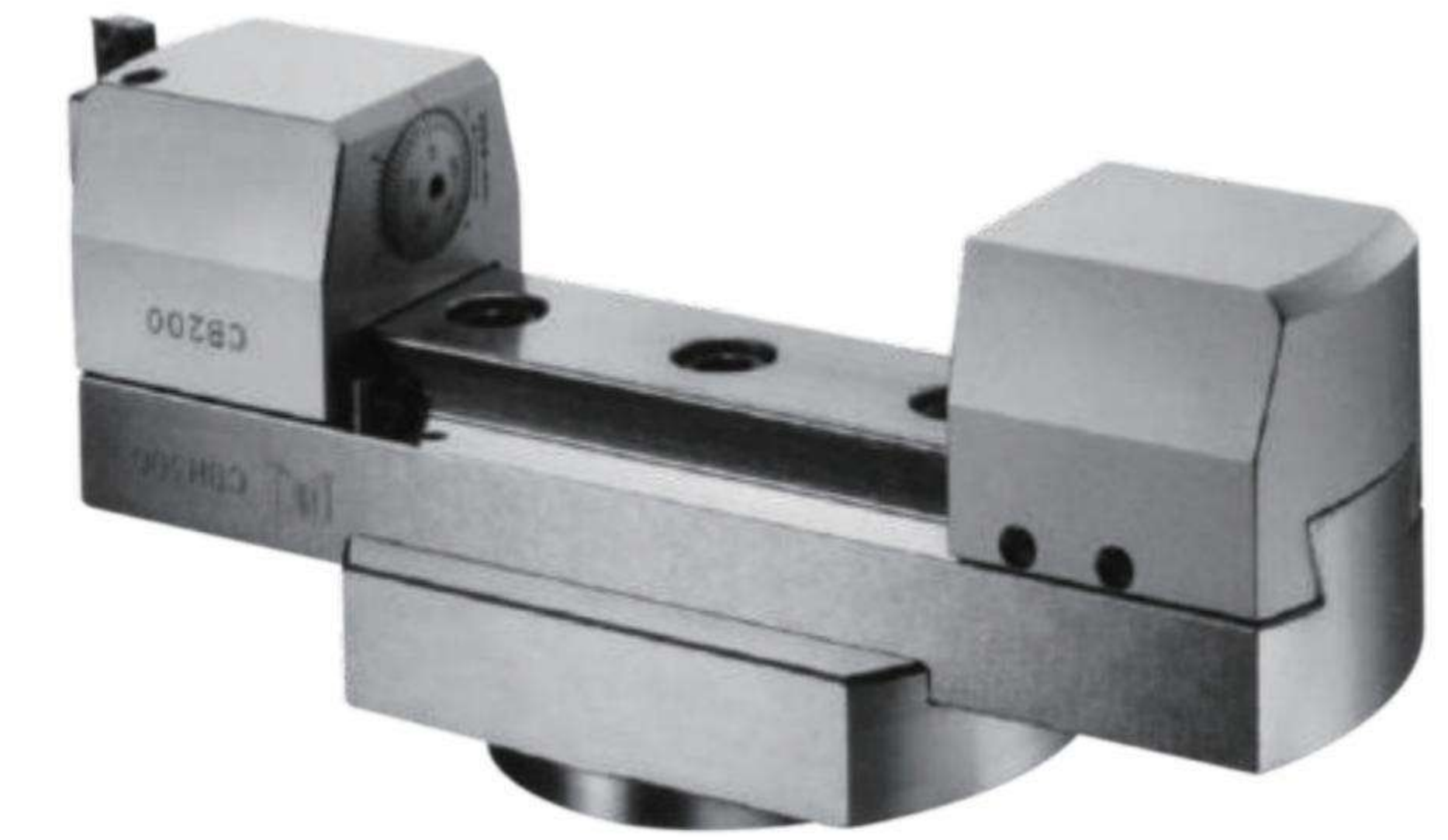
**特點/Feature**

- 1、可調節粗鏜頭，鏜孔範圍19-204mm。
- 2、結構簡單，剛性強，適用於各種鏜孔作業。
- 1、Adjustable rough boring head with boring range 19-204mm.
- 2、Simple modular structure, high boring rigidity for universal boring process.

**BORING TOOL SYSTEM 孔加工刀具**



鏜孔範圍200-910mm組合系列



MODULAR BORING CUTTER

**CBH 大徑微調精密鏜頭**

	型號 Specification	外形尺寸 (mm) Size C L		鏜孔範圍 Boring range	組合刀柄 Modular holder	刀片型號 Insert	螺絲 Screw	扳手 Wrench	重量 Total weight
<b>BST</b>	CBH200310	180	130	200-310	BST	TPGH090204 TCMT110204	M2.5	T8	9.7
	CBH300410	280	130	300-410	BST				11.7
	CBH400510	380	130	400-510	BST				13.7
	CBH500610	480	130	500-610	BST				15.7
	CBH600710	580	130	600-710	BST				17.7
	CBH700810	680	130	700-810	BST				19.7
	CBH800910	780	130	800-910	BST				21.7

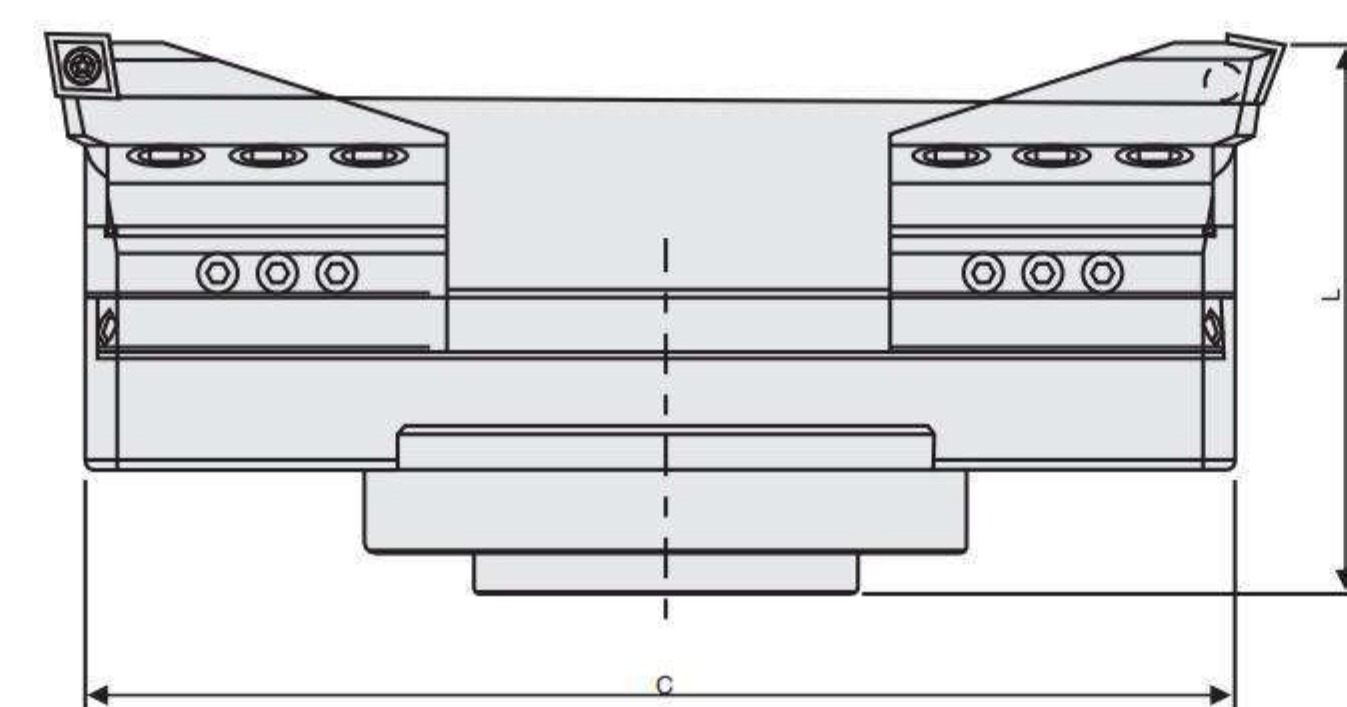
型號 Specification	組合形式 Module	刀片型號 Insert	重量 Total weight
BT50-BST系列Series	組合刀柄 Module holder		
BST-FI200	連接盤 Flange		2.7
DST200 DST300 DST400 DST500 DST600 DST700 DST800	橫向滑板 Extension Slide		3.4 5.4 7.4 9.4 11.4 13.4 15.4
DBN300	平衡滑塊 Balance Weight		1.6
CB200	微調滑塊 Finsert Head		1.6

適用刀片 Suit insert

TPGH080202/M2.2/T7, TPGH090204/M2.5/T8, TCMT110204/M2.5/T8, TPGH110304M/3/T15



## BORING TOOL SYSTEM 孔加工刀具



MODULAR BORING CUTTER

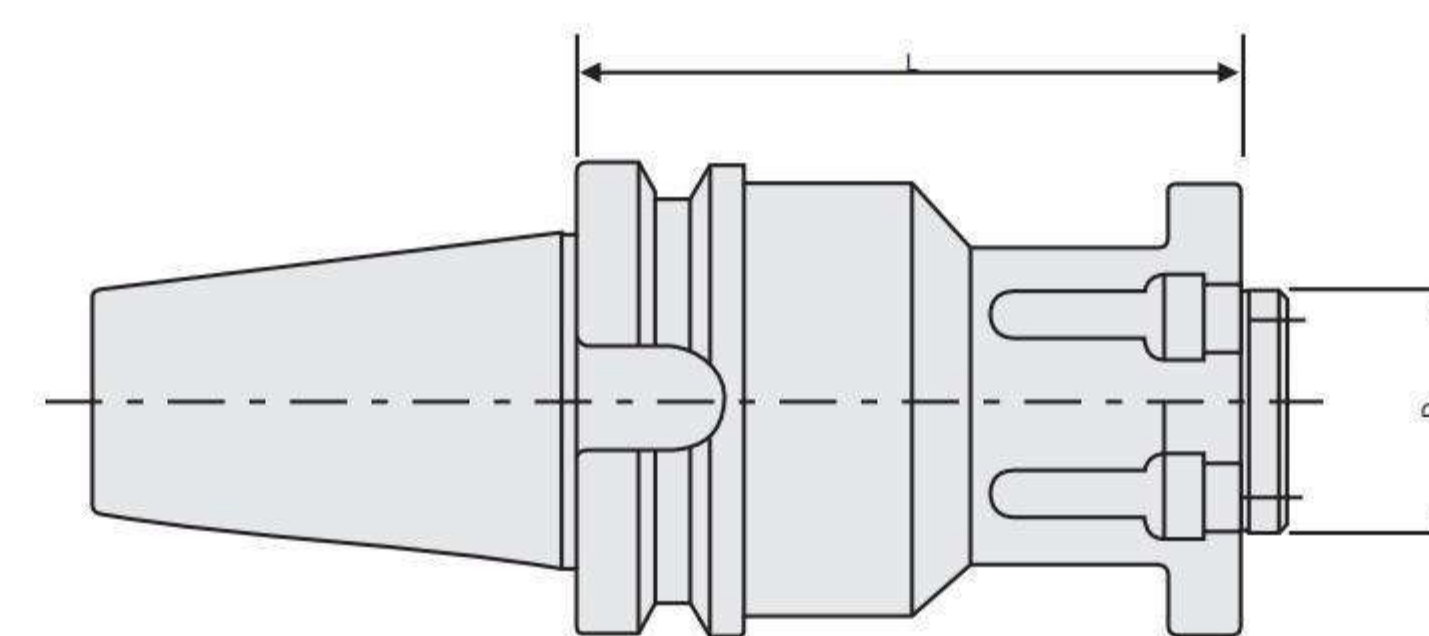
### RBH 可調試大徑雙刃粗鏜頭

鏜孔範圍Φ200-Φ900mm組合系列

型號 Specification	外形尺寸 (mm) Size		鏜孔範圍 Boring range	組合刀柄 Modular holder	刀片型號 Insert	螺絲 Screw	扳手 Wrench	整組重量 Total weight
	C	L						
RBH200310	180	130	200-310	BST	(選配刀片座) DB200-C12 DB200-T16 DB200-T22 DB200-S12	M5	T20	9.7
RBH300410	280	130	300-410	BST		M5	T20	11.7
RBH400510	380	130	400-510	BST		M5	T20	13.7
RBH500610	480	130	500-610	BST		M5	T20	15.7
RBH600710	580	130	600-710	BST		M5	T20	17.7
RBH700810	680	130	700-810	BST		M5	T20	19.7
RBH800910	780	130	800-910	BST		M5	T20	21.7

型號 Specification	組合形式 Module	刀片型號 Insert	重量 Total weight
BT50-BST系列Series	組合刀柄 Module holder		
BST-BR200	連接盤 Flange		2.7
RST200 RST300 RST400 RST500 RST600 RST700 RST800	橫向滑板 Extension Slide		3.4 5.4 7.4 9.4 11.4 13.4 15.4
RS200	滑塊 Clamp Base		0.98
RS201	刀片座墊片 Height Setting Shim		0.05
RB200-C12 RB200-T16 RB200-T22 RB200-S12	刀片座及適用刀片 Insert Setting and applicable insert		0.68

## BORING TOOL SYSTEM 孔加工刀具



### BST 鏜頭刀頭

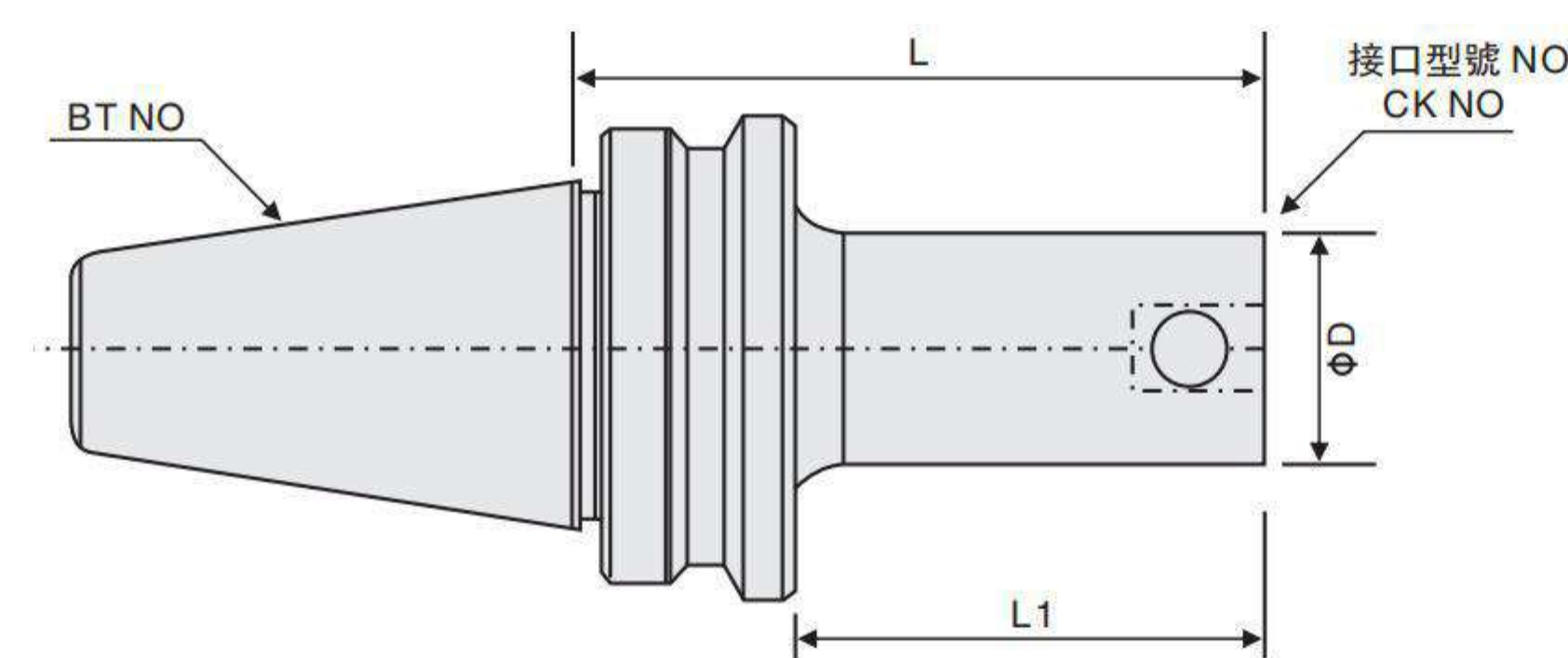
型號 Specification	外形尺寸 (mm) Size		重量 Weight
	D	L	
BT40	50	70	3.2
BST-100	50	100	4.0
BT50	50	100	5.10
BST-150	50	150	6.8
BST-200	50	200	9.6
BST-250	50	250	11.5
BST-300	50	300	14.4
BST-350	50	350	16.8
BST-400	50	400	19.3

BST粗精鏜孔刀頭基礎柄系列 (鏜孔範圍>200)



**BORING TOOL SYSTEM 孔加工刀具**

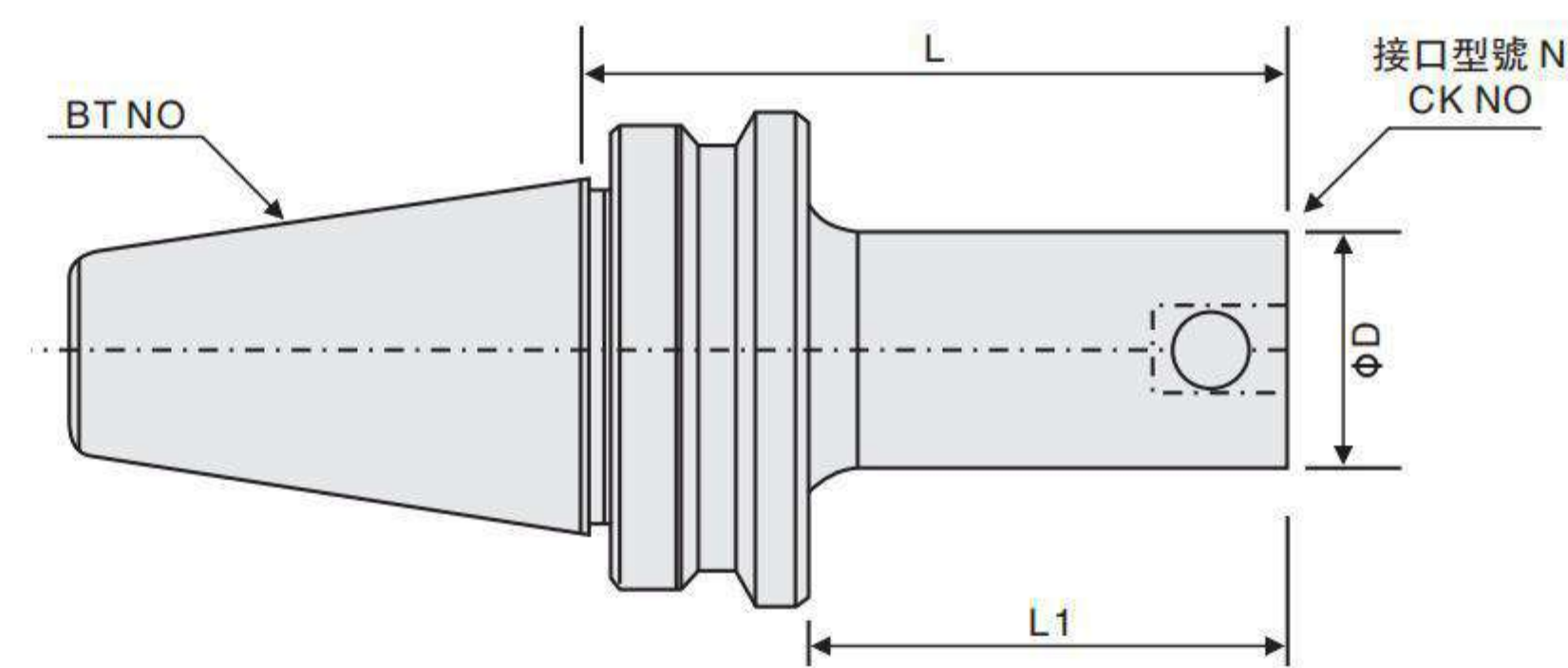
**BORING TOOL SYSTEM 孔加工刀具**



MODULAR BORING CUTTER

**BT CK型主軸柄**

	型號		尺寸 Size			螺釘	Fig.	重量
	Specification	接口型号	L	L1	D			
<b>BT30</b>	CK1-70	CK1	70	45	19	CKM1	1	0.47
	CK2-80	CK2	80	55	24	CKM2	1	0.48
	CK3-80	CK3	80	55	31	CKM3	1	0.48
	CK4-60	CK4	60	36	39	CKM4	1	0.56
	CK5-60	CK5	60	38	49	CKM5	1	0.67
<b>BT40</b>	CK1-75	CK1	75	45	19	CKM1	1	1.06
	CK1-115	CK1	115	85	19	CKM1	1	1.09
	CK2-85	CK2	85	55	24	CKM2	1	1.07
	CK2-120	CK2	120	90	24	CKM2	1	1.15
	CK3-95	CK3	95	65	31	CKM3	1	1.24
	CK3-145	CK3	145	115	31	CKM3	1	1.41
	CK4-85	CK4	85	50	39	CKM4	1	1.15
	CK4-135	CK4	135	105	39	CKM4	1	2.03
	CK5-105	CK5	105	75	49	CKM5	1	1.78
	CK5-165	CK5	165	135	49	CKM5	1	3.30
<b>BT50</b>	CK6-65	CK6	65	35	62	CKM6	1	1.37
	CK6-115	CK6	115	85	62	CKM6	1	2.16
	CK6-165	CK6	165	135	62	CKM6	1	2.91
	CK7-90	CK7	90	63	83	CKM7	1	2.66
	CK1-115	CK1	115	40	19	CKM1	1	3.76
	CK1-145	CK1	145	70	19	CKM1	1	3.88
	CK2-110	CK2	110	80	24	CKM2	1	3.81
	CK2-140	CK2	140	110	24	CKM2	1	4.05
	CK3-135	CK3	135	90	31	CKM3	1	3.86
	CK3-175	CK3	175	130	31	CKM3	1	4.14
	CK4-125	CK4	125	85	39	CKM4	1	4.05
	CK4-185	CK4	185	145	39	CKM4	1	4.57
	CK5-140	CK5	140	100	49	CKM5	1	4.16
	CK5-210	CK5	210	170	49	CKM5	1	5.60
	CK6-95	CK6	95	55	62	CKM6	1	4.45
	CK6-170	CK6	150	110	62	CKM6	1	5.69
	CK6-230	CK6	230	190	62	CKM6	1	6.11
	CK7-105	CK7	105	65	83	CKM7	1	5.34
	CK7-185	CK7	185	145	83	CKM7	1	8.89
	CK7-250	CK7	250	210	83	CKM7	1	10.25



BT LBK BORING TOOL HOLDER

**BT LBK鏜刀柄**

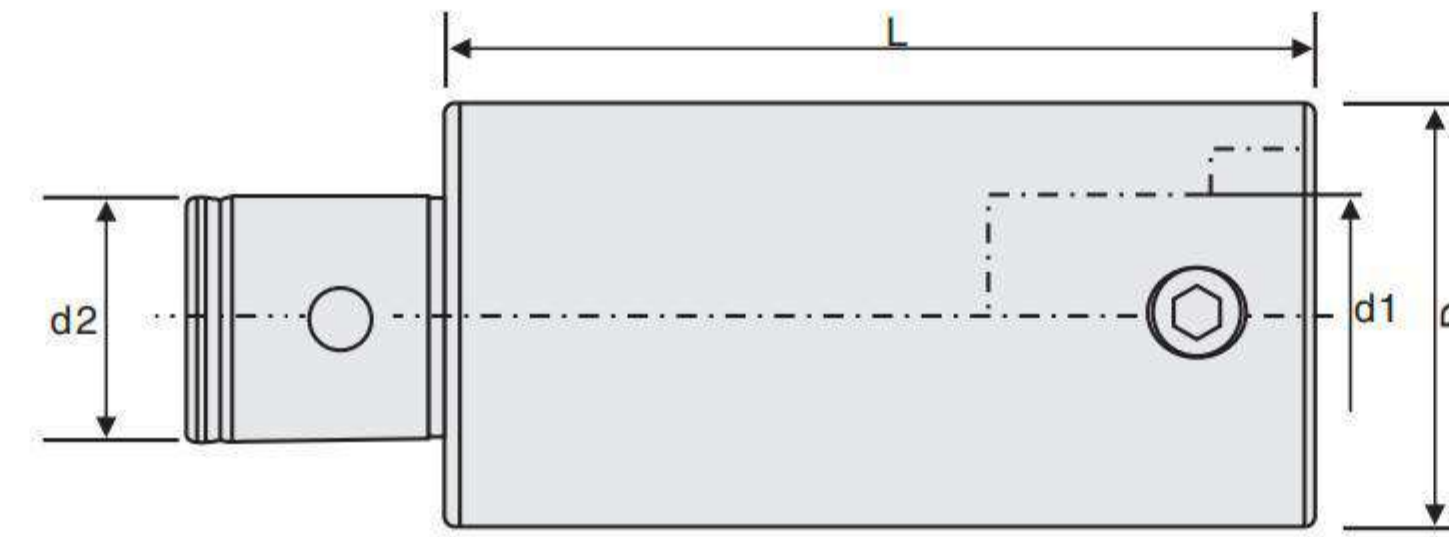
	型號		尺寸 Size			Fig.	重量
	Specification	接口型号	L	L1	D		
<b>BT30</b>	LBK1-70	LBK1	70	40	19	1	0.6
	LBK2-80	LBK2	80	50	24	1	0.8
	LBK3-80	LBK3	80	50	31	1	1.0
	LBK4-70	LBK4	70	40	39	1	1.3
	LBK5-60	LBK5	60	30	50	1	1.8
	LBK6-60	LBK6	60	30	64	1	3.0
<b>BT40</b>	LBK1-75	LBK1	75	40	19	1	1.1
	LBK1-105	LBK1	105	70	19	1	1.3
	LBK2-85	LBK2	85	50	24	1	1.3
	LBK2-115	LBK2	115	80	24	1	1.6
	LBK3-95	LBK3	95	60	31	1	1.5
	LBK3-125	LBK3	125	90	31	1	1.8
	LBK3-155	LBK3	155	120	39	1	2.0
	LBK4-85	LBK4	85	50	39	1	1.8
	LBK4-130	LBK3	130	65	49	1	2.4
	LBK4-175	LBK3	175	140	49	1	2.7
<b>BT50</b>	LBK5-75	LBK5	75	40	62	1	2.3
	LBK5-125	LBK5	125	90	62	1	3.3
	LBK5-175	LBK5	175	140	62	1	4.0
	LBK6-65	LBK6	65	30	83	1	3.3
	LBK6-115	LBK6	115	90	19	1	4.7
	LBK6-165	LBK6	165	130	19	1	5.9
	LBK1-115	LBK1	115	65	24	1	4.2
	LBK1-145	LBK1	145	95	24	1	5.6
	LBK2-110	LBK2	110	70	31	1	6.8
	LBK2-140	LBK2	140	90	31	1	5.5
	LBK3-125	LBK3	125	95	39	1	6.9
	LBK3-155	LBK3	155	105	39	1	8.1
	LBK4-115	LBK4	115	65	49	1	4.1
	LBK4-145	LBK4	145	95	49	1	4.2
	LBK4-175	LBK4	175	125	62	1	4.1
	LBK4-205	LBK4	205	155	62	1	4.2
	LBK5-105	LBK5	105	55	62	1	4.4
	LBK5-180	LBK5	180	130	83	1	4.5
	LBK5-240	LBK5	140	90	83	1	4.8
	LBK6-95	LBK6	95	45	83	1	4.9
	LBK6-170	LBK6	170	145	83	1	5.3
	LBK6-230	LBK6	230	210	83	1	5.4
	LBK6-290	LBK6	290	145	83	1	5.5
	LBK6-350	LBK6	350	210	83	1	6.5

**特點/Feature**

- 1、刀柄本體精密加工，確保穩定跳動。2、刀柄與鏜頭有貼合的接觸面，穩定的震動精度，提高加工表面精度。
- 1、Tool body is finish machined for stable run-out accuracy.
- 2、Covering interface between tool holder and boring head, precision vibration enhances machining surface roughness.



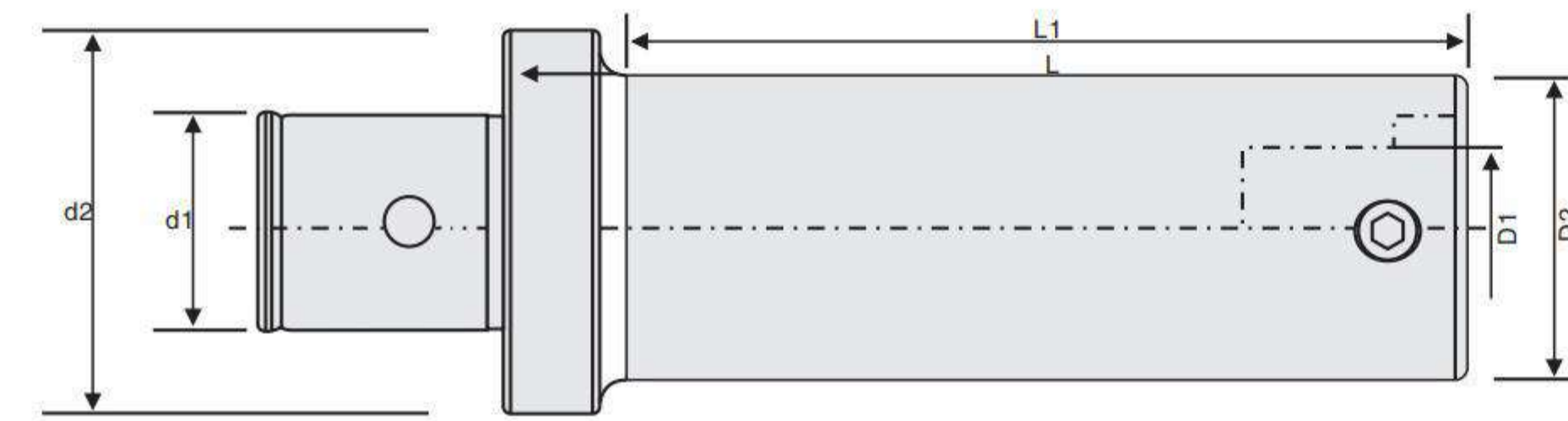
**BORING TOOL SYSTEM 孔加工刀具**



MODULAR BORING CUTTER

**CK 等徑延長接柄**

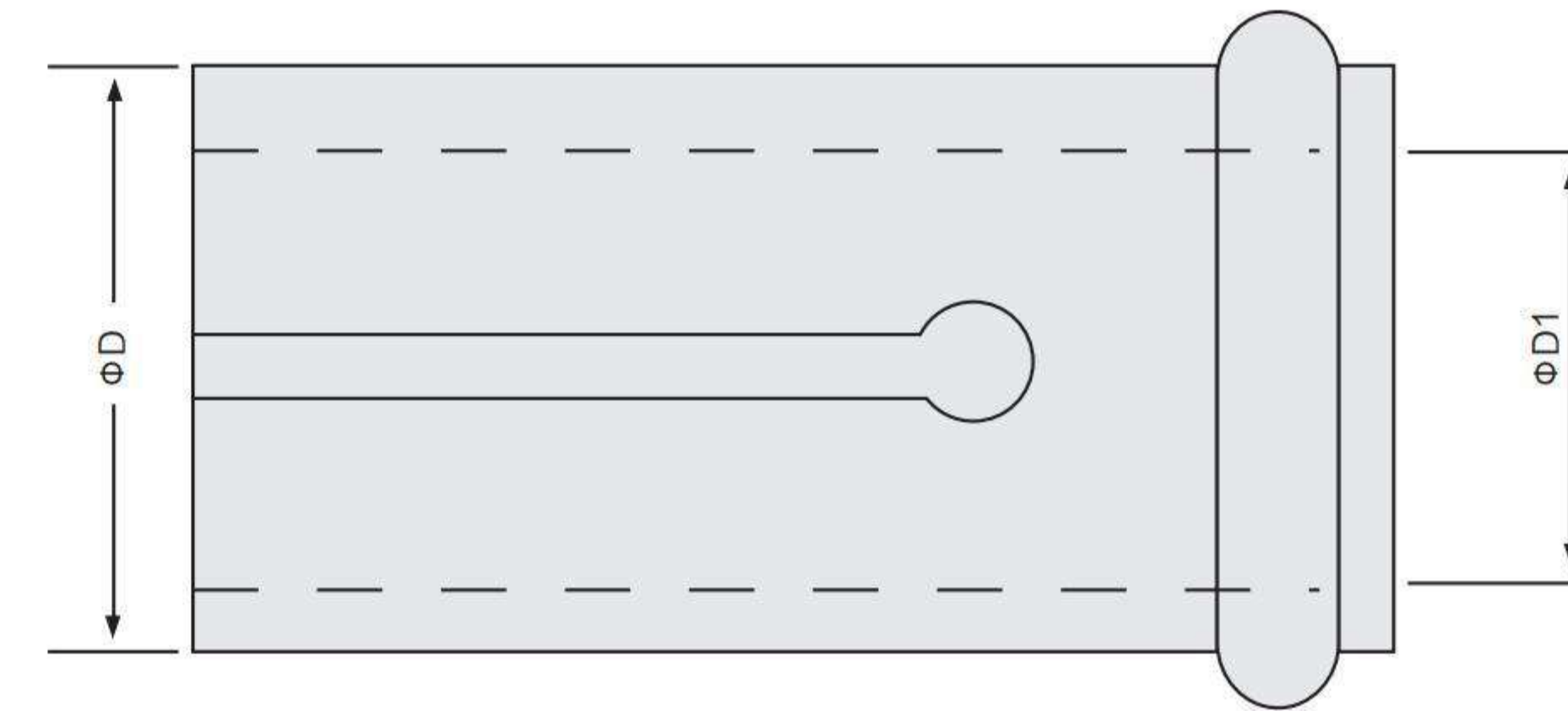
	型號 Specification	尺寸 Size				重量 Weight
		D	d1	d2	L	
<b>CK1</b>	1-30	19	11	11	30	0.07
<b>CK2</b>	2-30	24	14	14	30	0.1
<b>CK3</b>	3-30	31	18	18	30	0.15
<b>CK4</b>	4-45	39	22	22	45	0.4
	4-60	39	22	22	60	0.4
<b>CK5</b>	5-60	49	28	28	60	0.8
	5-90	49	28	28	90	1.1
<b>CK6</b>	6-60	62	36	36	60	1.4
	6-100	62	36	36	100	1.8
<b>CK7</b>	7-100	83	42	42	100	3.1



**CK 異徑延長接柄**

	型號 Specification	尺寸 Size						重量 Weight
		D1	D2	d1	d2	L1	L	
<b>CK2</b>	1-36	11	19	14	-	30	36	0.1
<b>CK3</b>	2-37	14	24	18	31	25	37	0.15
<b>CK4</b>	3-50	18	31	22	39	37	50	0.35
<b>CK5</b>	4-67	22	39	28	49	50	67	0.7
<b>CK6</b>	4-51	22	39	36	62	35	51	0.85
	4-101	22	39	36	62	85	101	1.3
	5-41	28	50	36	62	25	41	0.85
	5-91	28	50	36	62	75	91	1.45

**BORING TOOL SYSTEM 孔加工刀具**



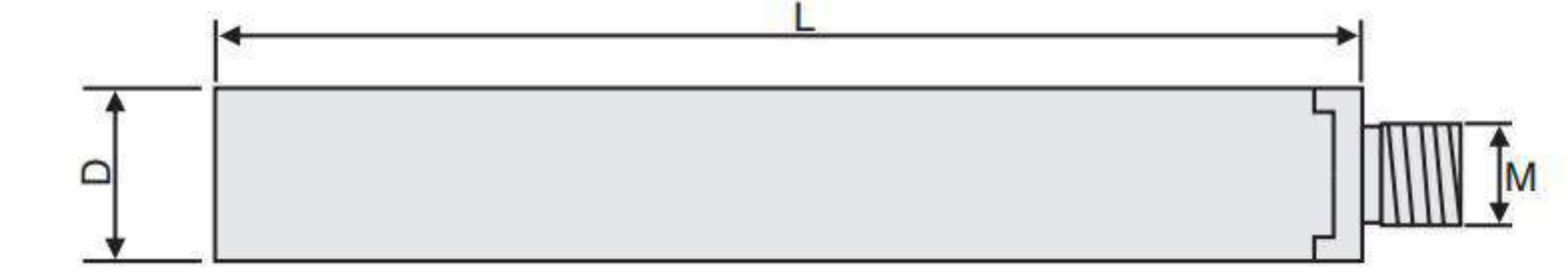
SIMPLE TYPE BORING

**變徑套筒**

型號 Specification	外徑D2 (mm)	內徑D1 (mm)	適用鎢鋼刀杆 Applicable Carbide Tool Holder	
			<b>NBJ16</b>	160548
	160648	16	6	ST06
	160848	16	8	ST08

型號 Specification	外徑D2 (mm)	內徑D1 (mm)	適用鎢鋼刀杆 Applicable Carbide Tool Holder	
			<b>NBH2084</b>	200547
	200647	20	6	ST06
	200847	20	8	ST08

其他內徑規格可定制。



型號 Specification	全長L (mm)	柄徑D (mm)	接合牙M (mm)	適用搪孔頭 Applicable Carbide Tool Holder				適用套筒 Applicable Bushing
				<b>ST08</b>	W5-100L	100	08	M5
<b>ST010</b>	W6-140L	140	10	M6	BE12A		C2010.C1610	
<b>ST012</b>	W6-156L	156	12	M6	BE14A.BE16A		C2012.C1612	
<b>ST016</b>	W10-186L	186	16	M10	BE16A		C2016	
					BE18A BE20A BE22A BE24A BE26A BE28A BE30A			

其他內徑規格可定制。

**一體式小徑焊接鎢鋼搪杆**

型號 Specification	柄徑D (mm)	適用套筒 Applicable Bushing		
		<b>C0590</b>	WB0608-8D	90
<b>C0698</b>	TB7510-8D	98	6	NBJ16-160648 NBH2084-200647
<b>C08115</b>	TB0912-8D	115	8	NBJ16-160848 NBH2084-200847

其他內徑規格可定制。

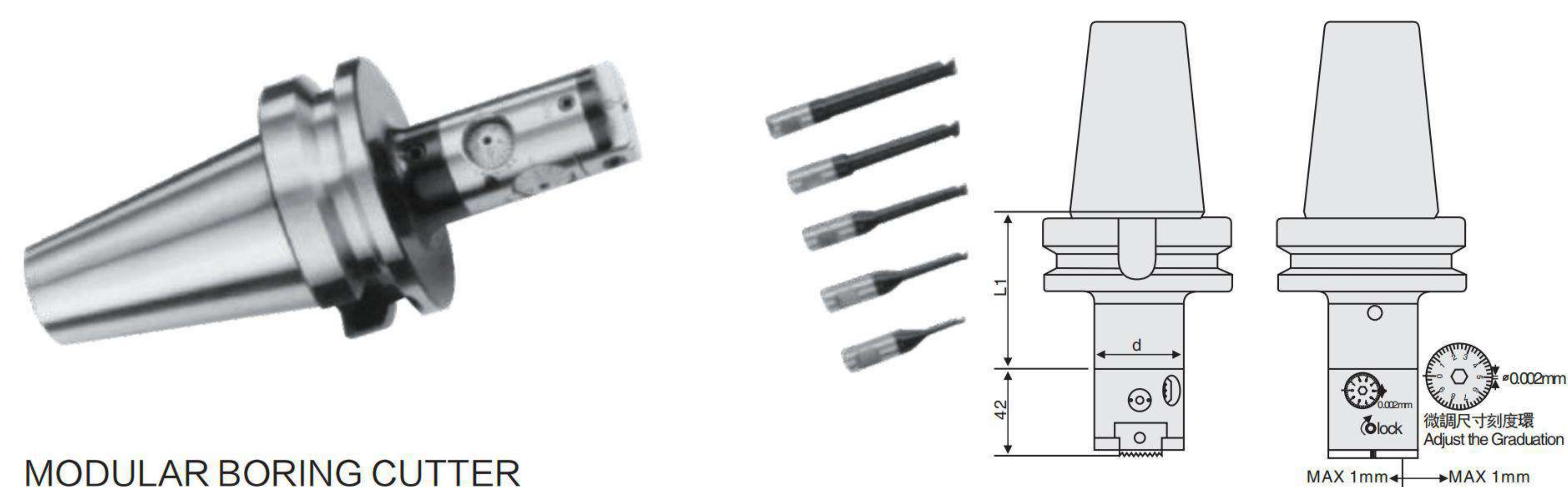
**組合式搪孔頭BE型 (搪孔範圍9~34mm)**

圖示 Figure	型號 Specification	d (mm)	H (mm)	L (mm)	M (mm)	刀片 Insert	螺絲 Clamp Screw	扳手 Wrench
<b>ST010</b>	BE10.5A	10.5	7	18	M5	TB**06**	M2.0×5×D2.85	T6
<b>ST012</b>	BE12A	12	8	23	M6	TP**08**	M2.2×5×D3.0	T7
<b>ST016</b>	BE14A	14	10	23	M6	TP**08**	M2.2×5×D3.0	T7
	BE16A	16	10	23	M6	TP**08**	M2.2×5×D3.0	T7
	BE18A	18	14	27	M10	TP**08**	M2.2×5×D3.0	T7
	BE20A	20	14	27	M10	TP**09**	M2.5×6×D3.5	T8
	BE22A	22	14	27	M10	TP**09**	M2.5×6×D3.5	T8
	BE24A	24	14	27	M10	TP**09**	M2.5×6×D3.5	T8
	BE26A	26	14	27	M10	TP**09**	M2.5×6×D3.5	T8
	BE28A	28	14	27	M10	TP**09**	M2.5×6×D3.5	T8
	BE30A	30	14	27	M10	TP**09**	M2.5×6×D3.5	T8

其他內徑規格可定制。



## BORING TOOL SYSTEM 孔加工刀具



MODULAR BORING CUTTER

### DCK2-FBH25P 極細微調精鏜孔系統

	型號 Specification	外形尺寸 (mm) Size L1	鏜孔範圍 Boring range	組合刀柄 Modular holder	重量 weight
<b>BT30</b>	DCK2-FBH25P	80	2-6	BT30-DCK2-80	0.70
<b>BT40</b>	DCK2-FBH25P	75	2-6	BT40-DCK2-75	1.30

精鏜孔刀桿 Cutting bar	鏜孔範圍 Boring range	深度 DM	重量 weight
TA0602-10	2-3.2	10	0.01
TA0603-16	3-4.2	16	0.01
TA0604-22	4-5.2	22	0.02
TA0605-28	5-6.2	28	0.02
TA0606-32	6-7.2	32	0.02

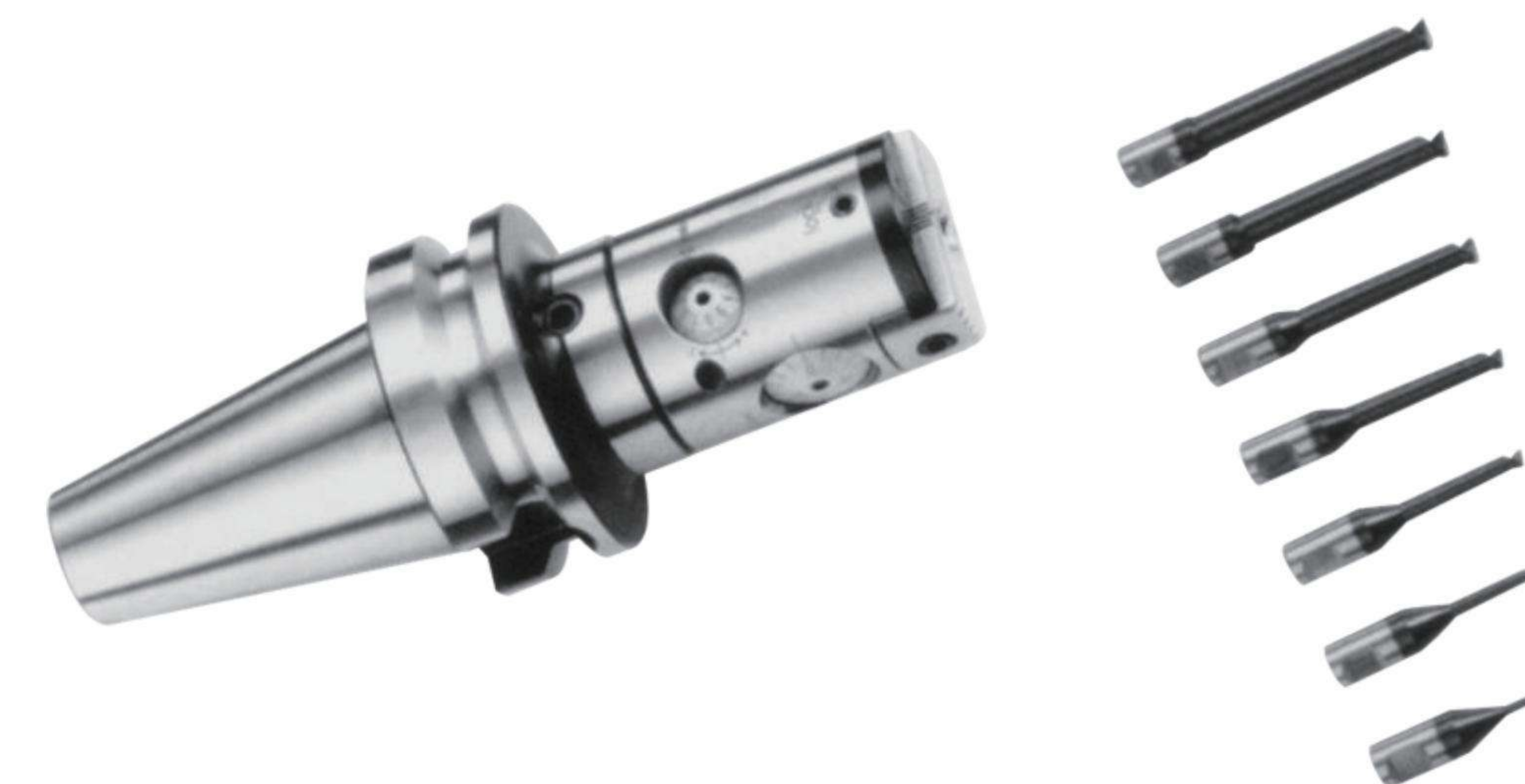


### DCK3-FBH32P 極細微調精鏜孔系統

	型號 Specification	外形尺寸 (mm) Size L1	鏜孔範圍 Boring range	組合刀柄 Modular holder	重量 weight
<b>BT30</b>	DCK3-FBH32P	80	2-8	BT30-DCK3-80	1.02
<b>BT40</b>	DCK3-FBH32P	80	2-8	BT40-DCK3-80	1.61

精鏜孔刀桿 Cutting bar	鏜孔範圍 Boring range	深度 DM	重量 weight
TA0802-10	2-3.2	10	0.03
TA0803-16	3-4.2	16	0.03
TA0804-22	4-5.2	22	0.03
TA0805-28	5-6.2	28	0.04
TA0806-32	6-7.2	32	0.04
TA0807-36	7-8.2	36	0.04
TA0808-42	8-9.2	42	0.05

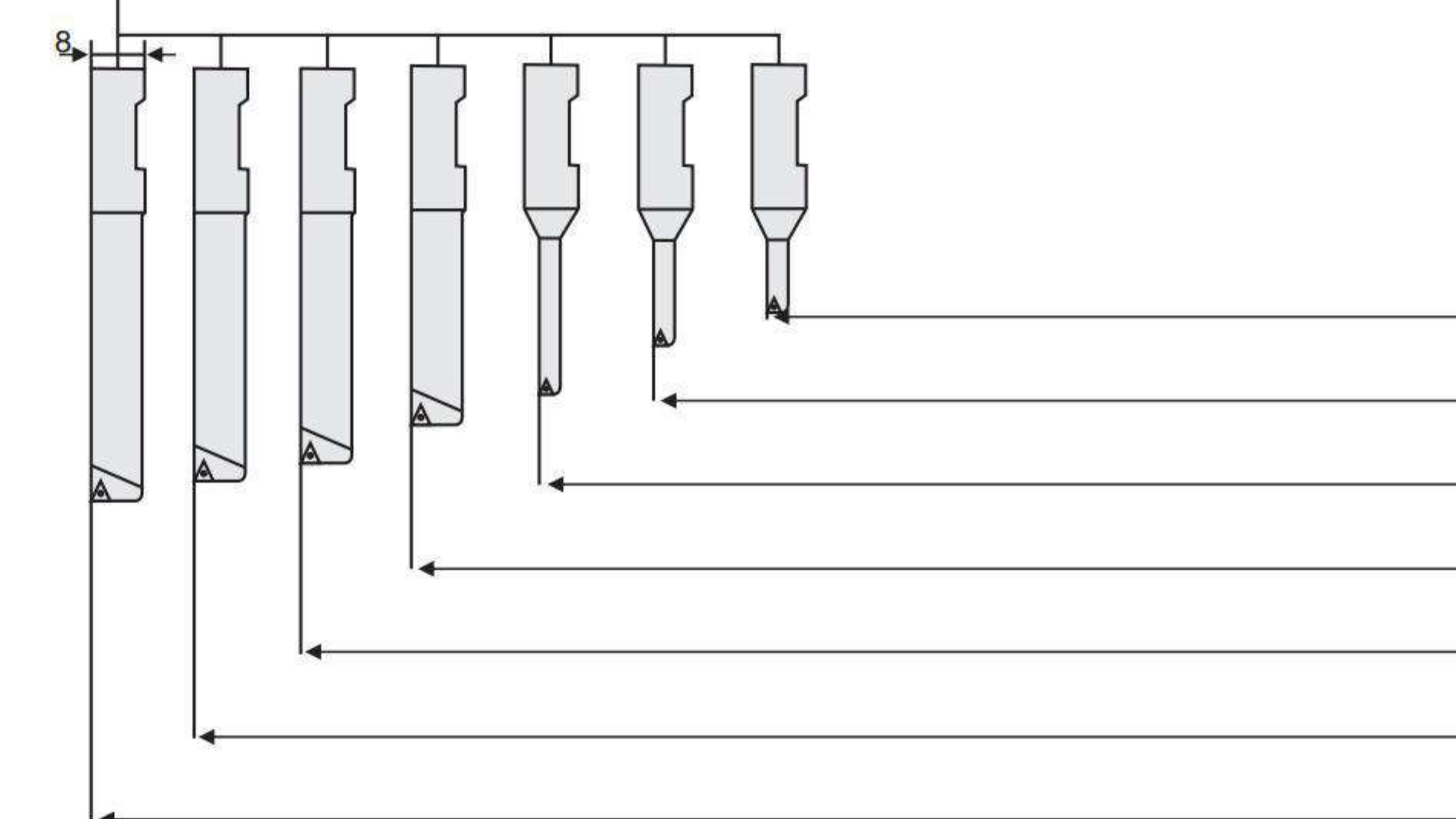
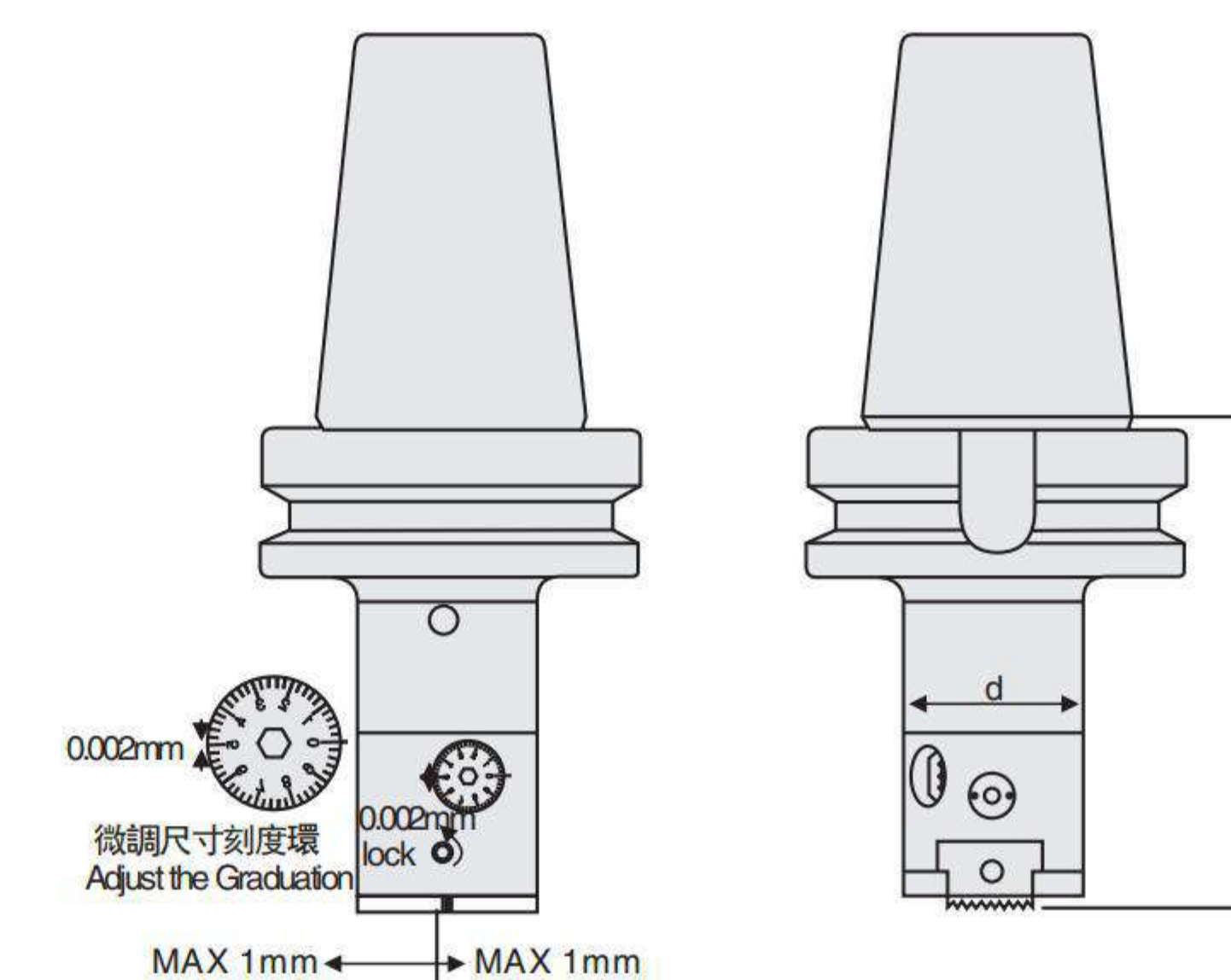
## BORING TOOL SYSTEM 孔加工刀具



MODULAR BORING CUTTER

### DCK4-FBH40P 極細微調精鏜孔系統

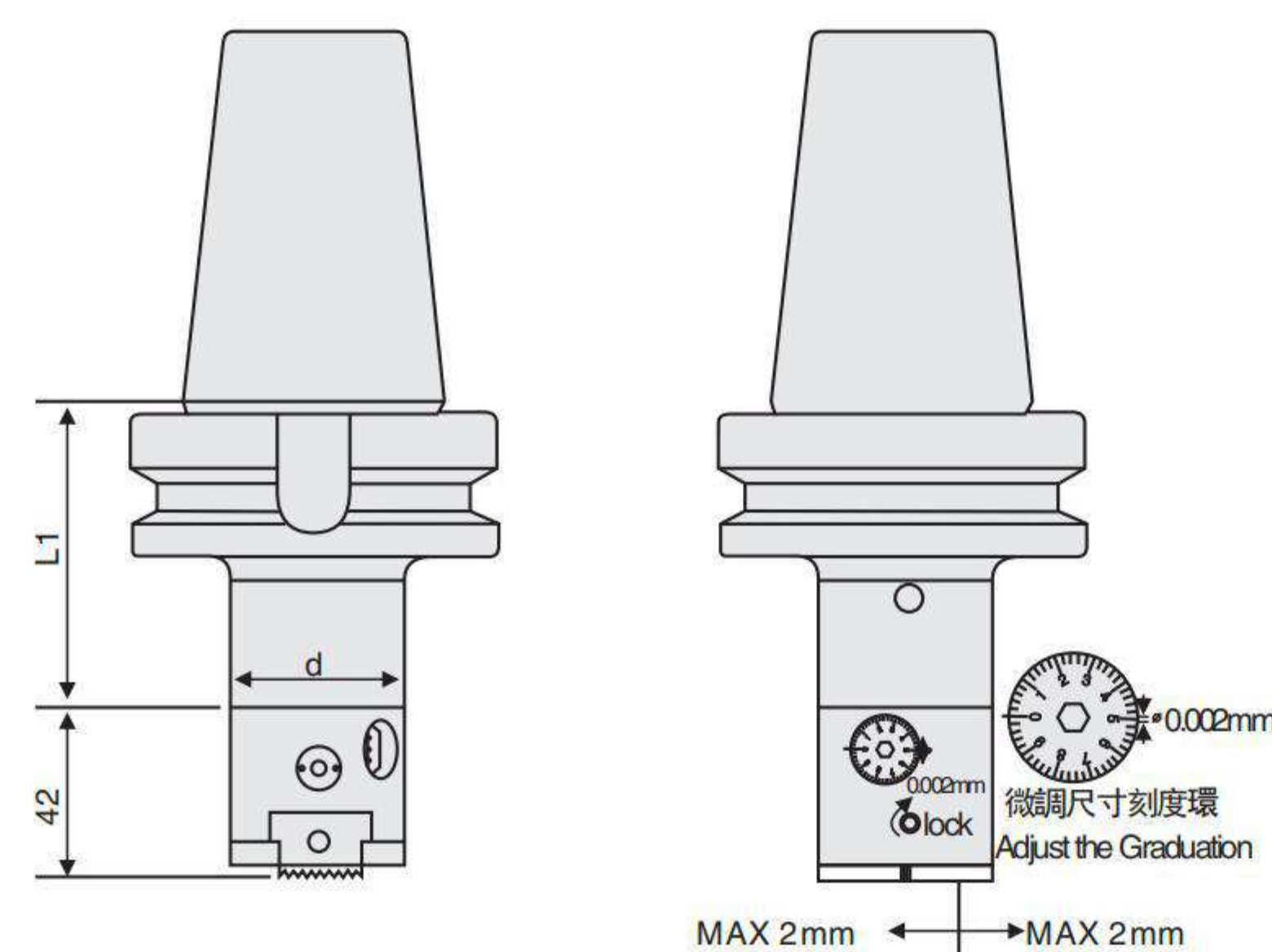
	型號 Specification	外形尺寸 (mm) Size L1	鏜孔範圍 Boring range	組合刀柄 Modular holder	重量 weight
<b>BT30</b>	DCK4-FBH40P	70	2-8	BT30-DCK4-70	1.21
<b>BT40</b>	DCK4-FBH40P	70	2-8	BT40-DCK4-70	1.61



精鏜孔刀桿 Cutting bar	鏜孔範圍 Boring range	深度 DM	重量 weight
CA0802-09	2-3.2	9	0.03
CA0803-16	3-4.2	16	0.03
CA0804-22	4-5.2	22	0.03
CA0805-27	5-6.2	27	0.04
CA0806-32	6-7.2	32	0.04
CA0807-37	7-8.2	37	0.04
CA0808-42	8-9.2	42	0.05



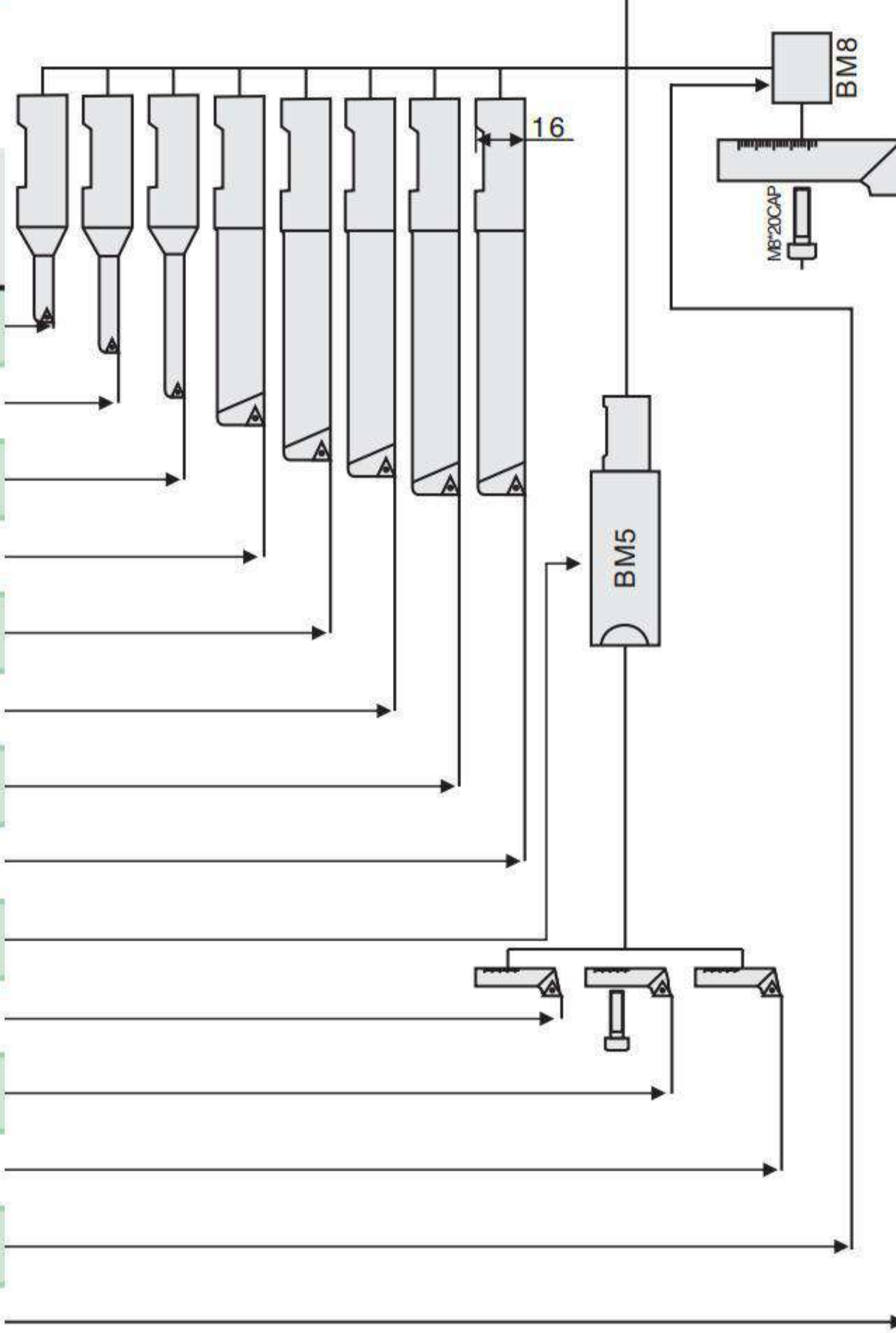
**BORING TOOL SYSTEM 孔加工刀具**



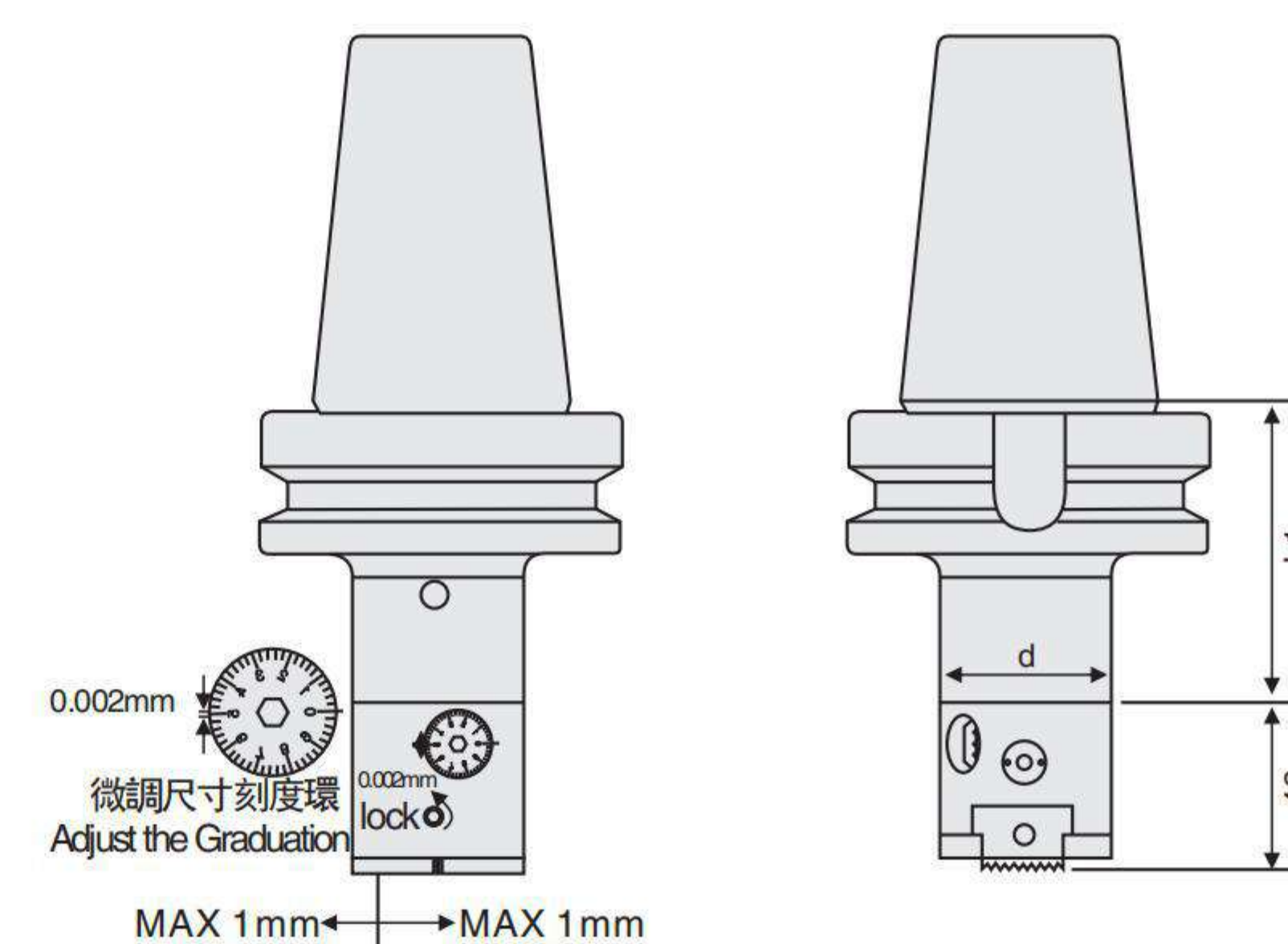
**DCK5-FBH50P 極細微調精鏜孔系統**

	型號 Specification	外形尺寸 (mm) Size L1	鏜孔範圍 Boring range	組合刀柄 Modular holder	重量 weight
<b>BT30</b>	DCK5-FBH50P	70	6-90	BT30-DCK5-70	8.2
<b>BT40</b>	DCK5-FBH50P	80	6-90	BT40-DCK5-80	10.8
<b>BT50</b>	DCK5-FBH50P	90	6-90	BT40-DCK5-90	11.3

精鏜孔刀桿 Cutting bar	鏜孔範圍 Boring range	深度 L	刀片 Insert	螺絲 Screw	扳手 Wrench	重量 weight
BR1606-21	6-9	21	WBGT0601..L	M2	T6	0.04
BR1608-28	8-11	28	TBGT0601..L	M2	T6	0.04
BR1610-35	10-13	35	TBGT0601..L	M2	T6	0.05
BR1612-42	12-15	42	TPGH0902..L	M2.5	T8	0.06
BR1614-50	14-17	50	TPGH0902..L	M2.5	T8	0.07
BR1616-60	16-20	60	TPGH0902..L	M2.5	T8	0.09
BR1620-65	20-24	65	TPGH1103..L	M3	T8	0.11
BR1624-68	24-28	68	TPGH1103..L	M3	T8	0.12
BM5		60+MLTP2938 or MLTP3652 or MLTP4468		AHL0512	L4	0.25
MLTP2938	29-38	+10	TPGH0902..L	M2.5	T8	0.01
MLTP3652	36-52	+12	TPGH0902..L	M2.5	T8	0.02
MLTP4468	44-68	+12	TPGH0902..L	M2.5	T8	0.03
BM8		+MLTP5790		AHL0820	L6	0.03
MLTP5790	57-90	+20	TPGH1103..L	M3	T10	0.10



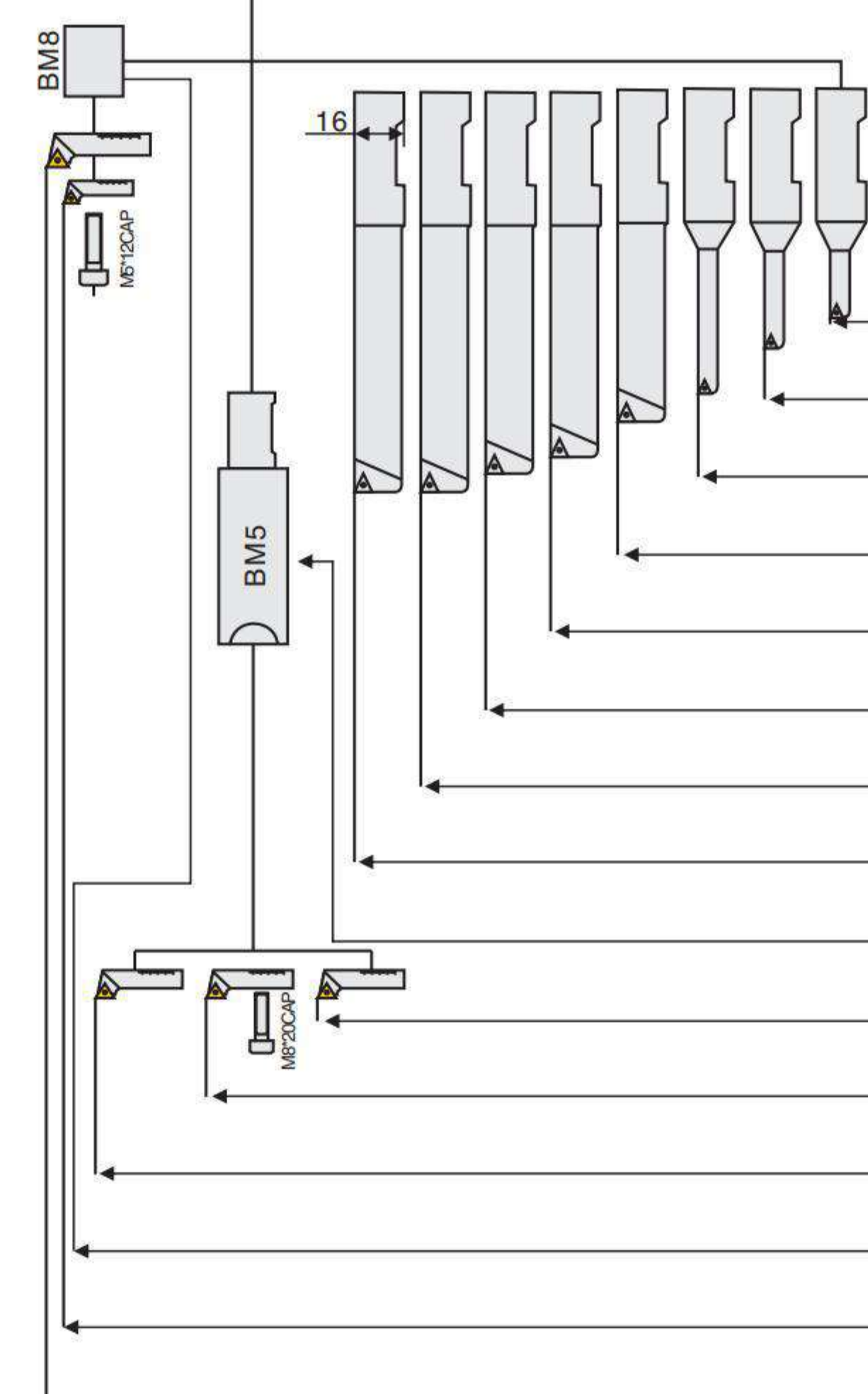
**BORING TOOL SYSTEM 孔加工刀具**



**MODULAR BORING CUTTER  
DCK6-FBH63P 極細微調精鏜孔系統**

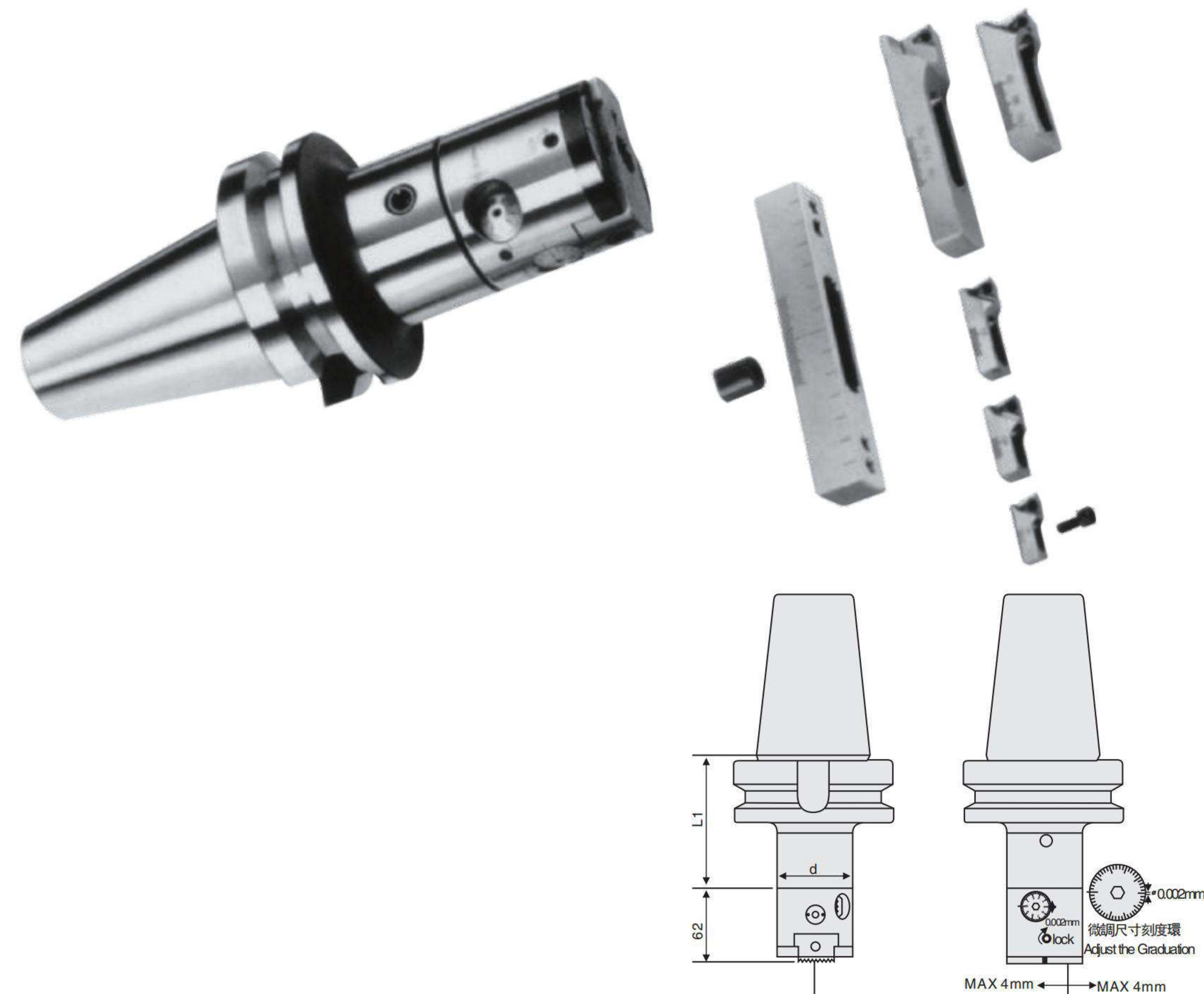
	型號 Specification	外形尺寸 (mm) Size L1	鏜孔範圍 Boring range	組合刀柄 Modular holder	重量 weight
<b>BT30</b>	DCK6-FBH63P	55	6-150	BT40-DCK6-55	8.2
<b>BT40</b>	DCK6-FBH63P	85	6-150	BT50-DCK6-85	10.8
<b>BT50</b>	DCK6-FBH63P	155	6-150	BT50-DCK6-155	11.3

精鏜孔刀桿 Cutting bar	鏜孔範圍 Boring range	深度 L	刀片 Insert	螺絲 Screw	扳手 Wrench	重量 weight
BR1606-21	6-9	21	WBGT0601..L	M2	T6	0.04
BR1608-28	8-11	28	TBGT0601..L	M2	T6	0.04
BR1610-35	10-13	35	TBGT0601..L	M2	T6	0.05
BR1612-42	12-15	42	TPGH0902..L	M2.5	T8	0.06
BR1614-50	14-17	50	TPGH0902..L	M2.5	T8	0.07
BR1616-60	16-20	60	TPGH0902..L	M2.5	T8	0.09
BR1620-65	20-24	65	TPGH1103..L	M3	T8	0.11
BR1624-68	24-28	68	TPGH1103..L	M3	T8	0.12
BM5		60+MLTP2938 or MLTP3652 or MLTP4468		AHL0512	L4	0.25
SRTP2938	29-38	+10	TPGH0902..L	M2.5	T8	0.01
SRTP3652	36-52	+12	TPGH0902..L	M2.5	T8	0.02
SRTP4468	44-68	+12	TPGH0902..L	M2.5	T8	0.03
BM8		+MLTP5790		AHL0820	L6	0.03
SRTP70110	70-110	+20	TPGH1103..L	M3	T10	0.10
SRTP110150	110-150	+20	TPGH1103..L	M3	T10	0.21





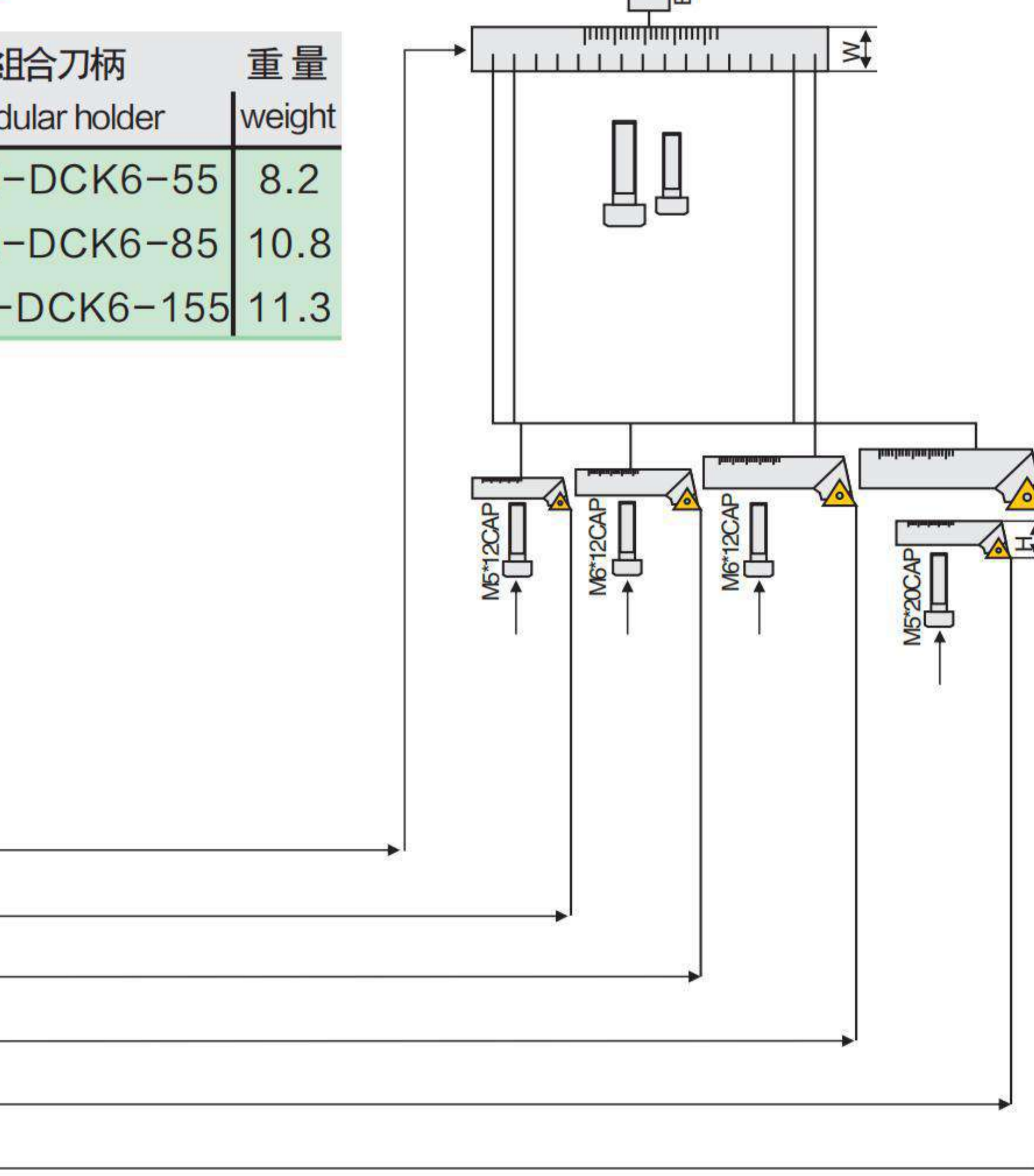
**BORING TOOL SYSTEM 孔加工刀具**



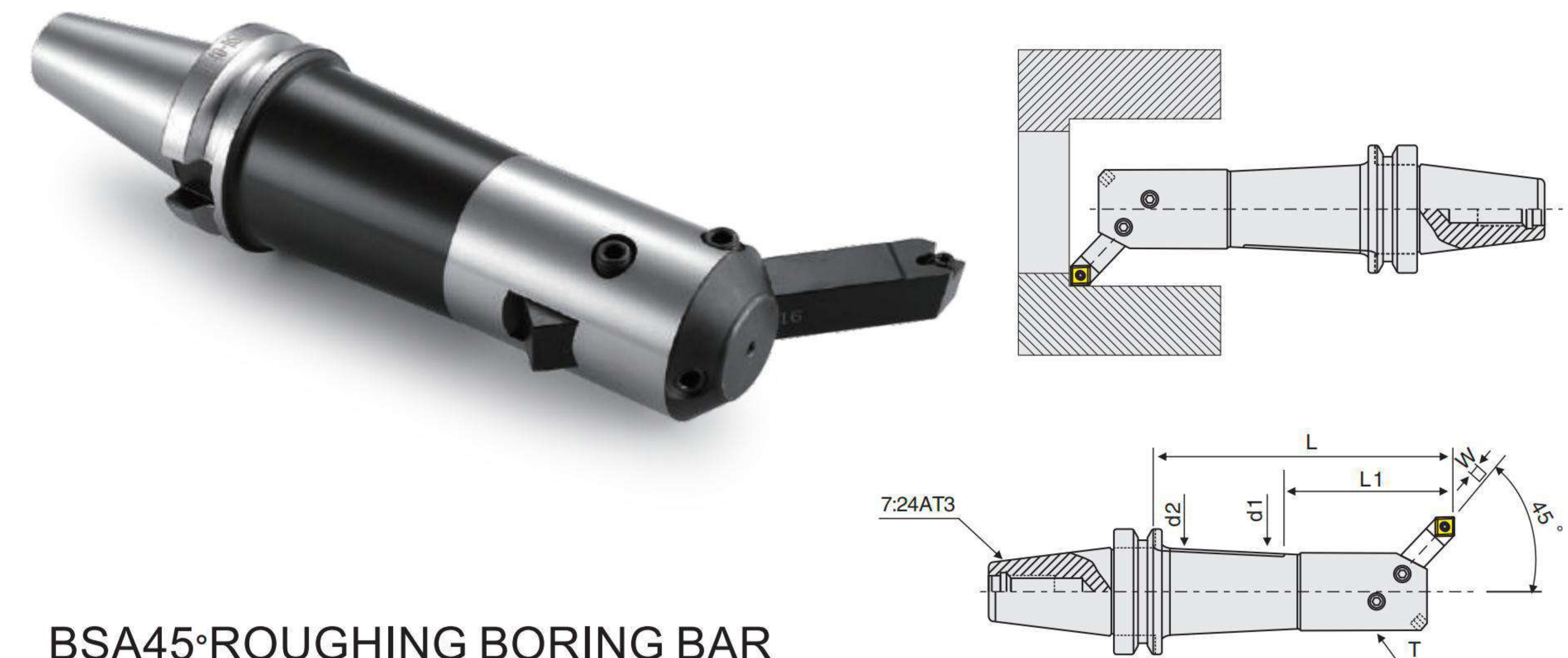
**DCK6-FBH63P 極細微調精鏜孔系統**

	型號 Specification	外形尺寸 (mm) Size L1	鏜孔範圍 Boring range	組合刀柄 Modular holder	重量 weight
BT30	DCK6-FBH63P	55	6-150	BT40-DCK6-55	8.2
BT40	DCK6-FBH63P	85	6-150	BT50-DCK6-85	10.8
BT50	DCK6-FBH63P	155	6-150	BT50-DCK6-155	11.3

型號 Specification	鏜孔範圍 Boring range	外形尺寸 (mm) Size H	重量 weight
PS140-20	+Bm8	20	0.43
MLTP2938	150-200	10	0.01
MLTP3652	160-210	12	0.02
MLTP4468	170-220	12	0.03
MLTP70110	140-240	19	0.10
MLTP110150	180-280	19	0.21



**BORING TOOL SYSTEM 孔加工刀具**



**BSA45° ROUGHING BORING BAR  
BSA 45度粗鏜孔刀柄**

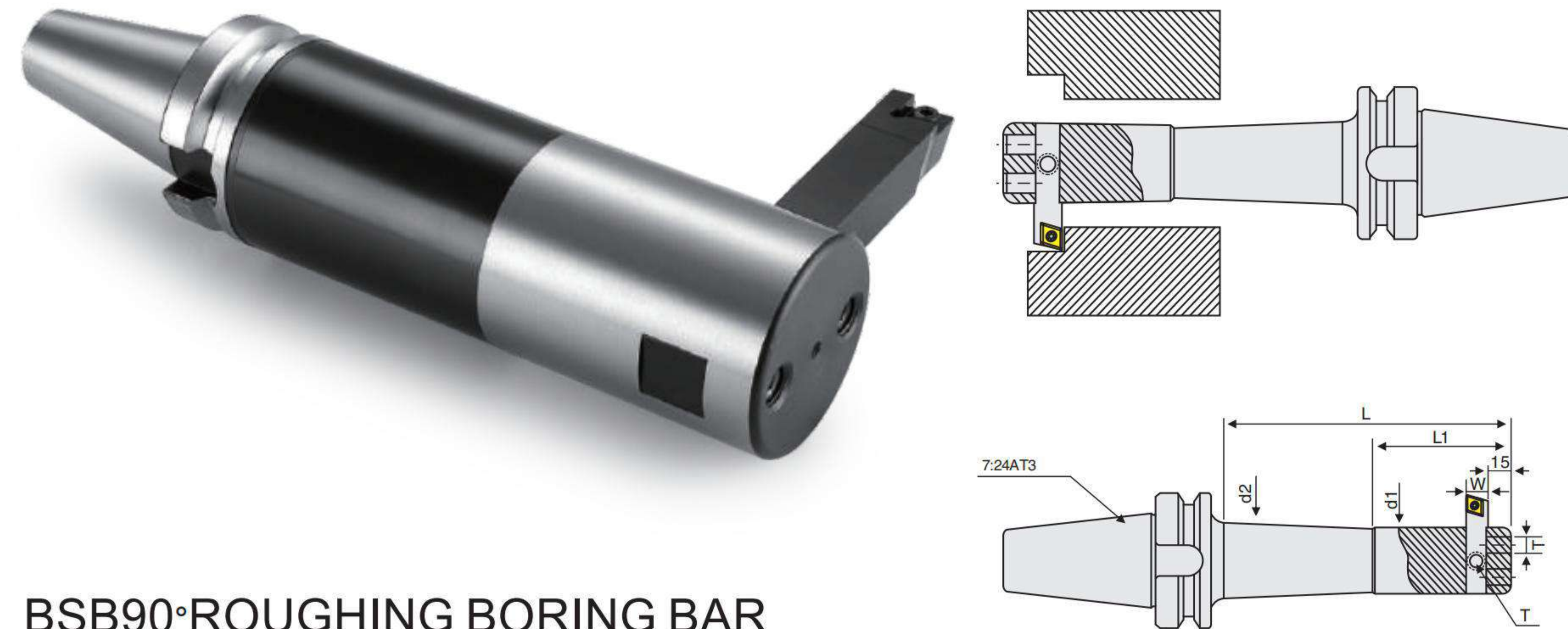
	型號 Specification	尺寸 (mm) Size				鏜孔範圍 Boring range	W	螺絲 Screw	重量 weight
		d1	d2	L1	L				
BT40	BSA25-120	20	22	35	90	25-38	8	SM6	1.3
	BSA30-150	24	26	40	120	30-42	8	SM6	1.5
	BSA38-165	30	33	50	135	38-52	10	SM8	1.8
	BSA42-165	34	37	50	135	42-56	10	SM8	2.1
	BSA50-165	40	44	65	135	50-65	13	SM8	2.4
	BSA62-180	50	56	80	150	62-90	16	SM10	2.5
	BSA72-180	60	-	95	150	72-110	19	SM10	4.0
	BSA90-180	75	-	-	150	90-125	19	SM10	5.3
BT50	BSA25-135	20	22	35	92	25-38	8	SM6	4.3
	BSA30-165	24	26	40	122	30-42	8	SM6	4.5
	BSA38-180	30	33	50	137	38-52	10	SM8	4.9
	BSA42-210	34	37	60	167	42-56	10	SM8	5.1
	BSA50-180	40	44	65	137	50-65	13	SM10	5.5
	BSA50-240	40	44	65	197	50-65	13	SM10	5.8
	BSA62-195	50	56	80	152	62-90	16	SM10	6.3
	BSA62-270	50	56	80	227	62-90	16	SM10	7.7
	BSA72-195	60	66	95	152	72-110	19	SM10	7.1
	BSA72-285	60	66	95	242	72-110	19	SM10	9.4
	BSA90-210	75	80	110	267	90-125	19	SM12	9.5
	BSA90-300	75	80	110	257	90-125	19	SM12	12.6
	BSA105-195	90	-	-	152	105-160	25	SM12	11.0
	BSA105-285	90	94	130	242	105-160	25	SM12	15.3

**特點/Feature**

1. 可選用四角形熔焊刀具或舍弃式刀具
2. 鏜盲孔專用



## BORING TOOL SYSTEM 孔加工刀具



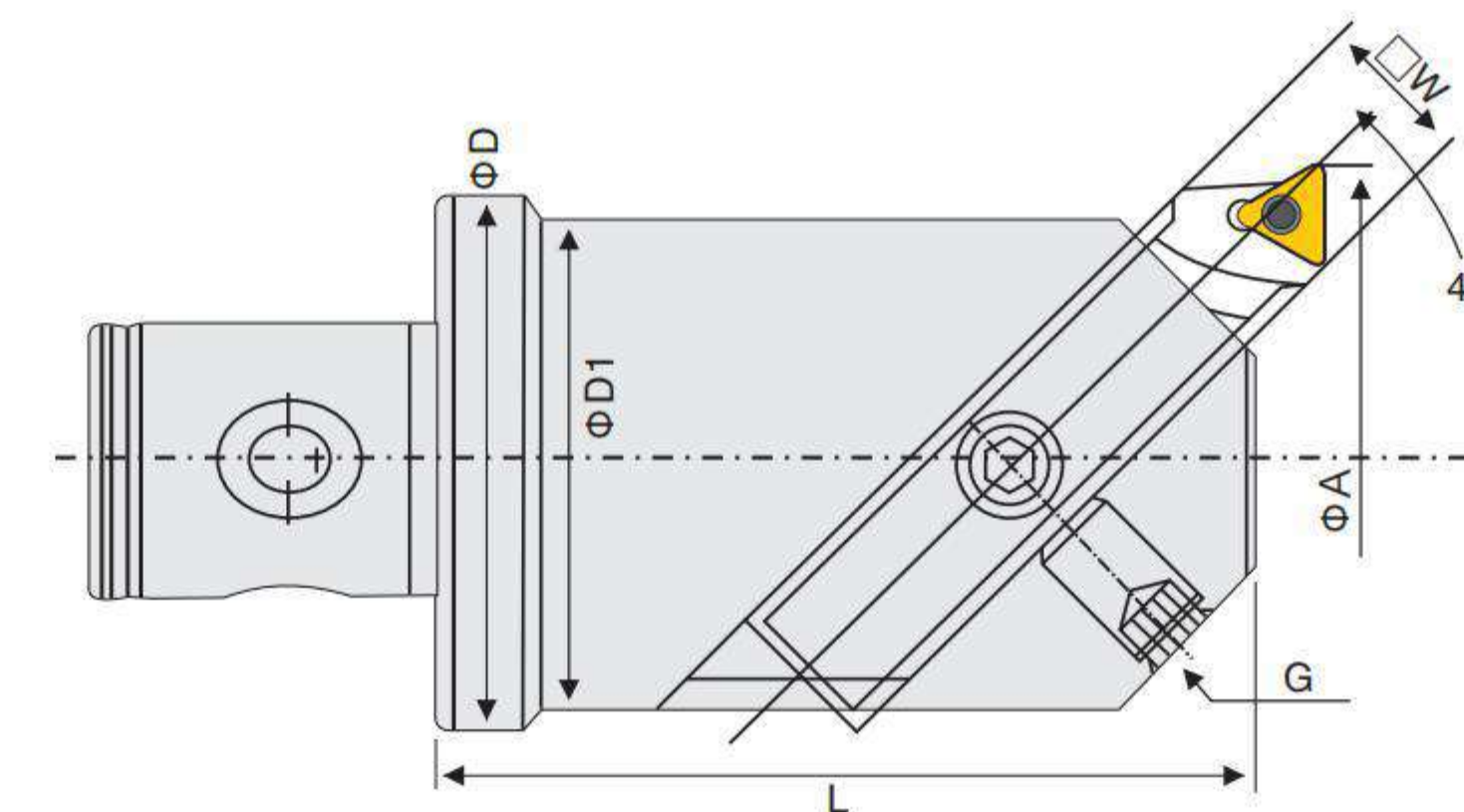
BSB90°ROUGHING BORING BAR  
BSB 90度粗鏜孔刀柄

	型號 Specification	尺寸 (mm) Size				鏜孔範圍 Boring range	W	螺絲 Screw	重量 weight
		d1	d2	L1	L				
BT40	BSB25-120	20	22	35	90	25-52	8	SM6	1.3
	BSB38-150	30	33	55	120	38-70	10	SM8	1.8
	BSB50-165	40	44	70	135	50-90	13	SM10	2.6
	BSB62-180	50	56	80	150	62-115	16	SM10	3.7
	BSB90-180	75	-	-	150	90-150	19	SM12	6.0
BT50	BSB25-135	20	22	35	92	25-52	8	SM6	4.5
	BSB38-180	30	33	55	137	38-70	10	SM8	5.1
	BSB50-180	40	44	70	137	50-90	13	SM10	5.7
	BSB50-240	40	44	70	197	50-90	13	SM10	6.0
	BSB62-195	50	56	80	152	62-115	16	SM10	6.7
	BSB62-270	50	56	80	227	62-115	16	SM10	8.1
	BSB72-195	60	66	95	152	72-135	19	SM12	7.6
	BSB72-285	60	66	95	242	72-135	19	SM12	9.9
	BSB90-210	75	80	115	167	90-150	19	SM12	10.0
	BSB90-300	75	80	115	257	90-150	19	SM12	13.1
	BSB105-195	90	90	-	152	105-190	25	SM12	11.7
BSB105-285	90	94	135	242	105-190	25	SM12	16.0	

### 特點/Feature

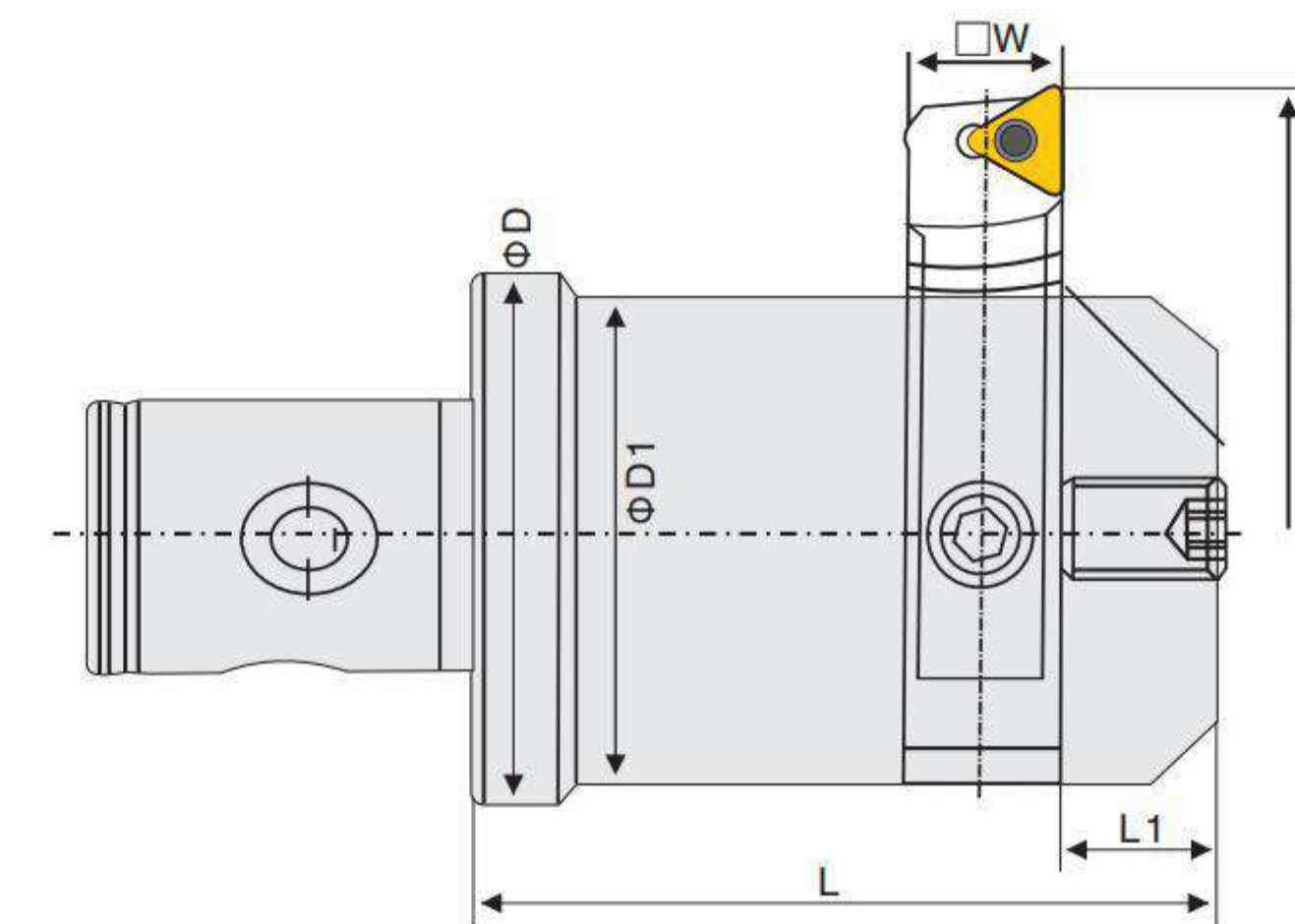
- 1、適用於孔徑凹凸不平，毛坯粗糙之加工物。
- 2、可選用四角形熔焊刀具或捨棄式刀具。
- 3、適用通孔，背鏜加工。

## BORING TOOL SYSTEM 孔加工刀具



MODULAR BORING CUTTER  
BSA 45度斜角型粗搪頭

型號 Specification	鏜孔範圍 Boring Range		尺寸 Size					
	φ A min	φ A max	φ D	φ D1	L	E	□W	G
BSA30-CK2	φ 30	φ 42	24	24	40	1.6	8	M6×1.00P
BSA38-CK3	φ 38	φ 52	31	60	60	2.6	10	M8×1.25P
BSA50-CK4	φ 50	φ 65	42	40	70	3	13	M10×1.50P
BSA62-CK5	φ 62	φ 90	55	50	85	2	16	M12×1.75P
BSA72-CK6	φ 72	φ 110	63	60	98	2.4	19	M12×1.75P

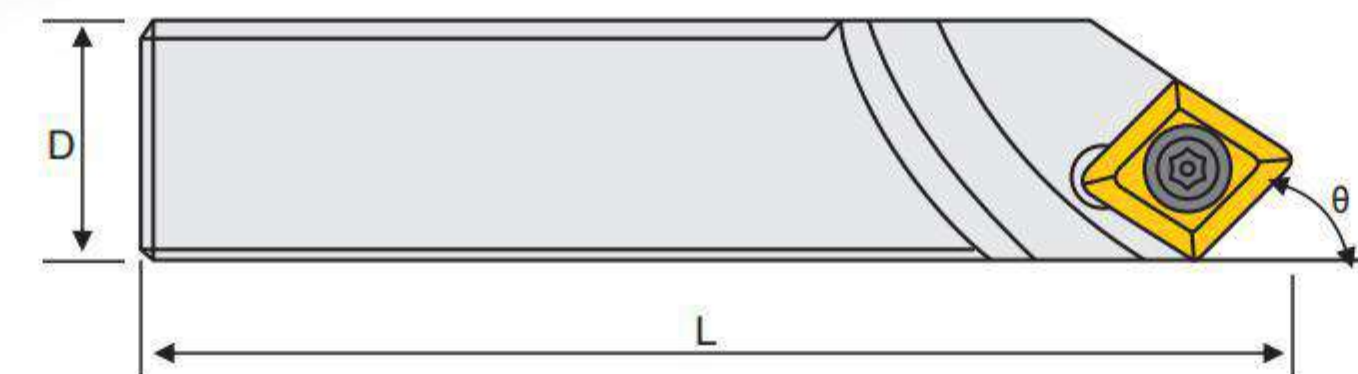
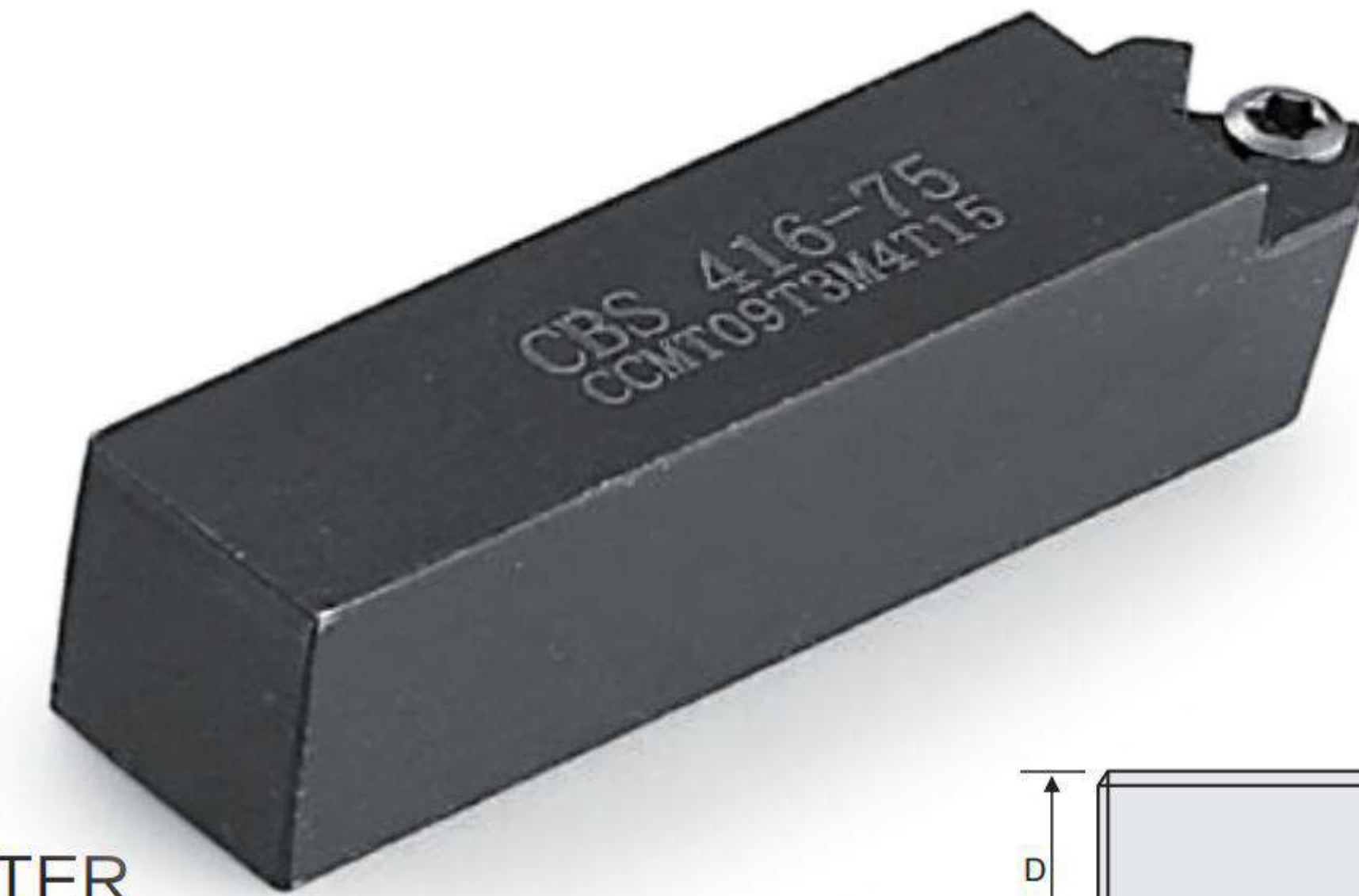
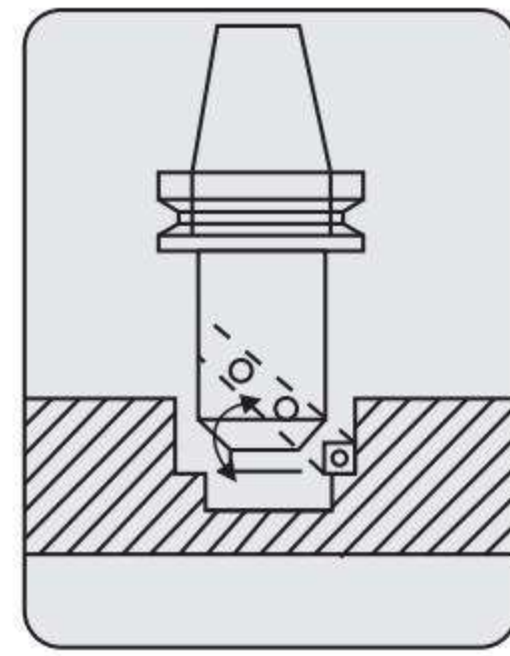


BSB 90度直角型粗搪頭

型號 Specification	鏜孔範圍 Boring Range		尺寸 Size					
	φ A min	φ A max	φ D	φ D1	L	L1	□W	G
BSB25-CK2	φ 26	φ 52	24	20	45	10	8	M6×1.00P
BSB38-CK3	φ 38	φ 70	31	30	55	10	10	M8×1.25P
BSB50-CK4	φ 50	φ 90	42	40	60	10	13	M10×1.50P
BSB62-CK5	φ 62	φ 115	55	50	70	1	16	M12×1.75P
BSB72-CK6	φ 72	φ 135	63	60	85	12	19	M12×1.75P



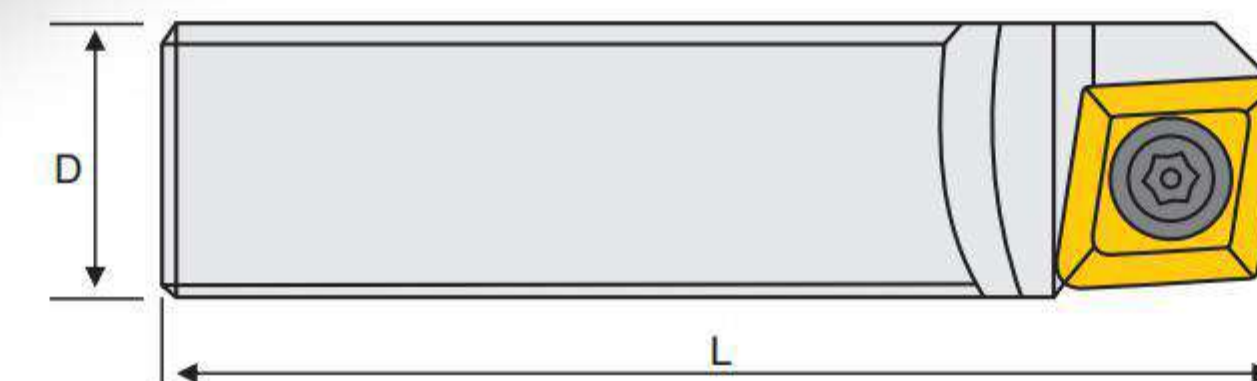
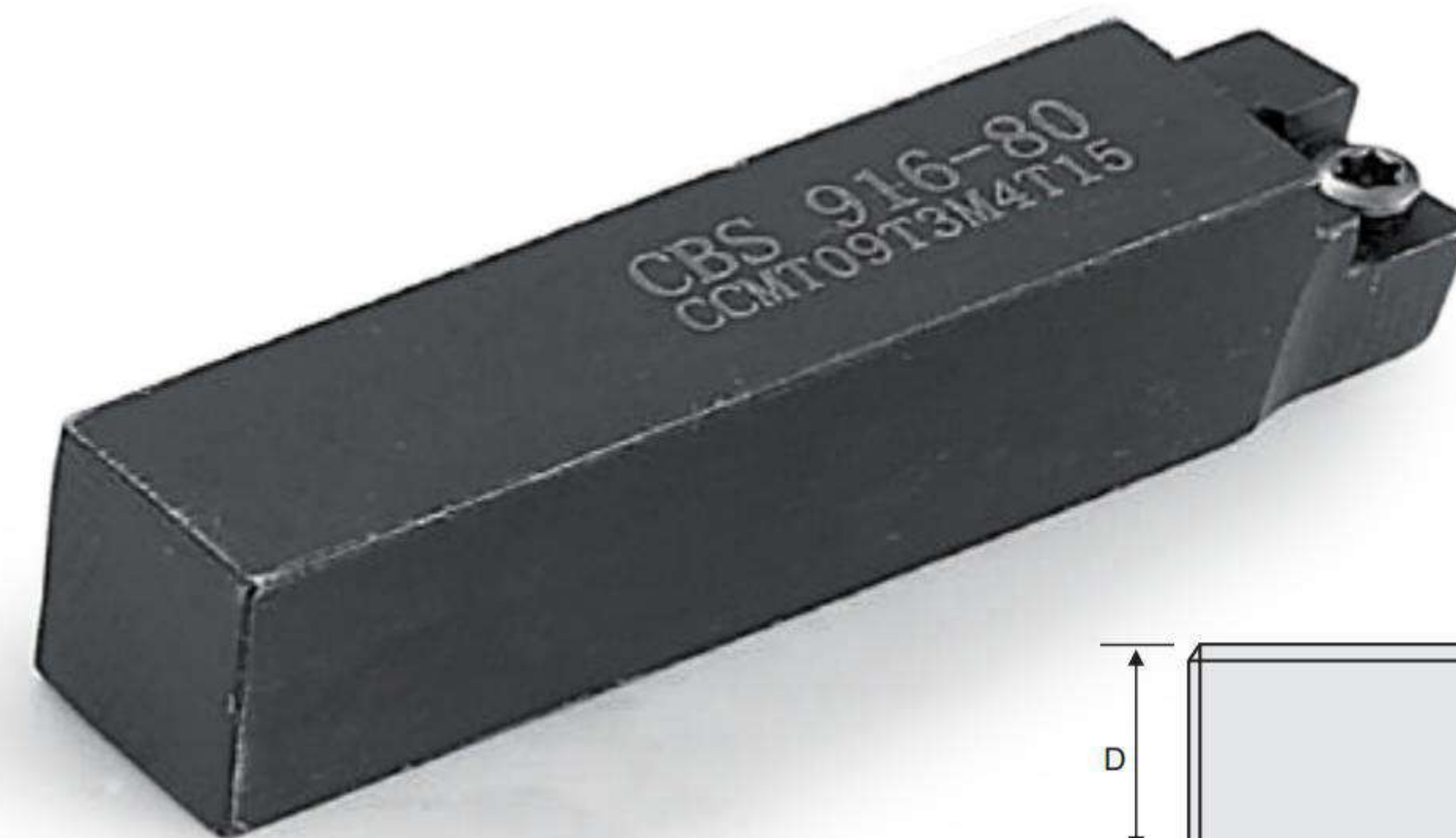
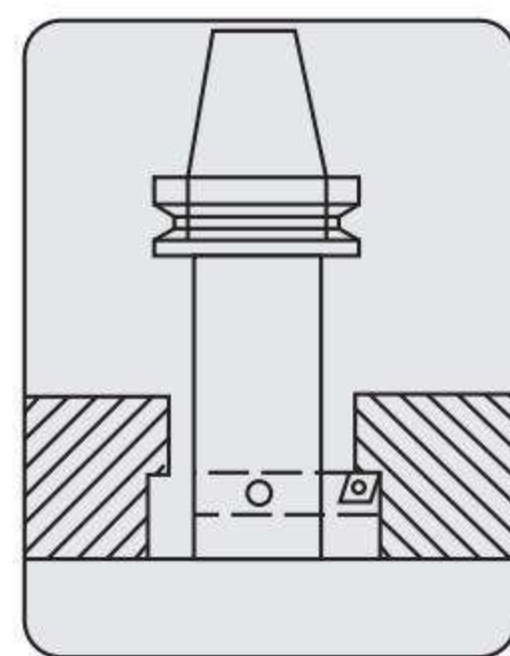
**BORING TOOL SYSTEM 孔加工刀具**



MODULAR BORING CUTTER

**CBS 刀夾**

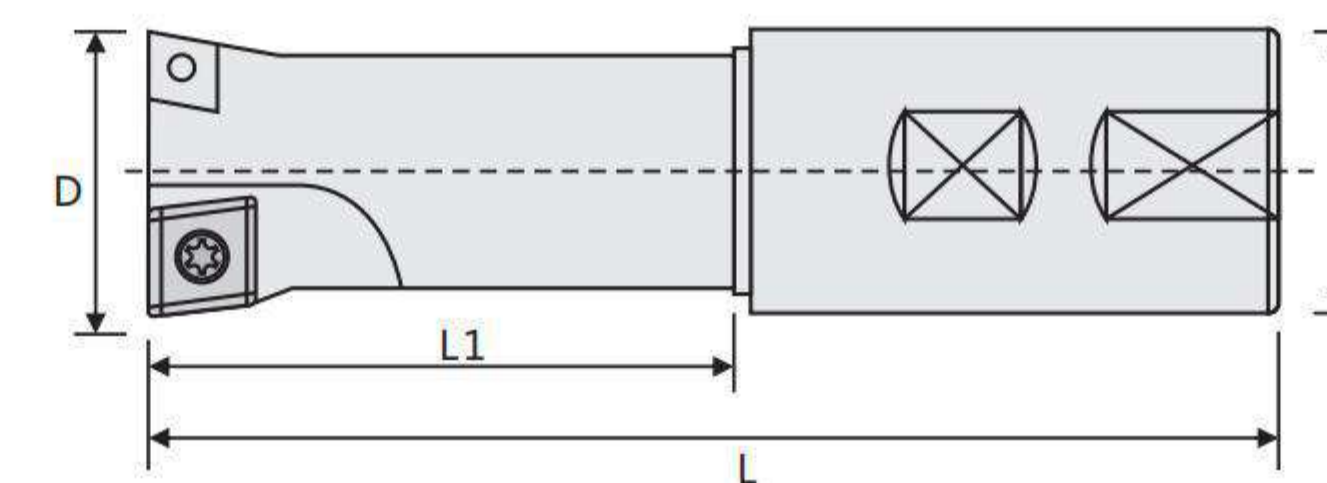
型號 Specification	D	L	角度 Angle	刀片規格 Insert	螺絲 Clamp Screw	扳手 Wrench
CBS-408	8	50	45°	CCMT0602	M2.5-6.0-3.5-60	T9
CBS-410	10	60	45°	CCMT09T3	M4-10-5.7-60	T15
CBS-413	13	70	45°	CCMT09T3	M4-10-5.7-60	T15
CBS-416	16	100	45°	CCMT0602	M4-10-5.7-60	T15
CBS-419	19	150	45°	CCMT09T3	M4-10-5.7-60	T15
CBS-425	25	150	45°	CCMT09T3	M4-10-5.7-60	T15
CBS-908	8	50	90°	CCMT0602	M2.5-6.0-3.5-60	T9
CBS-910	10	60	90°	CCMT0602	M4-10-5.7-60	T15
CBS-913	13	70	90°	CCMT09T3	M4-10-5.7-60	T15
CBS-916	16	100	90°	CCMT09T3	M4-10-5.7-60	T15
CBS-919	19	150	90°	CCMT0602	M4-10-5.7-60	T15
CBS-925	25	150	90°	CCMT09T3	M4-10-5.7-60	T15



**BSB 直角型搪頭**

型號 Specification	D	L	角度 Angle	刀片規格 Insert	螺絲 Clamp Screw	扳手 Wrench
CBS908L	8	50	90°	CCMT0602	M2.5-6.0-3.5-60	T9
CBS910L	10	60	90°	CCMT0602	M2.5-6.0-3.5-60	T9
CBS913L	13	70	90°	CCMT09T3	M4-10-5.7-60	T15
CBS916L	16	100	90°	CCMT0602	M4-10-5.7-60	T15
CBS919L	19	150	90°	CCMT09T3	M4-10-5.7-60	T15

**BORING TOOL SYSTEM 孔加工刀具**



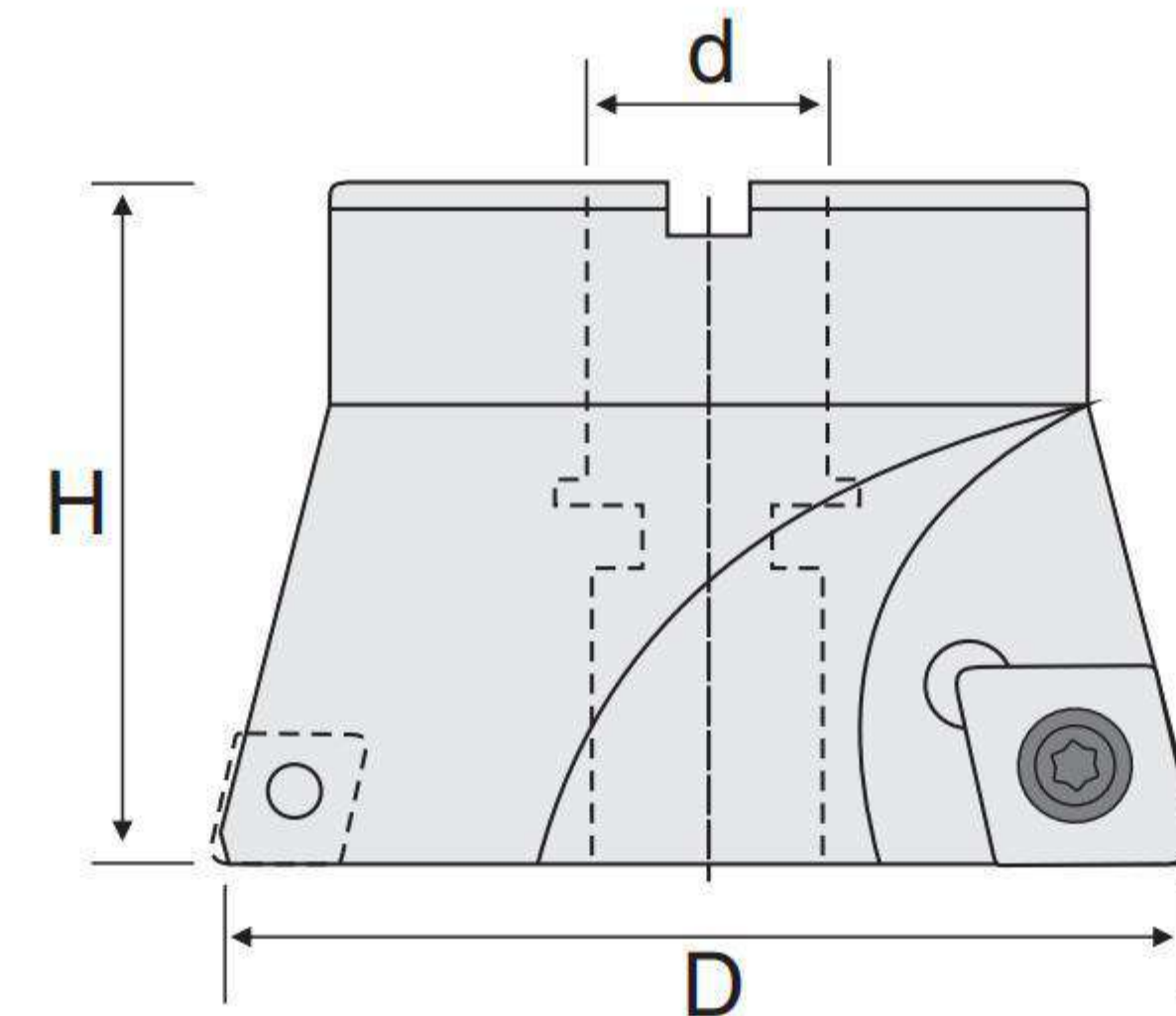
**固定式粗鏜刀杆**

型號 Specification	刀數 No. of flutes	尺寸 Size			
		D	d	L	L1
SB11.7-12-120	1	11.7	16	120	30
SB12.7-13-120	1	12.7	16	120	30
SB13.7-14-120	1	13.7	16	120	30
SB14.7-15-120	1	14.7	16	130	30
SB15.7-16-135	2	15.7	16	135	70
SB16.7-17-135	2	16.7	16	135	70
SB17.7-18-135	2	17.7	16	135	70
SB18.7-19-160	2	18.7	16	160	90
SB19.7-20-160	2	19.7	20	160	90
SB21.7-22-160	2	20.7	20	160	90
SB23.7-24-180	2	23.7	20	180	100
SB24.7-25-190	2	24.7	25	190	110
SB25.7-26-200	2	25.7	25	200	120
SB26.7-27-200	2	26.7	25	200	120
SB27.7-28-200	2	27.7	25	200	120
SB29.7-30-210	2	29.7	25	210	130
SB31.7-32-210	2	31.7	25	210	130
SB34.7-35-250	2	34.7	32	250	150
SB36.7-37-250	2	36.7	32	250	150
SB39.7-40-270	2	39.7	32	270	170
SB41.7-42-250	2	41.7	32	250	150
SB44.7-45-310	2	44.7	32	310	210
SB46.7-47-260	2	46.7	32	260	160
SB49.7-50-260	2	49.7	42	260	160
SB49.7-50-310	2	49.7	42	310	210
SB51.7-52-260	2	51.7	42	260	160
SB54.7-55-330	2	54.7	42	330	230
SB59.7-60-260	2	59.7	42	260	160
SB59.7-60-350	2	59.7	42	350	250

型號 Specification	刀片 Insert	螺釘 Clamp screw	扳手 wrench
SB12-SB20	CCMT060204	M2.5 × 6	T8
SB22-SB60	CCMT09T308	M4 × 10	T15



**BORING TOOL SYSTEM 孔加工刀具**

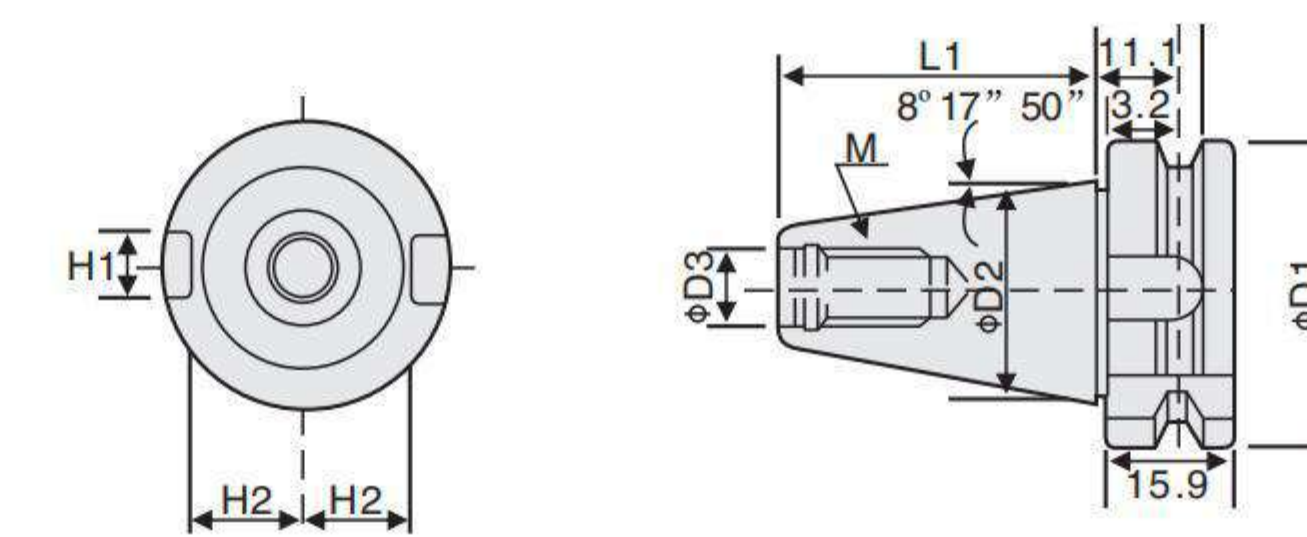


**固定式粗搪刀頭**

型號 Specification	刀數 No.of flutes	尺寸 Size D	尺寸 Size d	尺寸 Size L1
GC44.7-45-22	2	44.7	22	50
GC49.7-50.22	2	49.7	22	50
GC54.7-55-22	2	54.7	22	50
GC59.7-60-22	2	59.7	22	50
GC61.7-62-22	2	61.7	22	50
GC61.7-62-25.4	2	61.7	25.4	50
GC64.7-65-25.4	2	64.7	25.4	50
GC69.7-70-25.4	2	69.7	25.4	50
GC71.7-72-25.4	2	71.7	25.4	50
GC74.7-75-25.4	2	74.7	25.4	50
GC79.7-80-25.4	2	79.7	25.4	50
GC84.7-85-25.4	2	84.7	25.4	50
GC89.7-90-31.75	2	89.7	31.75	50
GC94.7-95-31.75	2	94.7	31.75	50
GC99.7-100-31.75	2	99.7	31.75	50

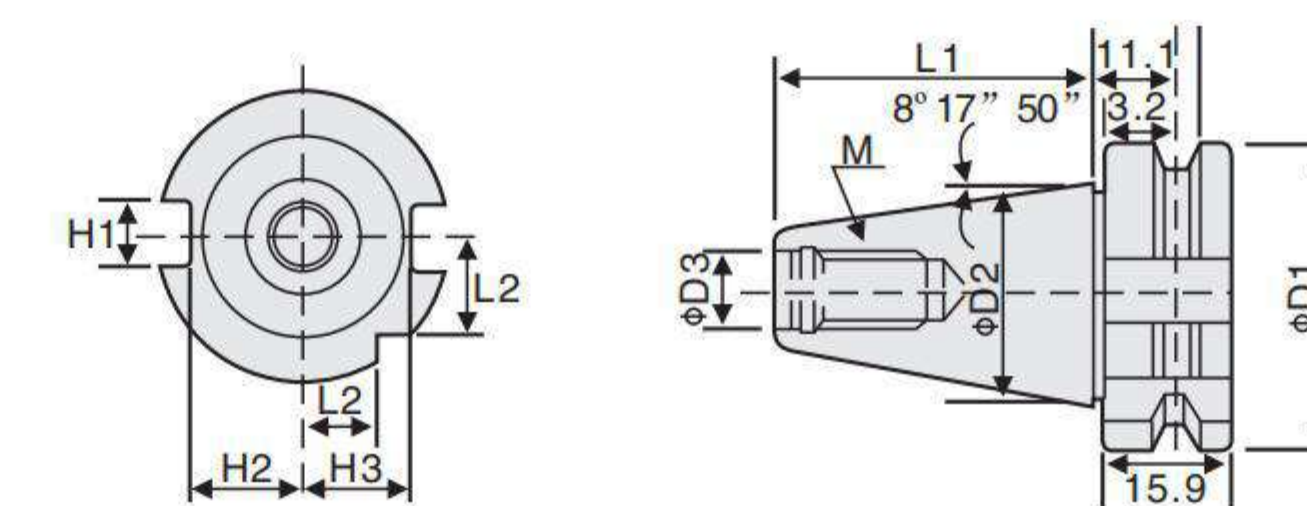
型號 Specification	刀片 Insert	螺釘 Clamp screw	扳手 wrench
GC45-100	CCMT09T308	M4×10	T15

**BORING TOOL SYSTEM 孔加工刀具**



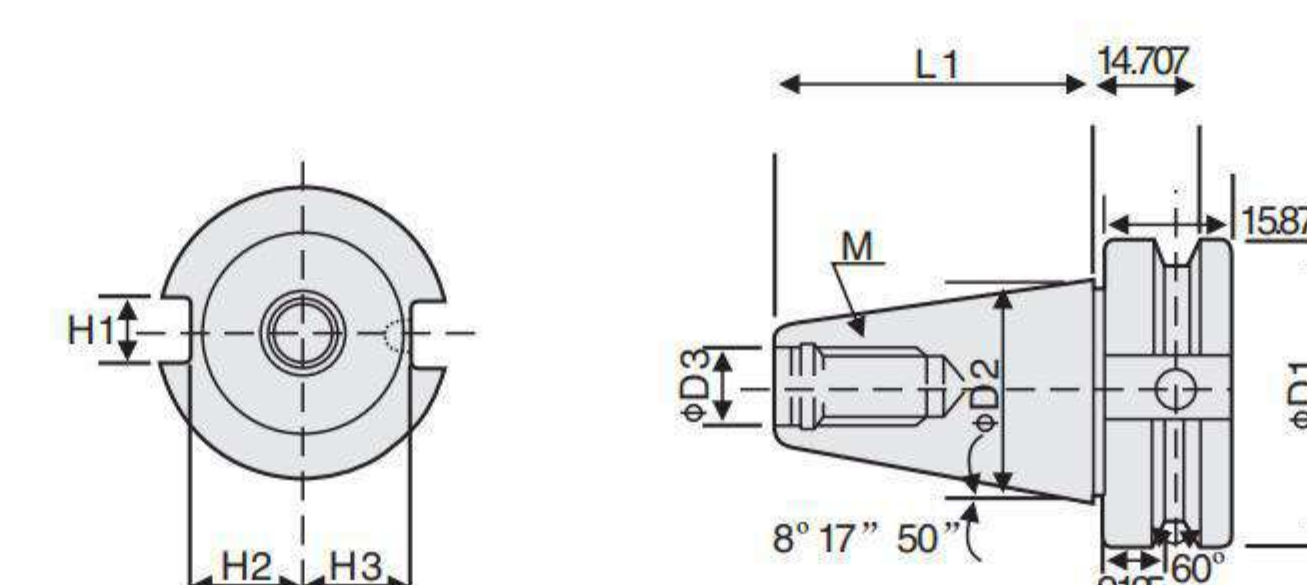
**SPECIFICATIONS  
BT 錐柄規格尺寸**

BT.NO	ΦD1	ΦD2	ΦD3	L1	L2	L3	L4	L5	H1	H2	M
BT30	46	31.75	12.5	48.4	20	2	13.6	8	16.1	16.3	M12
BT40	63	44.45	17	65.4	25	2	16.6	10	16.1	22.6	M16
BT50	100	69.85	25	101.8	35	3	23.2	15	25.7	35.4	M24



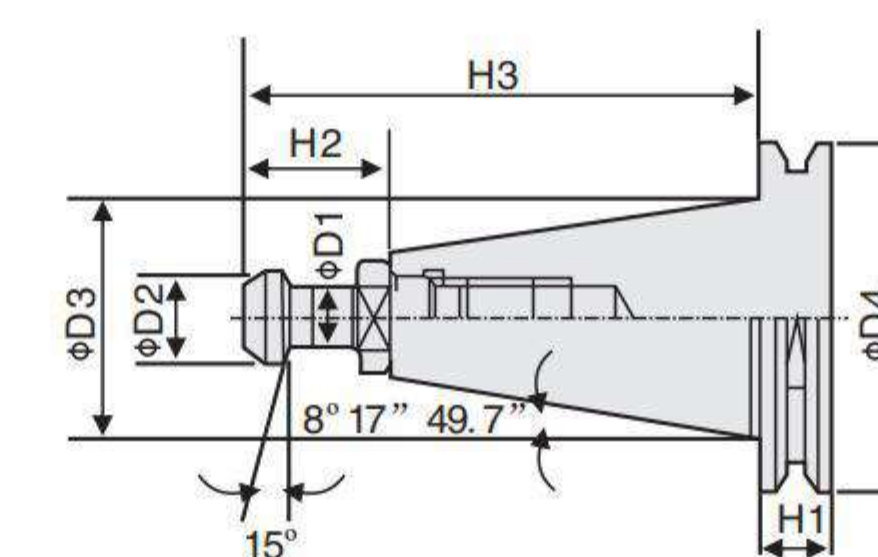
**SK 錐柄規格尺寸**

SK.NO	ΦD1	ΦD2	ΦD3	L1	L2	H1	H2	H3	M
SK40	63.55	44.45	17	68.4	18.5	16.1	22.8	25	M16
SK50	97.5	69.85	25	101.75	30	25.7	35.5	37.7	M24



**CAT 錐柄規格尺寸**

CAT.NO	ΦD1	ΦD2	ΦD3	L1	H1	H2	H3	M
CAT40	63.5	44.45	16.28	68.25	16.28	22.6	25.02	5/8"-11UNC
CAT50	98.43	69.85	26.38	101.6	305.31	35.31	37.72	1"-8UNC



**ISO 錐柄規格尺寸**

ISO.NO	D1	D2	D3	D4	H1	H2	H3
ISO20	6	9	22.225	33	8	12	45.3
ISO25	7	10	25.4	37	8	16	55.7
ISO30	9	13	31.75	50	15.9	24	71.8



