

# 镗孔刀具系列

BORING HEAD



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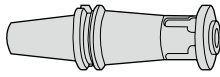
BORING HEAD



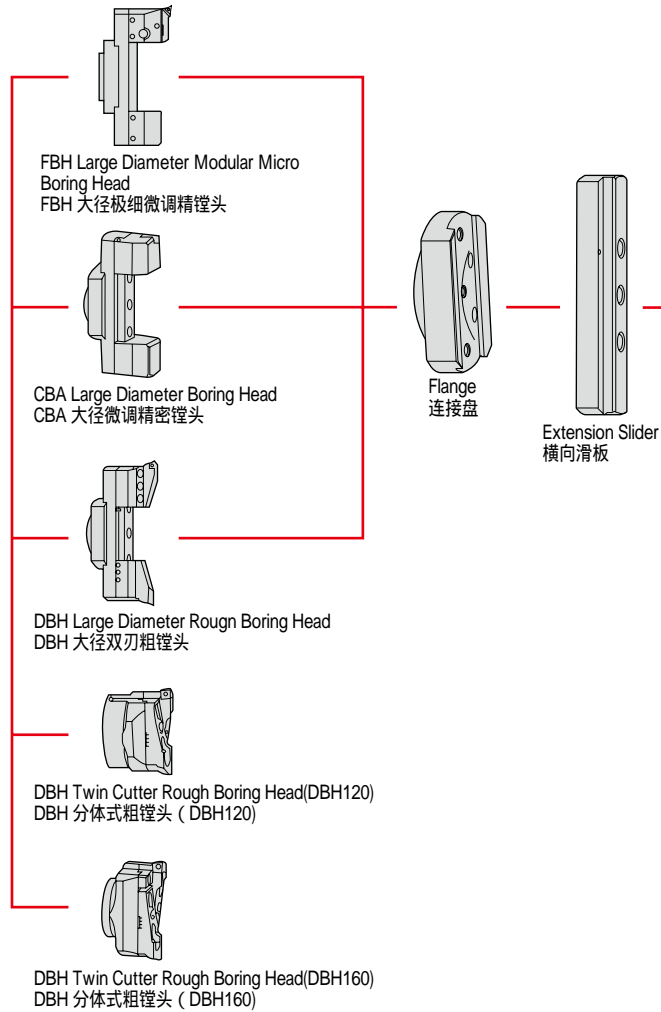
· 模块式精镗系列 MODULAR FINE BORING SYSTEM

孔加工工具  
HOLE MAKING TOOLS

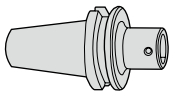
BST BORING SYSTEM  
BST 系列



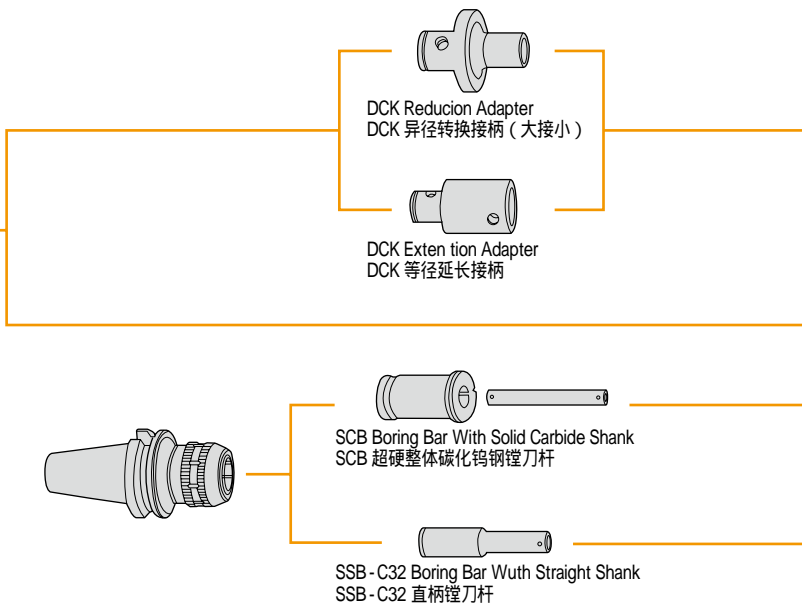
BST Basic Boring Holder  
BST 镗头刀柄

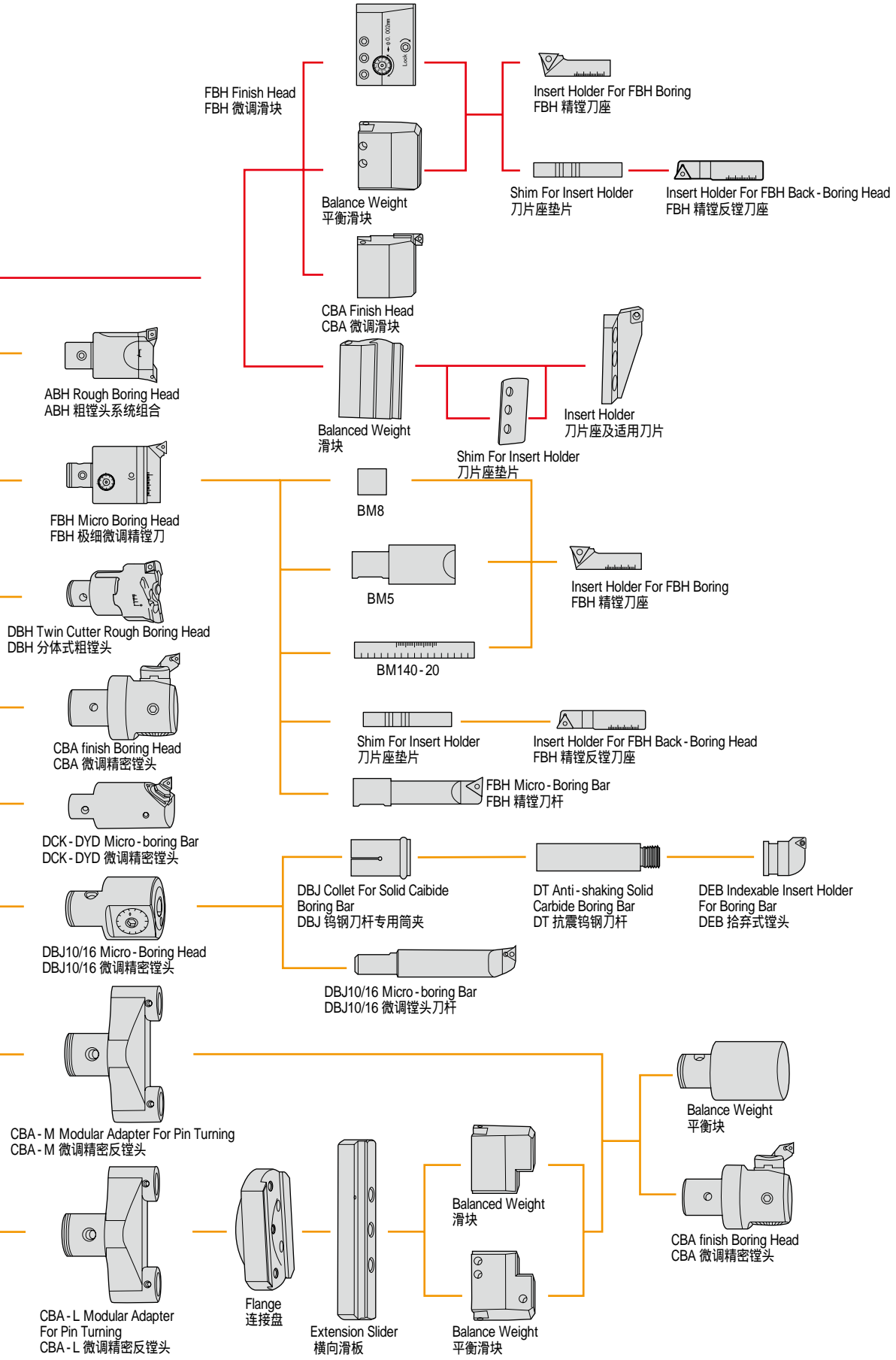


DCK BORING SYSTEM  
DCK 系列



DCK Taper Shank For Boring Head  
DCK 镗头刀柄

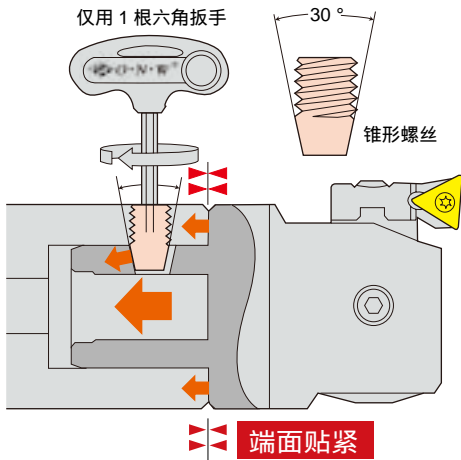




· CK 模块式镗刀系列 CK MODULAR BORING BAR

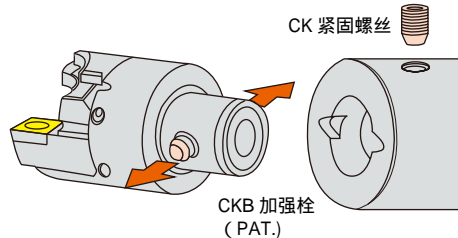
高精度 强力 操作方便——最理想的连接方式

High Precision, Big Power And Easy Operation——the Best Connection Style



**要点: 1** 依靠锥形螺丝, 把紧固力转换成轴向拉力, 使镗头端面与本体强力贴紧。

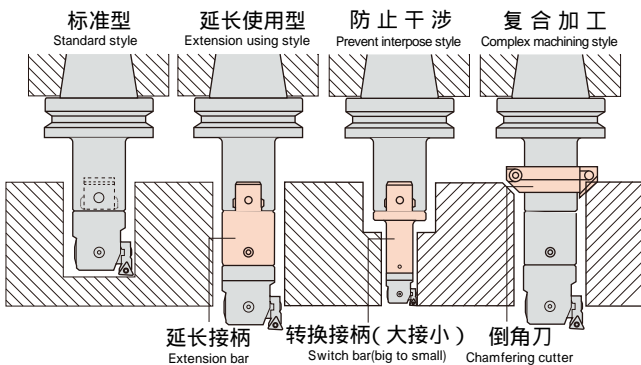
**要点: 2** 配有CKB加强栓(PAT.), 以承受如粗镗等高扭矩加工。



CK No.	剪切强度 (CK 紧固螺丝)
CK1	600kg
CK2	1,100kg
CK3	1,400kg
CK4	3,000kg
CK5	4,700kg
CK6	7,100kg
CK7	16,200kg

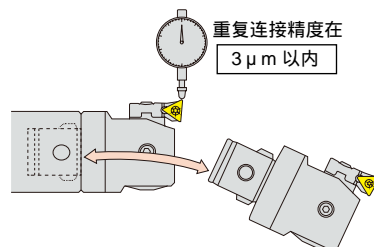
**因为是模块式** 能够自由设定加工直径和有效加工深度

针对不同的工件形状, 可以用延长杆加长、或用减径杆减小加工直径。既可以保持刚性, 又可以防止干涉。再配合倒角器, 可自由组合成最合适的镗孔刀具。



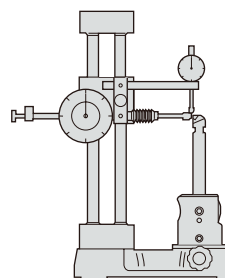
**虽然是模块式** 重复连接精度在 3 μm 以内

同一镗头多次重复拆、装, 刀尖的位置误差不超过 3 μm。实际加工中可获得稳定的加工精度。



**因为是模块式** 只需镗头单独对刀

由于镗头与本体的重复连接精度非常高, 所以只需镗头单独对刀。镗头单体对刀可减轻劳动强度、提高工作效率, 并且可事先将各镗头的加工直径调节好, 而降低综合成本。



特点:

注:

依靠 30 度锥形螺丝, 把紧固力转换成轴向拉力, 使镗刀端面与本体端面贴紧。(如图)

模块式设计, 可以自由设定加工直径和有效加工深度, 配有。转换接头(大接小)减少刀具直径, 既可以确保刚性, 又可以防止干涉, 再配合倒角器可自由组合成最合适的镗削刀具。(如图)

因镗头与本体的连接精度非常高所以只需对镗头单独对刀, 可减轻劳动强度, 提高工作效率, 降低综合成本。

独特高低段差设计, 平刃或高低刃均可采用。

Features:

To change settled force into axial pull with the 30 angle taper screw, so the end face of boring bar and holder touch closely. (Show as chart)

Modular designs can set on machining diameter and available process depth freely and easy for choosing. Reducing the cutter diameter of switch head (size) can not only assure the rigidity but also prevent interpose; then cooperating with chamfering machine, there is the most suitable boring bar in free combination. (show as chart)

Because the boring head and holder minutely connected, so we should setting cutting head separated, then it can increase the job efficiency, reduce the labor intensity and colligation cost.



· EWN 精镗头 EWN FINE BORING HEAD

加工范围： 20 - 203



特点 1:

**只需交换刀片座**  
增大加工范围 改善切削排出性

排屑空间增大

1# 标准刀片座    2# 加大刀片座    3# 加大刀片座

同一镗头可对应 3 种刀片座，加工范围约增大到原来的 3 倍。同时可根据需要灵活组合，增大镗头与孔壁间的空隙，改善切屑的排出性。

特点 2:

**满足同轴度的要求**  
标准对应反镗加工

在镗背面的孔时，往往需要将工件反装。这样不仅浪费时间，而且很难保证前后孔的同轴度，EWN 精镗头只需将刀片座反装即可标准对应反镗加工，既能保证精度，又能提高生产效率。

( 用 1# 刀片座不能进行反镗加工。 )

正转    反转

特点 3:

**高信赖性进给螺丝**

最小可  
调刻度  
1 μm/

进给螺丝是精镗头的命脉，采用配对生产法，将螺丝与螺母间的齿隙限制在最小，获得最高的信赖性。

因进给螺纹牙距极细小进给到底时或套管轴固定螺丝未放松时绝不能再进刀，否则会破坏进给螺纹。

高精度进给螺丝    调节直径时，轴向尺寸无变化。

· EWN 150 精镗头 (大孔径用) EWN 150 FINE BORING HEAD

特点 1:

**重视操作性**  
只需 T 型扳手 1 把，方便，迅速

特点 2: 加工范围： 150 - 880

加工范围增大  
通过交换刀片座，  
增大加工范围

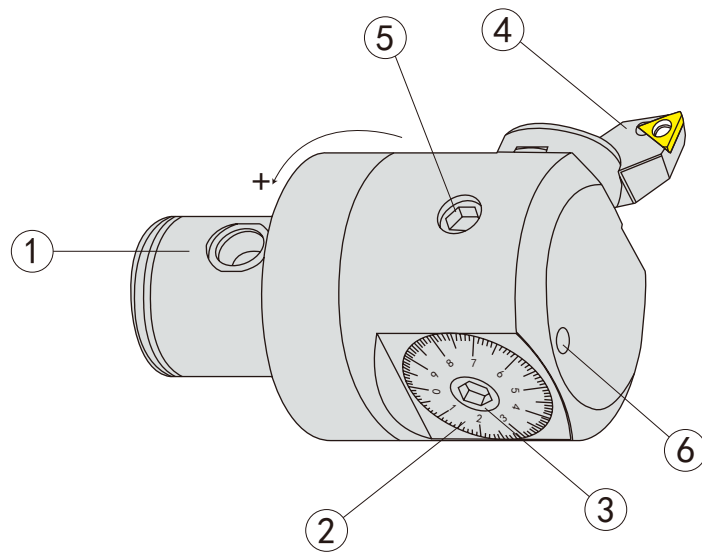
ENH6-1    ENH6-2    ENH6-3  
+26/    +50/

**对应反镗加工**  
只要将刀片座反装，就可以进行反镗。  
( 用 1# 刀片座不能进行反镗加工 )

反转

## · EWN 产品主要部位名称 THE NAME OF THE MAIN PART OF PRODUCTS WITH EWN

- ① EWN shank  
EWN 柄部
- ② Micro adjusting knob  
微调旋钮
- ③ EWN body  
EWN 头部
- ④ Insert holder  
刀片座
- ⑤ Lock screw  
固定螺丝
- ⑥ Oil inlet  
注油口



## 使用顺序 /Sequence of Use

请参照图示，按下列顺序 1-5 顺序操作：

- 步骤一：松开固定螺丝。
- 步骤二：按顺时针方向旋转调旋钮，使加工直径增大，调整旋钮刻度为 0.01mm。
- 步骤三：按逆时针方向旋转旋钮，使加工直径减小。
- 步骤四：调整尺寸加工时，请按同方向微调，以确保微调精度。
- 步骤五：微调至所需尺寸时，请以适当扭力锁紧固定螺丝。

Please operate the following step(1-5)according to the diagram figured:

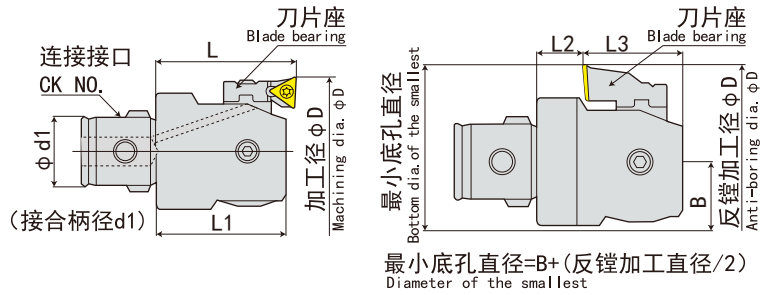
- Step1.Loosening the fixed screws.
- Step2.Rotating tune knob by clockwise to increase the processing diameter,the graduate is 0.01mm.
- Step3.Rotating by anti-clockwise will decrease the processing diameter.
- Step4.When adjusting the size of processing,please fine-tuning by the same direction to ensure mirco adjustment Precision.
- Step5.When meet the demanded size,please use the proper force to lock the fasten screws.

## 使用者注意事项 /Notices of The User

- 1. 请使用在加工范围内。
- 2. 当滑座在已锁紧状态下，请勿旋转调整旋钮，否则会导致调整机构被破坏。
- 3. 滑座之固定，请使用专用扳手，以适当扭力来确保锁紧固定螺丝。过度锁紧会导致座体移位，过松会造成精度不良。
- 4. 本产品是由精密螺丝、移动刀片座旋转调整旋钮，在阻力很大或无法转动时，请停止调整，并确认以下事项：  
固定螺丝是否松开。  
是否超出调整范围。  
当过度旋转调整旋钮时，会导致刀杆和本体卡死，镗头精度被破坏。
- 5. 在使用本产品前，应先加入润滑脂；使用后，应将表面清理干净，浸入防锈油，以免长时间放置后生锈。

- 1Using in the processing range.
- 2Do not rotate the adjustment knob when the slide is tightly locked,or the adjusting mechanism will be destroyed.
- 3Please use special wrench to fix the screw with proper torque force to fix the guide shaft.Too much locking will be screw stem shift, on the contrary,there will be accuracy of non-performing.
- 4Our products use micro screws,mobile slide to rotate the adjustment knob. You should make sure the following notices and adjusting with great resistance or it can not move:  
Whether the fixed screw is loosened.  
Whether it is out of the adjustment range.  
Too much force will make cutting tools dead and the precision of boring head destroyed.
- 5Lubrication grease shall be applied befor working; Please clean it after working and dip it in antirust oil in case of rust.

· EWN 微调精密镗头 EWN SMALL DIAMETER FINE BORING HEAD



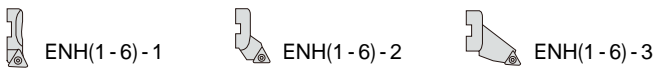
最小底孔直径=B+(反镗加工直径/2)  
Diameter of the smallest

规格 / 型号 Model	连接接口 CK.NO	d1	刀片座 Blade bearing	正镗 Boring			反镗 Counter boring			适配刀片 Insert	螺丝 Screw	扳手 Wrench	重量 KGS	
				镗孔范围 Boring Range D	L	L1	镗孔范围 Boring Range D	L2	L3					B
EWN20-36-CK1	CK1	11	ENH1-1	20-26	32.5	29.5	-	10.5	19	10			0.07	
			ENH1-2	25-31			30-31							
			ENH1-3	30-36			30-36							
EWN25-47-CK2	CK2	14	ENH2-1	25-33	36.5	32.5	-	11.5	21	12.5	TPGH0802	M2.2*5	T6	0.12
			ENH2-2	32-40			36-40							
			ENH2-3	39-47			39-47							
EWN32-60-CK3	CK3	18	ENH3-1	32-42	42.5	35	-	10	25	16			0.21	
			ENH3-2	41-51			46-51							
			ENH3-3	50-60			50-60							
EWN41-74-CK4	CK4	22	ENH4-1	41-54	51.5	43	-	14	29	20			0.4	
			ENH4-2	50-63			53-63							
			ENH4-3	61-74			61-74							
EWN53-95-CK5	CK5	28	ENH5-1	53-70	59.5	53	-	19	34	25.5	TCGT110204	M2.5*6	T8	1.1
			ENH5-2	65-82			65-82							
			ENH5-3	78-95			78-95							
EWN68-150-CK6	CK6	36	ENH6-1	68-100	70	67.2	80-100	22	45.2	32.5			1.74	
			ENH6-2	94-126			90-126							
			ENH6-3	118-150			118-150							
EWN100-203-CK6	CK6	36	ENH6-1	100-153	71	67.2	112-153			45.5			2.46	
			ENH6-2	126-179			126-179							
			ENH6-3	150-203			150-203							

规格说明:



· EWN-ENH 刀片座 EWN-ENH INSERT HOLDER



备注:

刀片座不附带刀片, 请另行订购。

规格 / 型号 Model	镗孔范围 Boring Range	适配刀片 Insert	螺丝 Screw	扳手 Wrench	对应镗头 Boring head	规格 / 型号 Model	镗孔范围 Boring Range	适配刀片 Insert	螺丝 Screw	扳手 Wrench	对应镗头 Boring head
ENH1-1	20-26	TPGH0802	M2.2*5	T6	EWN20-36-CK1	ENH4-1	41-54	TCGT110204	M2.5*6	T8	EWN41-74-CK4
ENH1-2	25-31					ENH4-2	50-63				
ENH1-3	30-36					ENH4-3	61-74				
ENH2-1	25-33	TPGH0802	M2.2*5	T6	EWN25-47-CK2	ENH5-1	53-70	TCGT110204	M2.5*6	T8	EWN53-95-CK5
ENH2-2	32-40					ENH5-2	65-82				
ENH2-3	39-47					ENH5-3	78-95				
ENH3-1	32-42	TPGH0802	M2.2*5	T6	EWN32-60-CK3	ENH6-1	68-100	TCGT110204	M2.5*6	T8	EWN68-150-CK6 EWN100-203-CK6
ENH3-2	41-51					ENH6-2	94-126				
ENH3-3	50-60					ENH6-3	118-150				

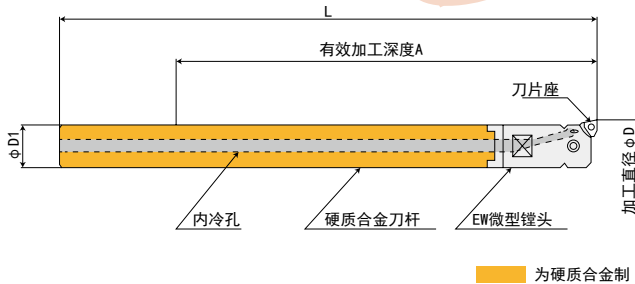


· 硬质合金刀杆 EW 微型精镗头 加工范围 15 - 22

高信赖性、最小刻度 0.01mm/φ 的精密调整机构微型化

仅有微量的偏心、对应高速加工  
一体型硬质合金刀杆、高刚性

硬质合金



型号说明

ST14 W EW 15 110L  
 直柄直径 | 硬质合金 | 精镗头 | 最小加工直径 | 有效加工深度

规格 / 型号 Model	D1	加工直径 D	L	A	刀片座	适用刀片	适用刀片固定螺丝组合
ST14W-EW15-110L	14	15-18	151	110	EN15	WC02	S2S-B
-140L			181	140			
ST16W-EW18-100L	16	18-22	144	100			
-160L			204	160			

硬质合金刀杆与微型镗头是一体的，不能单独销售。  
不附带刀片，请另外订购。

**⚠ 请注意** 根据工件材质的不同，加工深度有可能不能达到 [有效加工深度]

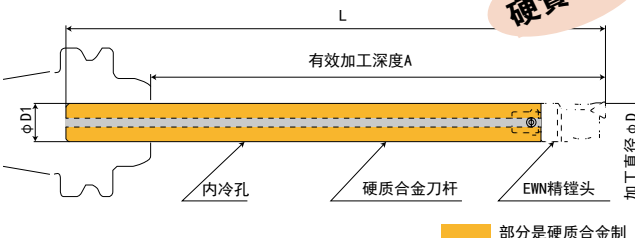
· CK 硬质合金直杆刀柄 加工范围 20 - 60

利用硬质合金将不可能变成可能

利用硬质合金刀杆，深孔加工的难题迎刃而解

中心内冷

硬质合金



型号说明

ST19 W CK1 130L  
 直杆刀柄 | 硬质合金 | CK NO. | 有效加工深度

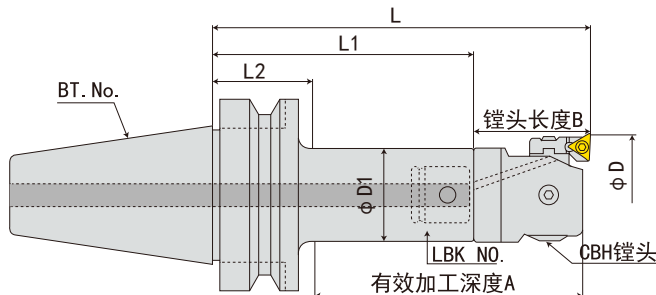
规格 / 型号 Model	D1	加工范围 D	L	A	适用精镗头
ST19W-CK1-130L	19	20-36	172.5	130	EWN20-36-CK1
-180L			222.5	180	
-230L			272.5	230	
ST24W-CK2-150L	24	25-47	195.5	150	EWN25-47-CK2
-210L			255.5	210	
-280L			325.5	280	
ST31W-CK3-160L	31	32-60	240	160	EWN32-60-CK3
-240L			320	240	
-310L			390	310	

不附带 EWN 精镗头

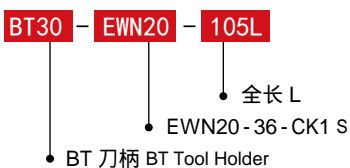
**⚠ 请注意** 根据工件材质的不同，加工深度有可能不能达到 [有效加工深度]

孔加工工具  
HOLE MAKING TOOLS

· BT30/40-EWN 微调精密镗头 BT30/40-EWN SMALL DIAMETER FINE BORING HEAD



规格 / 型号 Model	组合内容 Tool Connection		连接 接口	全长 L	刀柄长 L1	L2	镗头 长度 B	刀柄 外径 D1	镗孔范围 Boring Range D	有效 深度 A	重量 KGS		
	CK 刀柄 CK Shank	EWN 镗头 Boring head											
BT30-EWN20-87.5L	BT30-LBK1-55L	EWN20-36CKB1	LBK1	87.5	55	22	32.5	19	20-36	65.5	0.77		
-102.5L	-70L			102.5	70							80.5	0.77
BT30-EWN25-116.5L	BT30-LBK2-80L	EWN25-47CKB2	LBK2	116.5	80	22	36.5	24	25-47	94.5	0.92		
BT30-EWN32-122.5L	BT30-LBK3-80L	EWN32-60CKB3	LBK3	122.5	80							42.5	31
BT30-EWN41-121.5L	BT30-LBK4-70L	EWN41-74CKB4	LBK4	121.5	70	22	51.5	39	41-74	99.5	1.4		
BT30-EWN53-119.5L	BT30-LBK5-60L	EWN53-95CKB5	LBK5	119.5	60							59.5	50
BT30-EWN68-130L	BT30-LBK6-60L	EWN68-105CKB6	LBK6	130	60	22	70	63	68-150	108	2.94		
BT40-EWN20-107.5L	BT40-LBK1-75L	EWN20-36CKB1	LBK1	107.5	75							32.5	19
-137.5L	-105L			137.5	105	110.5	1.27						
BT40-EWN25-121.5L	BT40-LBK2-85L	EWN25-47CKB2	LBK2	121.5	85	27	36.5	24	25-47	94.5	1.32		
-151.5L	-115L			151.5	115							124.5	1.42
-201.5L	-165L			201.5	165							174.5	1.52
-236.5L	-200L			236.5	200							209.5	1.67
BT40-EWN32-137.5L	BT40-LBK3-95L	EWN32-60CKB3	LBK3	137.5	95	27	42.5	31	32-60	110.5	1.51		
-167.5L	-125L			167.5	125							140.5	1.41
-197.5L	-155L			197.5	155							170.5	1.81
-227.5L	-185L			227.5	185							200.5	1.91
BT40-EWN41-136.5L	BT40-LBK4-85L	EWN41-74CKB4	LBK4	136.5	85	27	51.5	39	41-74	109.5	1.85		
-181.5L	-130L			181.5	130							154.5	1.9
-226.5L	-175L			226.5	175							199.5	2.5
-256.5L	-205L			256.5	205							229.5	2.6
BT40-EWN53-134.5L	BT40-LBK5-75L	EWN53-95CKB5	LBK5	134.5	75	27	59.5	50	53-95	107.5	2.8		
-184.5L	-125L			184.5	125							157.5	3.05
-234.5L	-175L			234.5	175							207.5	4.1
-264.5L	-205L			264.5	205							237.5	4.3
BT40-EWN68-135L	BT40-LBK6-65L	EWN68-150CKB6	LBK6	135	65	27	70	63	68-150	108	3.89		
-185L	-115L			185	115							158	5.24
-235L	-165L			235	165							208	5.59
-275L	-205L			275	205							248	5.85
-320L	-250L			320	250							293	6.14
-370L	-300L			370	300							343	6.44
BT40-EWN100-136L	BT40-LBK6-65L	EWN100-203CKB6	LBK6	136	65	27	71	63	100-203	109	4.61		
-186L	-115L			186	115							159	5.96
-236L	-165L			236	165							209	6.31
-276L	-205L			276	205							249	6.56
-321L	-250L			321	250							294	6.86
-371L	-300L			371	300							344	7.16



孔加工工具  
HOLE MAKING TOOLS

· BT30/40 - EWN 微调精密镗头 BT30/40 - EWN SMALL DIAMETER FINE BORING HEAD

规格 / 型号 Model	组合内容 Tool Connection		连接 接口	全长 L	刀柄长 L1	L2	镗头 长度 B	刀柄 外径 D1	镗孔范围 Boring Range D	有效 深度 A	重量 KGS
	CK 刀柄 CK Shank	EWN 镗头 Boring head									
BT50-EWN20 -122.5L	BT50-LBK1-90L	EWN20-36CKB1	LBK1	122.5	90	38	32.5	19	20-36	84.5	3.77
				-147.5L	-115L					109.5	3.97
				-177.5L	-145L					139.5	4.47
				-207.5L	-175L					169.5	4.57
				-237.5L	-205L					199.5	5.07
BT50-EWN25 -126.5L	BT50-LBK2-90L	EWN25-47CKB2	LBK2	126.5	90	38	36.5	24	25-47	88.5	3.8
				-146.5L	-110L					108.5	4
				-176.5L	-140L					138.5	4.3
				-211.5L	-175L					173.5	4.6
				-241.5L	-205L					203.5	4.9
BT50-EWN32 -132.5L	BT50-LBK3-90L	EWN32-60CKB3	LBK3	132.5	90	38	42.5	31	32-60	94.5	4.61
				-167.5L	-125L					129.5	4.91
				-197.5L	-155L					159.5	5.01
				-227.5L	-185L					189.5	5.21
				-257.5L	-215L					219.5	5.41
BT50-EWN41 -141.5L	BT50-LBK4-90L	EWN41-74CKB4	LBK4	141.5	90	38	51.5	39	41-74	103.5	5
				-166.5L	-115L					128.5	5.2
				-196.5L	-145L					158.5	5.6
				-226.5L	-175L					188.5	5
				-256.5L	-205L					218.5	5.25
				-301.5L	-250L					263.5	5.6
				-351.5L	-300L					313.5	5.9
				-401.5L	-350L					363.5	6.2
BT50-EWN53 -154.5L	BT50-LBK5-95L	EWN53-95CKB5	LBK5	154.5	95	38	59.5	50	53-95	116.5	6.5
				-164.5L	-105L					126.5	6.6
				-209.5L	-150L					171.5	7.1
				-239.5L	-180L					201.5	7.3
				-299.5L	-240L					261.5	7.5
				-329.5L	-270L					291.5	7.8
				-359.5L	-300L					321.5	8.1
				-409.5L	-350L					371.5	8.4
BT50-EWN68 -160L	BT50-LBK6-90L	EWN68-150-CKB6	LBK6	160	90	38	70	63	68-150	122	7.64
				-175L	-105L					136	7.84
				-220L	-150L					182	8.04
				-240L	-170L					202	8.24
				-250L	-180L					212	8.44
				-300L	-230L					262	9.19
				-340L	-270L					302	9.94
				-370L	-300L					332	11.24
				-420L	-350L					382	12.54
				-470L	-400L					432	13.54
				-520L	-450L					482	14.54
				-570L	-500L					532	15.54
BT50-EWN100 -161L	BT50-LBK6-90L	EWN100-203-CKB6	LBK6	161	90	38	71	63	100-153	123	8.36
				-176L	-105L					137	8.56
				-221L	-150L					183	8.74
				-241L	-170L					203	8.96
				-251L	-180L					213	9.16
				-301L	-230L					263	9.91
				-341L	-270L					303	10.66
				-371L	-300L					333	11.96
				-421L	-350L					383	13.26
				-471L	-400L					433	14.26
				-521L	-450L					483	15.26
				-571L	-500L					533	16.26

BT30 - EWN20 - 105L

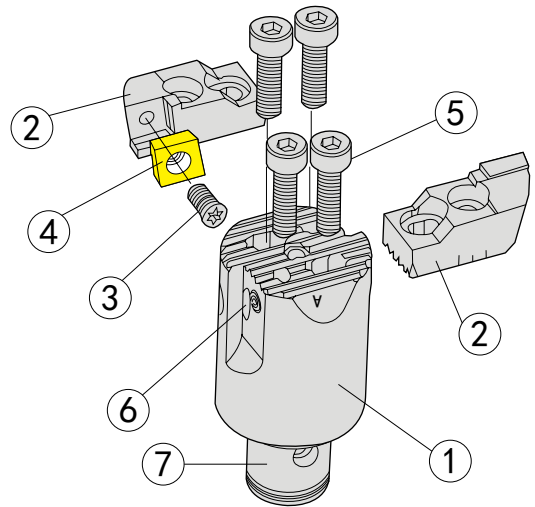


孔加工工具  
HOLE MAKING TOOLS

## RBC 新型带齿双刃粗镗刀头及段差型粗镗头使用说明

RBC LNSTRUCTIONS OF TWIN -CUTTER ROUGH BORING HEAD AND STEPPED ROUGH BORING METHOD

- ① Boring body  
镗头本体
- ② Insert holder  
刀片座
- ③ Insert screw  
刀片螺丝
- ④ Insert  
刀片
- ⑤ Lock screw  
锁紧螺丝
- ⑥ Adjusting screw  
调整螺丝
- ⑦ LBK - Interface  
LBK 连接接口

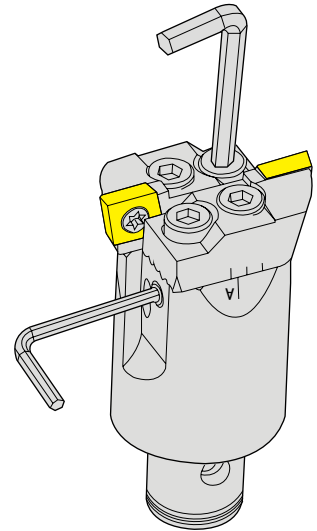


### 使用顺序 / Sequence of Use

请参照右图，按下列顺序 1 - 4 顺序操作：

- 步骤一：松开刀片座上固定螺丝。
- 步骤二：从侧面旋转调整螺丝，推动刀片座到预定加工尺寸。
- 步骤三：锁紧刀片座上固定螺丝。
- 步骤四：适当扭力旋转调整螺丝，以避免切削时松脱影响加工。

- Please operate the following step(1 - 4)according to the diagram figured;
- Step1.Loosening the fixed screws on the blade bearing.
  - Step2.Rotating and adjusting the side screws to move the blade bearing to an scheduled processing dimension.
  - Step3.Locking the fixed screws on the blade bearing.
  - Step4.Using proper force to rotate and adjust the screws to avoid the screw loose during cutting.

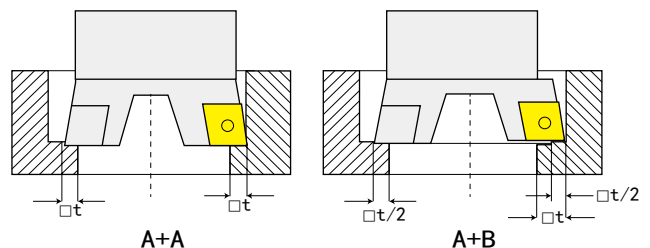


### 使用者注意事项 / Notices of The User

- 1. 平刃式切削加工，A、B 两刃等高等径切削，此时切削进给为单刃切削的两倍。适用于切削量少时或铸铁、铝、铜等易切削材质使用。
- 2. 高低刃切削加工，A、B 两刃不等高，不等径切削，此时切削进给与单刃切削相同。适用于切除量多或难切削材质如铜材等。
  - a. 当 A、B 刀片座互相调换边即形成高低刃，即 A 刀片座对 B 接合面，B 刀片座对 A 接合面。
  - b. 切削量调整 ( t ) 须注意高刃与低刃须均等。以平衡作用于两边之切削反作用相同，防止共振发生，避免单刃受力过大而损坏。

1 During plain - blade cutting processing,i.e. equal height and dimension of A and B blade,the cutting feed is twice of single blade cutting.This method is suitable for cutting less output or easy cutting material such as cast iron,aluminum,or copper,etc.

2 During high - low cutting processing,i.e.unequal height of A and B blade, the cutting feed is same with single blade cutting.This method is suitable for cutting more output or hard cutting material such as steel,etc.



- a. When A and B blade bearing be mutual exchanged side to form high - low blade,i.e. A blade bearing to match B matching face,B blade bearing to math A matching face.
- b. Be careful that the adjusted cutting output of high blade and low blade should be same.in that case the two sides cutting and counteractive will be balanced to prevent of resonance and damage from excessive force on single blade.

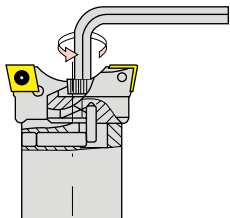


## · RBC 新型带齿双刃粗镗刀头及段差型粗镗头使用说明

RBC LNSTRUCTIONS OF TWIN-CUTTER ROUGH BORING HEAD AND STEPPED ROUGH BORING METHOD

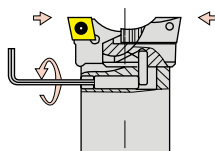
## 双刃等高调节方法

1 松开2颗锁紧螺丝

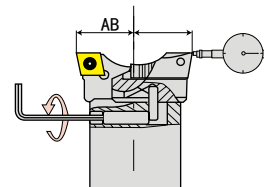


2

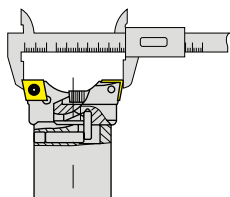
寸小约2mm, 稍微拧紧2颗锁紧



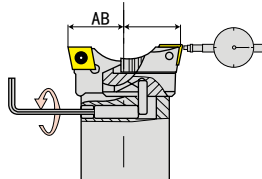
3 旋转调节螺丝, 使A、B尺寸在 ±0.05之内。



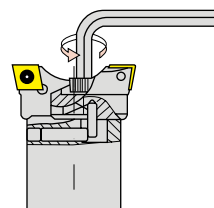
4 测量当前尺寸, 计算刀片座调节量。



5 旋转调节螺丝至要加工尺寸并使 A、B尺寸之差在 ±0.05之内。



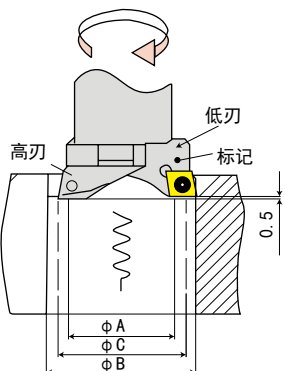
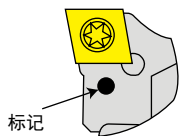
6 拧紧2颗锁紧螺丝。



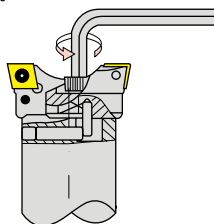
## 段差加工调节方法

高刃加工直径计算方法:

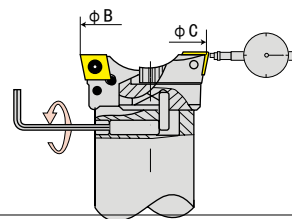
$$\phi C = (\text{加工前直径 } \phi A + \text{加工直径 } \phi B) / 2$$



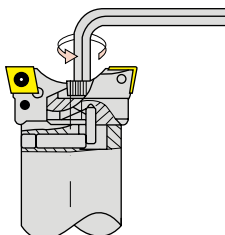
1 松开两颗锁紧螺丝, 再略微拧紧。



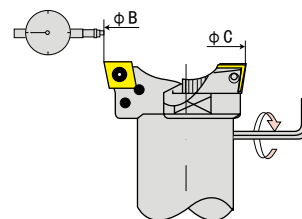
2 旋转调节螺丝推动刀片座, 观察刻度线, 将高刃调至 \phi C 尺寸, 低刃略小于 B 尺寸



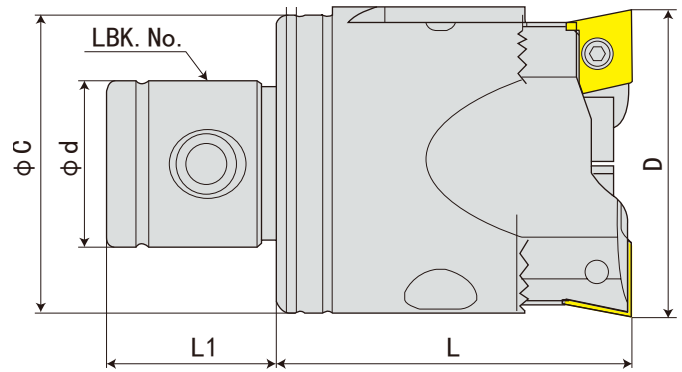
3 拧紧两颗锁紧螺丝。



4 试切, 看尺寸再调节低刃。



· RBC 带齿可调式双刃粗镗头 RBC INDEXABLE TWIN-BIT ROUGH BORING HEAD



镗头型号 Boring Head Type	接合型号 LBK No.	镗孔范围 Dmm Boring Range	L mm	C mm	d mm	L1 mm	刀片规格 Insert	重量 Kg Weight
RBC20 -25 -LBK1 -C	LBK1	20~25	30	19	11	13	CCMT060204	0.12
RBC25 -35 -LBK2 -C	LBK2	25~35	35	24	14	16	CCMT060204	0.15
RBC32 -45 -LBK3 -C	LBK3	32~45	45	31	18	20	CCMT060204	0.3
-LBK3 -T							TCMT110204	
RBC40 -55 -LBK4 -C	LBK4	40~55	54	39	22	24	CCMT09T304	0.6
-LBK4 -T							TCMT16T304	
-LBK4 -S							SCMT09T304	
RBC52 -75 -LBK5 -C	LBK5	52~75	64	50	28	30	CCMT09T304	1
-LBK5 -T							TCMT220408	
-LBK5 -S							SCMT09T304	
RBC68 -92 -LBK6 -C	LBK6	68~92	75	68	36	40	CCMT120408	2.5
-LBK6 -T							TCMT16T304	
-LBK6 -S							SCMT120404	
RBC90 -122 -LBK6 -C	LBK6	90~122	100	88	36	40	CCMT120408	3.1
-LBK6 -T							TCMT16T304	
-LBK6 -S							SCMT120404	
RBC100 -122 -LBK7A -C	LBK7	100~122	100	88	36	40	CCMT120408	3.8
-LBK7A -T							TCMT220408	
-LBK7A -S							SCMT120404	
RBC120 -164AC	LBK7 BST	120~164	95	100	58	50	CCMT120408	4.7
RBC120 -164AT							TCMT220408	
RBC120 -164AS							SCMT120404	
RBC160 -204AC	LBK7 BST	160~204	95	130	58	50	CCMT120408	5.6
RBC160 -204AT							TCMT220408	
RBC160 -204AS							SCMT120404	

特点:

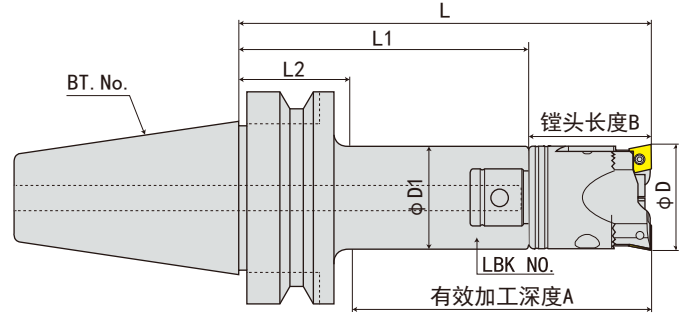
注:

- 刀片支持座采用排齿式设计, 刚性增强适合重切削。
- 内藏式水孔, 直接冷却, 刀片寿命长。
- 排屑槽设计, 增加深孔排屑功能。
- 连接压板使刀头与刀座一体, 增加切削刚性。

Features:

- The blade support base adopts the tooth arrangement sign, and the rigidity enhancement is suitable for heavy cutting.
- Coolant nozzle easily cools the insert, elongating its working life.
- The design of chip pocket, improving chip flow of deep boring.
- Clamp plate solidifies cartridges and head, upgrading cutting rigidity.
- Patented step boring design; suitable for both level boring and step boring

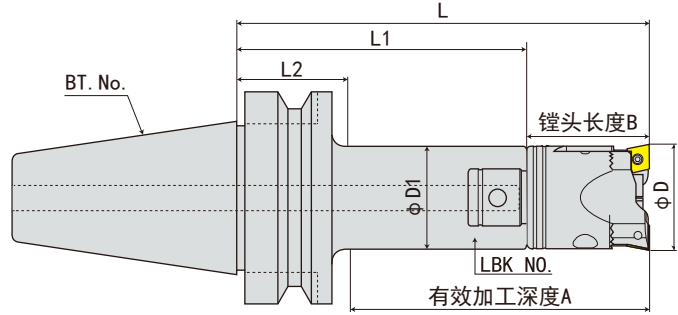
· RBC 带齿可调式双刃粗镗头 +LBK 刀柄 RBC INDEXABLE TWIN-BIT ROUGH BORING HEAD+LBK SHANK



规格 / 型号 Model	LBK 刀柄 LBK Shank	RBC 镗头	镗孔范围 Boring Range	有效 加工 深度 A	接合 型号 LBK No.	全长 L	刀杆长 L1	L2	镗头 长度 B	刀杆 外径 D1	重量 KG			
BT30-RBC20 -C -85L -100L	BT30-LBK1 -55L -70L	RBC20-25-LBK1-C	20-25	63 78	LBK1	85 100	55 70	22	30	19	0.85			
BT30-RBC25 -C -115L	-LBK2-80L	RBC25-35-LBK2-C	25-35	93	LBK2	115	80					35	24	0.95
BT30-RBC32 -C -125L	-LBK3-80L	RBC32-45-LBK3-C	32-45	93	LBK3	125	80					45	31	1.2
BT30-RBC40 -C -124L	-LBK4-70L	RBC40-55-LBK4-C	40-55	102	LBK4	124	70					54	39	1.6
BT30-RBC52 -C -124L	-LBK5-60L	RBC52-75-LBK5-C	52-75	102	LBK5	124	60					64	50	2.1
BT30-RBC68 -C -135L	-LBK6-60L	RBC68-92-LBK6-C	68-92	113	LBK6	135	60					75	63	6.2
BT40-RBC20 -C -105L -135L	BT40-LBK1-75L -105L	RBC20-25-LBK1-C	20-25	78 108	LBK1	105 135	75 105	27	30	19	1.12			
BT40-RBC25 -C -120L -150L -200L -235L	BT40-LBK2-85L -115L -165L -200L	RBC25-35-LBK2-C	25-35	93 123 173 208	LBK2	120 150 200 235	85 115 165 200				35	24	1.32	
BT40-RBC32 -C -140L -170L -200L -230L -205L	BT40-LBK3-95L -125L -155L -185L -205L	RBC32-45-LBK3-C	32-45	113 143 173 203 223	LBK3	140 170 200 230 250	95 125 155 185 205				45	31	1.35	
BT40-RBC40 -C -139L -184L -229L -259L -304L -354L	BT40-LBK4-85L -130L -175L -205L -250L -300L	RBC40-55-LBK4-C	40-55	112 157 202 232 277 327	LBK4	139 184 229 259 304 354	85 130 175 205 250 300				54	39	1.45	
BT40-RBC52 -C -139L -189L -175L -205L -250L	BT40-LBK5-75L -125L -175L -205L -250L	RBC52-75-LBK5-C	52-75	112 162 212 242 287	LBK5	139 189 239 269 314	75 125 175 205 250				64	50	1.5	
BT40-RBC68 -C -140L -190L -240L -280L -325L -375L	BT40-LBK6-65L -115L -165L -205L -250L -300L	RBC68-92-LBK6-C	68-92	113 163 213 253 298 348	LBK6	140 190 240 280 325 375	65 115 165 205 250 300				75	63	2.1	
BT40-RBC90 -C -165L -215L -265L -305L -350L -400L	BT40-LBK6-65L -115L -165L -205L -250L -300L	RBC90-122-LBK6-C	90-122	138 188 238 278 323 373	LBK6	165 215 265 305 350 400	65 115 165 205 250 300	100	63	2.3				
BT40-RBC120AC -195L -245L -295L -345L -395L	BT40-BST-100L -150L -200L -250L -300L	RBC120-164AC	120-164	168 218 268 318 368	BST	195 245 295 345 395	100 150 200 250 300	95	95	2.4				
BT40-RBC160AC -195L -245L -295L -345L -395L	BT40-BST-100L -150L -200L -250L -300L	RBC160-204AC	160-204	168 218 268 318 368	BST	195 245 295 345 395	100 150 200 250 300	95	95	2.7				

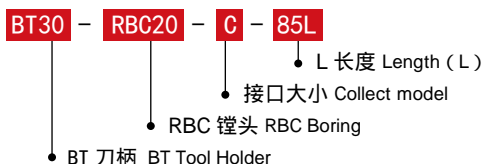
孔加工工具  
HOLE MAKING TOOLS

RBC 带齿可调式双刃粗镗头 +LBK 刀柄 RBC INDEXABLE TWIN-BIT ROUGH BORING HEAD+LBK SHANK



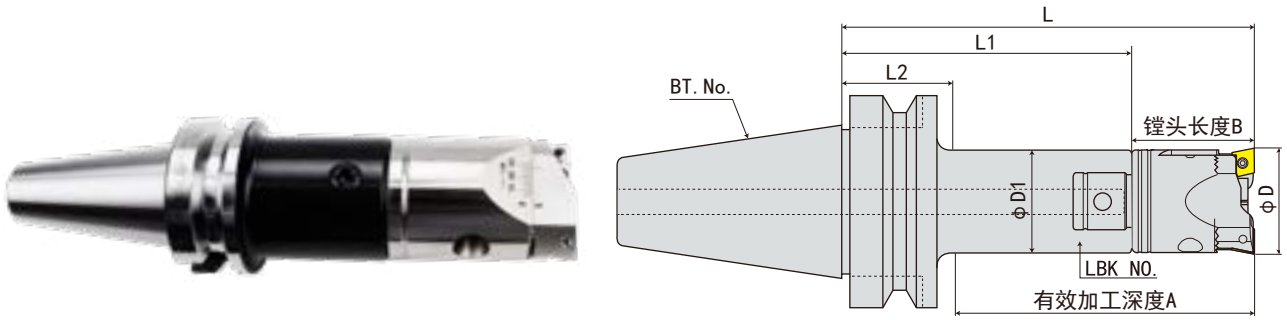
规格 / 型号 Model	LBK 刀柄 LBK Shank	RBC 镗头	镗孔范围 Boring Range	有效加工 深度 A	接合型号 LBK No.	全长 L	刀杆长 L1	L2	镗头 长度 B	刀杆 外径 D1	重量 KG				
BT50-RBC20-C-120L	BT50-LBK1-90L	RBC20-25-LBK1-C	20-25	82	LBK1	120	90	38	30	19	3.82				
-145L	-115L			107		145	115				4.02				
-175L	-145L			137		175	145				4.52				
-205L	-175L			167		205	175				4.62				
-235L	-205L			197		235	205				5.12				
BT50-RBC25-C-125L	BT50-LBK2-90L			RBC25-35-LBK2-C		25-35	87				LBK2	125	90	35	24
-145L	-110L	107	145		110		4								
-175L	-140L	137	175		140		4.3								
-210L	-175L	172	210		175		4.6								
-240L	-205L	202	240		205		4.9								
BT50-RBC32-C-135L	BT50-LBK3-90L	RBC32-45-LBK3-C	32-45		97		LBK3	135	90	45		31	4.7		
-170L	-125L			132	170	125		4.8							
-200L	-155L			162	200	155		4.9							
-230L	-185L			192	230	185		5.1							
-260L	-215L			222	260	215		5.3							
BT50-RBC40-C-144L	BT50-LBK4-90L			RBC40-55-LBK4-C	40-55	106		LBK4	144		90		54	39	5.2
-169L	-115L	131	169			115	5.4								
-199L	-145L	161	199			145	5.9								
-229L	-175L	191	229			175	5.2								
-259L	-205L	221	259			205	5.15								
-304L	-250L	266	304			250	5.8								
-354L	-300L	316	354			300	6.1								
-404L	-350L	366	404			350	6.4								
BT50-RBC52-C-159L	BT50-LBK5-95L	RBC52-75-LBK5-C	52-75			121	LBK5		159	95	64	50			6.4
-169L	-105L					131			169	105					6.5
-214L	-150L			176	214	150		7							
-244L	-180L			206	244	180		7.2							
-304L	-240L			266	304	240		7.4							
-334L	-270L			296	334	270		7.7							
-364L	-300L			326	364	300		8							
-414L	-350L			376	414	350		8.3							
BT50-RBC68-C-165L	BT50-LBK6-90L			RBC68-92-LBK6-C	68-92	127		LBK6	165	90			75	63	8.4
-180L	-105L					142			180	105					8.6
-225L	-150L	187	225			150	8.8								
-245L	-170L	207	245			170	9								
-255L	-180L	217	255			180	9.2								
-305L	-230L	267	305			230	9.95								
-345L	-270L	307	345			270	10.7								
-375L	-300L	337	375			300	12								
-425L	-350L	387	425			350	13.3								
-475L	-400L	437	475			400	14.3								
-525L	-450L	487	525			450	15.3								
-575L	-500L	537	575			500	16.3								

规格说明:



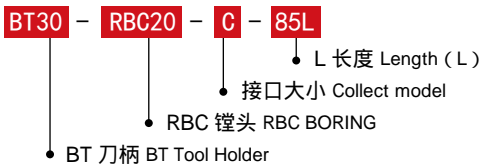


· RBC 带齿可调式双刃粗镗头 +LBK 刀柄 RBC INDEXABLE TWIN-BIT ROUGH BORING HEAD+LBK SHANK



规格 / 型号 Model	LBK 刀柄 LBK Shank	RBC 镗头	镗孔范围 Boring Range	有效加工 深度 A	接合型号 LBK No.	全长 L	刀杆长 L1	L2	镗头 长度 B	刀杆 外径 D1	重量 KG						
BT50-RBC90 -C -190L	BT50-LBK6-90L	RBC90-122-LBK6-C	90-122	152		190	90		100		9						
-205L	-105L			167		205	105				9.2						
-250L	-150L			212		250	150				9.4						
-270L	-170L			232		270	170				9.6						
-280L	-180L			242		280	180				9.8						
-330L	-230L			292		330	230				10.55						
-370L	-270L			332		370	270				11.3						
-400L	-300L			362		400	300				12.6						
-450L	-350L			412		450	350				13.9						
-500L	-400L			462		500	400				14.9						
-550L	-450L			512		550	450				15.9						
-600L	-500L			562		600	500				16.9						
BT50-RBC120AC-195L	BT50-BST-100L			RBC120-164AC		120-164	157				BST	195	100		95	95	9.8
-245L	-150L						207					245	150				11.55
-295L	-200L	257	295		200		13.8										
-345L	-250L	307	345		250		14.2										
-395L	-300L	357	395		300		18.1										
-445L	-350L	407	445		350		20.45										
-495L	-400L	457	495		400		23.9										
-545L	-450L	507	545		450		29.2										
-595L	-500L	557	595		500		29.2										
-645L	-550L	607	645		550												
-695L	-600L	657	695		600												
BT50-RBC160AC-195L	BT50-BST-100L	RBC160-204AC	160-204		157		BST	195	100			95	95				10.7
-245L	-150L				207			245	150								12.45
-295L	-200L				257			295	200								14.7
-345L	-250L			307	345	250		15.1									
-395L	-300L			357	395	300		19									
-445L	-350L			407	445	350		21.35									
-495L	-400L			457	495	400		24.8									
-545L	-450L			507	545	450		27.1									
-595L	-500L			557	595	500		30.1									
-645L	-550L			607	645	550											
-695L	-600L			657	695	600											

规格说明:



· 200 以上 RBC 组合式大径粗镗刀系列《镗孔范围 200- 1010mm》

RBC LARGE DIAMETER MODULAR ROUGH BORING HEAD WITH DIAMETER OVER 200MM 《BORING RANGE FROM 200- 1010MM》



镗头 型号 Boring Head Type	型号 Type		RBC200	RBC300	RBC400	RBC500	RBC600	RBC700	RBC800	RBC900
	长度 Length(mm)		115	115	115	115	98	98	98	98
	整组重量 Total Weight(kg)		9.2	10.1	11	11.9	17.3	18.3	19.3	20.8
	加工直径 Boring Diameter D(mm)		200-310	300-410	400-510	550-610	600-710	700-810	800-910	900-1010
组合 型式 Module	接合刀杆 Taper Shank		BT50/SK50/HSK100A - LBK7				BT50 - FMA - 47.625			
	连接盘 Flange		LBK7 FLN135 BST FLN135							
	重量 (Kg) Weight		2.76							
	横向梁 (铝合金) Transverse depth (aluminum alloy)		SLN200	SLN300	SLN400	SLN500	SLN600	SLN700	SLN800	SLN900
	重量 (Kg)Weight		1.44	2.3	3.2	4.1	9.5	10.5	11.5	13
	滑轨 Clamp Base		CB - TW200							
	重量 (Kg)Weight		1.8Kg							
	刀片座垫片 Height Setting Shim		TW201							
	重量 (Kg)Weight		0.05Kg							
刀片座 Insert Holder		TW200C - 12		TW200T - 16		TW200T - 22		TW200S - 12		
适合刀片 Applicable Insert		CCMT120404		TCMT16T304		TCMT220408		SCM120408		
重量 (Kg) Weight		0.72Kg								

特点:

注:

通用 200~ 1010mm 大型孔径加工使用。  
 粗、精镗刀使用同基础组件，且可另选配附件搭配使用。  
 粗搪刀，具有多种刀片选择，可通用于多种材料及加工方式。  
 可依客户需求订制 1M 以上规格。

Features:

This type is suitable for large diameter boring with ranges from 200mm to 1010mm.

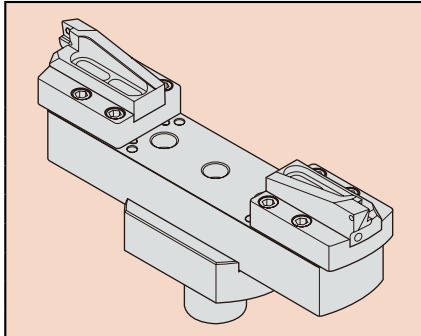
The structure includes common flange and extension slide for both rough and finish boring heads. It can be used in optional accessories for different works. Adjustment range is within 110mm on diameter.

Options of various inserts for rough boring to work on different materials and boring styles.

Boring head can be customized according to client's requirements above 1M specification.

- 200 以上 RBC 组合式大径双刃粗镗刀 +LBK 和 FMA47.625 刀柄 ( MAS 403 BT )  
RBC - INDEXABLE TWIN - BIT ROUGH BORING HEAD FOR LARGE HOLE BORING +LBKT SHANK (MAS 403 BT)

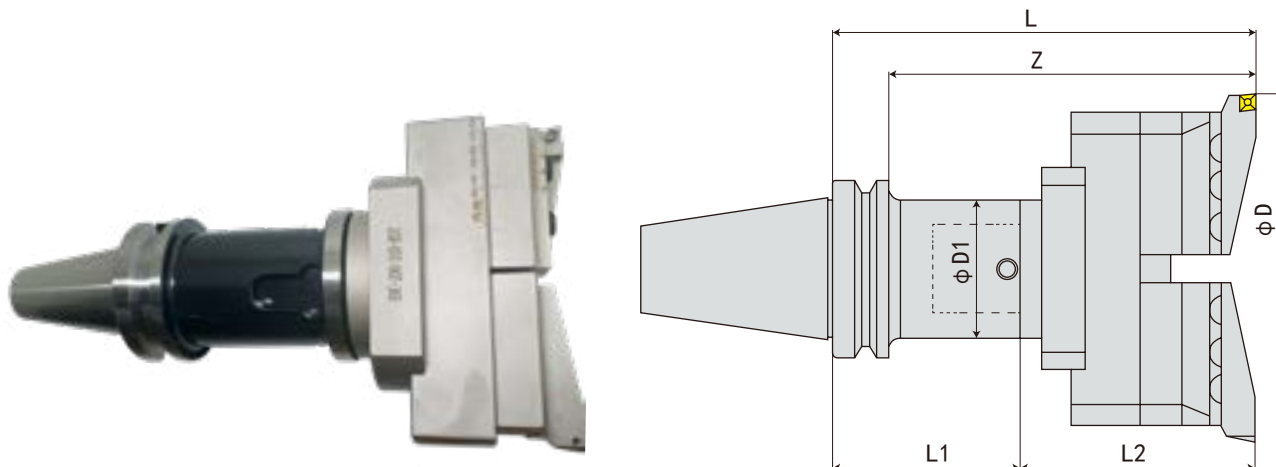
镗孔范围 200 - 1010mm Boring Range from 200 - 1010mm



镗头型号 Boring Head Type	接合型号 LBK No.	镗孔范围 D Boring Range	镗头长度 L2mm	刀片规格 Insert	重量 ( Kg ) Weight
RBC200	LBK7 BST	200 - 310	117	( 选配刀片座 ) Optional Inserts CCMT120408 TCMT16T304 TCMT220408 SCMT120404	7.24
RBC300		300 - 410			8.1
RBC400		400 - 510			9.2
RBC500		500 - 610			10.2
RBC600	FMA - 47.625	600 - 710	117		15.3
RBC700		700 - 810	16.3		
RBC800		800 - 910	17.3		
RBC900		900 - 1010	18.8		

· 200 以上 RBC 组合式大径双刃粗镗刀 +LBK 和 FMA47.625 刀柄 ( MAS 403 BT )  
 RBC - INDEXABLE TWIN - BIT ROUGH BORING HEAD FOR LARGE HOLE BORING +LBKT SHANK (MAS 403 BT)

镗孔范围 200 - 1010mm Boring Range from 200 - 1010mm



型号 Type	镗孔范围 D Boring Range	有效长 Z	组合内容 Tool Connection		接合型号 LBK No.	全长 L	刀杆长 L1	刀杆 外径 D1	重量 KGS
			BST 刀杆 BST Shank	RBC 镗头 RBC Boring Head					
BT50-RBC200-230	200-310		BT50-LBK7-100	RBC200	7	230	100	88	12
-280			-150			280	150		13.74
-330			-200			330	200		15.24
-380			-250			380	250		16.24
-430			-300			430	300		17.24
-480			-350			480	350		19.24
-530			-400			530	400		21.24
-580			-450			580	450		24.3
-630			-500			630	500		25.9
BT50-RBC300-230			300-410				BT50-LBK7-100		RBC300
-280	-150	280		150	14.6				
-330	-200	330		200	16.1				
-380	-250	380		250	17.1				
-430	-300	430		300	18.1				
-480	-350	480		350	20.1				
-530	-400	530		400	22.1				
-580	-450	580		450	23.2				
-630	-500	630		500	26.8				
BT50-RBC400-230	400-510			BT50-LBK7-100	RBC400		7	230	
-280			-150	280		150		15.5	
-330			-200	330		200		17	
-380			-250	380		250		18	
-430			-300	430		300		19	
-480			-350	480		350		21	
-530			-400	530		400		23	
-580			-450	580		450		26.1	
-630			-500	630		500		27.7	
BT50-RBC500-230			500-610			BT50-LBK7-100		RBC500	7
-280	-150	280			150	16.7			
-330	-200	330			200	18.2			
-380	-250	380			250	19.2			
-430	-300	430			300	20.2			
-480	-350	480			350	22.2			
-530	-400	530			400	23.6			
-580	-450	580			450	27.3			
-630	-500	630			500	28.6			
BT50-RBC600-190	600-710				BT50- FMA.47.625-75	RBC600	FMA47.625		
-RBC700-190	700-810		RBC700	23.6					
-RBC800-190	800-910		RBC800	24.6					
-RBC900-190	900-1010		RBC900	26.1					

 孔加工工具  
 HOLE MAKING TOOLS



· 200 以上 BMB 组合式大径微调精镗刀系列 《镗孔范围 200- 1010mm》  
BMB LARGE DIAMETER MODULAR FINIS BORING HEAD WITH DIAMETER OVER 200 《BORING RANGE FROM 200- 1010MM》



镗头 型号 Boring Head Type	型号 Type	BMB200	BMB300	BMB400	BMB500	BMB600	BMB700	BMB800	BMB900
	长度 Length(mm)	115	115	115	115	98	98	98	98
	整组重量 Total Weight(kg)	7	7.9	8.8	9.7	12.4	13.4	14.4	15.8
加工直径 Boring Diameter D(mm)		200-310	300-410	400-510	550-610	600-710	700-810	800-910	900-1010
组合 型式 Module	接合刀杆 Taper Shank	BT50/SK50/HSK100A-LBK7 BST				BT50-FMA-47.625			
	连接盘 Flange	LBK7 FLN135 BST FLN135 合金钢 Alloy Steel							
	重量 (Kg) Weight	2.76							
	横向梁 (铝合金) Transverse depth (aluminum alloy)	SLN200	SLN300	SLN400	SLN500	SLN600	SLN700	SLN800	SLN900
	重量 (Kg)Weight	1.44	2.3	3.2	4.1	9.5	10.5	11.5	13
	平衡块 Balance Base	BWN200							
	重量 (Kg)Weight	1.44Kg							
	微调单元 Finish Head	BMB200							
	重量 (Kg)Weight	1.44Kg							
	适合刀片 Applicable Insert	TC11/M2.5T/T8							

特点:

注:

- 通用 200~ 1010mm 大型孔径加工使用。
- 粗、精镗刀使用同基础组件，且可另选配附件搭配使用。
- 刀片座为可更换式。
- 可依客户需求订制 1M 以上规格。

Features:

- This type is suitable for large diameter boring with ranges from 200mm to 1010mm.
- The structure includes common flange and extension slide for both rough and finish boring heads. It can be used in optional accessories for different works. Adjustment range is within 110mm on diameter.
- Replaceable insert holders.
- Boring head can be customized according to client's requirements above 1M specification.

· 通过更换刀片座可扩大加工范围

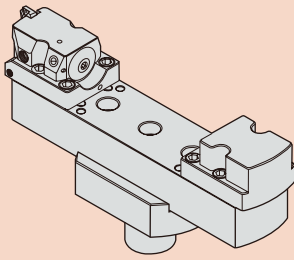
附件	另售品	
ENH7-1	ENH7-2	ENH7-3
对应刀片 TC11		

除以上型号外，也可使用 BMB 精镗头用刀片座（“沟槽加工用刀片座”等）



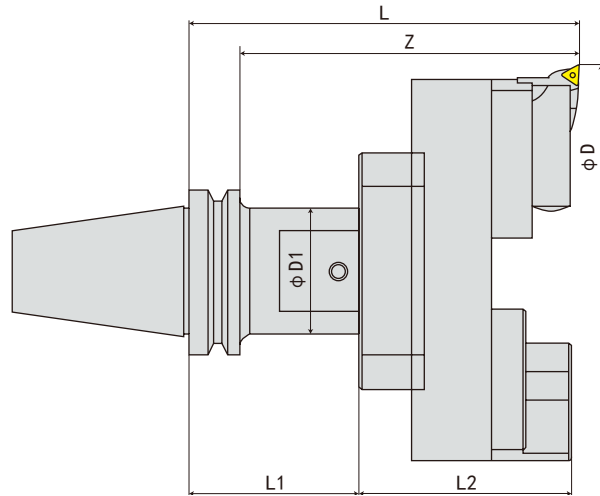
· 200mm 以上 BMB 大孔径微调精镗刀 +LBK 和 FMA47.625 刀柄 ( MAS 403 BT)  
 BMB LARGE DIAMETER MODULAR FINIS BORING HEAD +LBK/FMA(MAS 403 BT)

**镗孔范围** 200- 1010mm **Boring Range from** 200- 1010mm

	镗头型号	接合型号	镗孔范围 D	镗头长度	刀片规格	重量
	Boring Head Type	LBK No.	Boring Range	L2mm	Insert	KGS
	BMB200	LBK7 系列 LBK7 Series BST	200-310	115	可更换式刀片座 Replaceable insert holder	7
	BMB300		300-410			7.9
	BMB400		400-510			8.8
	BMB500		500-610			9.7
	BMB600	FMA - 47.625	600-710	98		12.4
	BMB700		700-810	13.4		
	BMB800		800-910	14.4		
	BMB900		900-1010	15.8		

· 200mm 以上 BMB 大孔径微调精镗刀 +LBK 和 FMA47.625 刀柄 ( MAS 403 BT)  
BMB LARGE DIAMETER MODULAR FINIS BORING HEAD +LBK/FMA(MAS 403 BT)

镗孔范围 200- 1010mm Boring Range from 200- 1010mm



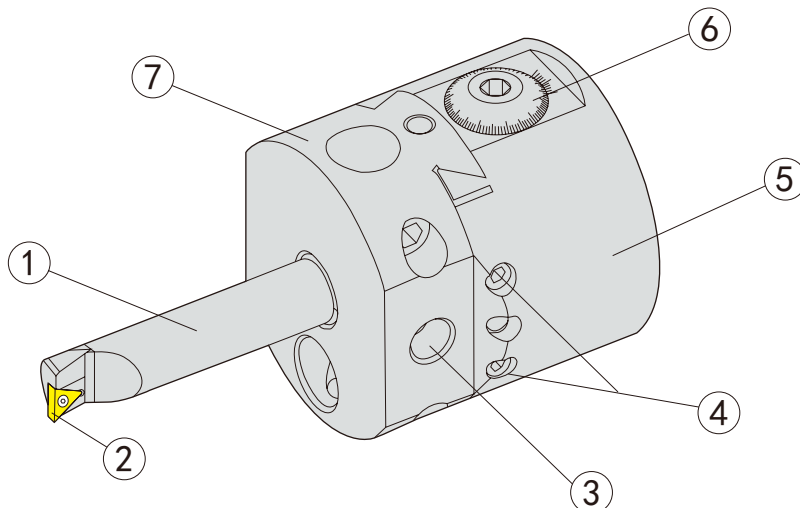
型号 Type	镗孔范围 D Boring Range	有效长 Z	组合内容 Tool Connection		接合型号 LBK No.	全长 L	刀杆长 L1	刀杆 外径 D1	重量 KGS
			BST 刀杆 BST Shank	RBC 镗头 RBC Boring Head					
BT50-BMB200-230	200-310	185	BT50-LBK7-100	BMB200	7	230	100	88	11.8
-280		235	-150			280	150		13.5
-330		285	-200			330	200		15
-380		335	-250			380	250		16
-430		385	-300			430	300		17
-480		435	-350			480	350		19
-530		485	-400			530	400		21
-580		535	-450			580	450		24.1
-630		585	-500			630	500		25.7
BT50-BMB300-230		300-410	185			BT50-LBK7-100	BMB300		7
-280	235		-150	280	150	14.4			
-330	285		-200	330	200	15.9			
-380	335		-250	380	250	16.9			
-430	385		-300	430	300	17.9			
-480	435		-350	480	350	19.9			
-530	485		-400	530	400	21.9			
-580	535		-450	580	450	25			
-630	585		-500	630	500	26.6			
BT50-BMB400-230	400-510		185	BT50-LBK7-100	BMB400	7		230	
-280		235	-150	280			150	15.3	
-330		285	-200	330			200	16.8	
-380		335	-250	380			250	17.8	
-430		385	-300	430			300	18.8	
-480		435	-350	480			350	20.8	
-530		485	-400	530			400	22.8	
-580		535	-450	580			450	25.9	
-630		585	-500	630			500	27.5	
BT50-BMB500-230		500-610	185	BT50-LBK7-100			BMB500	7	230
-280	235		-150	280	150	16.2			
-330	285		-200	330	200	17.7			
-380	335		-250	380	250	18.7			
-430	385		-300	430	300	19.7			
-480	435		-350	480	350	21.7			
-530	485		-400	530	400	23.7			
-580	535		-450	580	450	26.8			
-630	585		-500	630	500	28.4			
BT50-BMB600-190	600-710		173	BT50- FMA.47.625-75	BMB600	FMA47.625			190
-BMB700-190	700-810	BMB700			20.4				
-BMB800-190	800-910	BMB800			21.4				
-BMB900-190	900-1010	BMB900			22.8				

孔加工工具  
HOLE MAKING TOOLS



· NBH2084 产品主要部位名称 THE NAME OF THE MAIN PART OF PRODUCTS WITH NBH2084

- ① NBH2084 boring bar  
NBH2084 刀杆
- ② Insert  
刀片
- ③ Lock screw for boring bar  
刀杆固定螺丝
- ④ Lock screw for adjustment  
滑座固定螺丝
- ⑤ Body  
底座
- ⑥ Micro adjusting knob  
微调旋钮
- ⑦ Head slide  
头部滑座



**使用顺序 /Sequence of Use**

请参照图示，按下列顺序 1-6 顺序操作：

- 步骤一：在加工尺寸范围内固定好刀杆，用专用扳手旋紧螺丝稳固刀杆。
- 步骤二：松开燕尾槽固定螺丝 2 枚。
- 步骤三：按逆时针方向旋转调旋钮，使加工直径增大，调整旋钮刻度为 0.01mm。
- 步骤四：顺时针方向旋转时则使加工直径减小。
- 步骤五：调整尺寸加工时，请按同方向微调，以确保微调精度。
- 步骤六：微调至所需尺寸时，请以适当扭力锁紧镗头座体 2 枚 M8 螺丝，使滑座稳固在座体上。

Please operate the following step(1-6)according to the diagram figured;

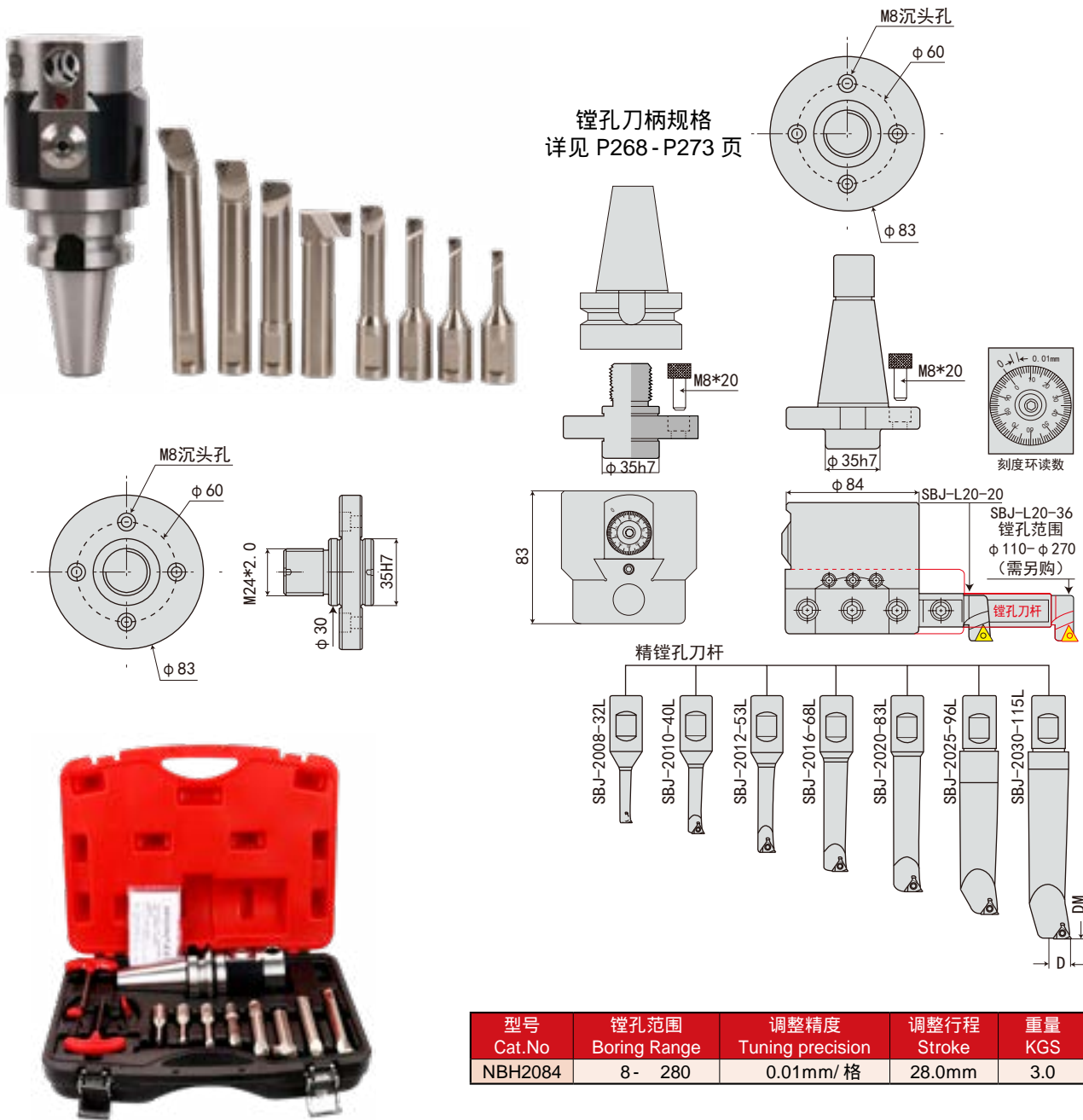
- Step1.Fixing the cutting tools in the processing size range,using special wrench to rotate the screws.
- Step2.Loosening the swallowtail solid groove,fixing with two screws.
- Step3.Rotating tune knob by anti-clockwise to increase the processing diameter,the graduate is 0.01mm.
- Step4.Rotating by clockwise will decrease the processing diameter.
- Step5.When adjusting the size of processing,please fine-tuning by the same direction to ensure mirco adjustment Precision.
- Step6.When meet the demanded size,please use the proper force to fasten two M8 screws of the boring then the slide can fixed to the block body.

**使用者注意事项 /Notices of The User**

- 1. 请使用在加工范围内。
- 2. 当滑座在已锁紧状态下，请勿旋转调整旋钮，否则会导致调整机构被破坏。
- 3. 滑座之固定，请使用专用扳手，固定座体与滑座配合 2 枚 M8 螺丝，过度锁紧会导致座体移位，过松会造成精度不良。
- 4. 本产品是由精密螺丝、移动滑座旋转调整旋钮，在阻力很大或无法转动时，请停止调整，并确认以下事项：  
导向轴固定螺丝是否松开。  
是否超出调整范围。  
当过度旋转调整旋钮时，会导致调整螺杆与 T 型螺母卡死，以致滑座脱落，导致镗头精度被破坏。

- 1Using in the range of processing.
- 2Do not rotate the adjustment knob when the slide is tightly locked,or the adjusting mechanism will be destroyed.
- 3Please use special wrench to fix the slide with two M8 screws,too much force will be seat shift, on the contrary,there will be accuracy of non-performing.
- 4Our products use micro screws,mobile slide to rotate the adjusting knob. You should make sure the following notices and adjusting with great resistance or it can not move:  
Whether the guiding shaft of the fixed screw is loosened.  
Whether it is out of the adjustment range.  
Too much force will make screw stem and T nut dead,thus the slide will come off to undermine precision.

· NBH2084 微调精镗头 NBH2084 FINE - TUNING BORING HEAD



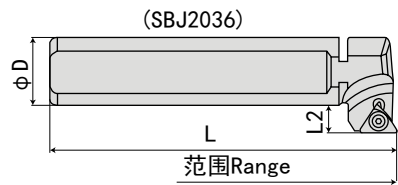
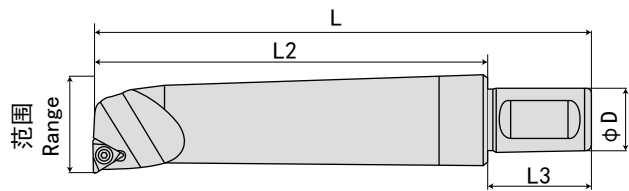
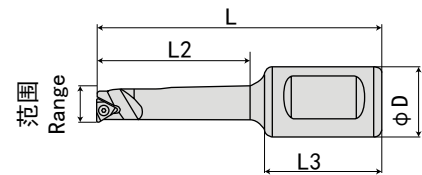
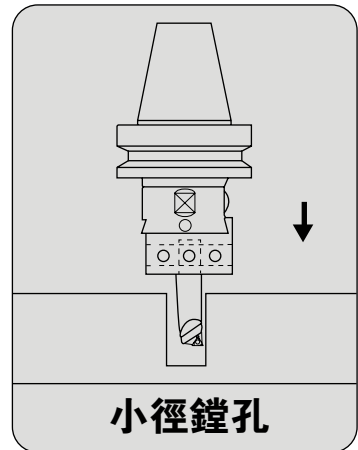
型号 Cat.No	镗孔范围 Boring Range	调整精度 Tuning precision	调整行程 Stroke	重量 KGS
NBH2084	8 - 280	0.01mm/格	28.0mm	3.0

· NBH2084 微调精镗头套装 NBH2084 FINE - TUNING BORING HEAD

规格 / 型号 Model	镗孔范围 Boring Range	组合系统 - 主轴柄规格	重量 KGS
R8 - NBH2084	08 - 280	R8 - UNF7/16 - 20NBH2084	10.0
NT30 - NBH2084		DIN2080 ISO30M12 - NBH2084	8.0
NT40 - NBH2084		DIN2080 ISO 40M - 16 - NBH2084	9.5
NT50 - NBH2084		DIN2080 ISO50M24 - NBH2084	10.8
BT30 - NBH2084		MAS403 BT30 - NBH2084	8.0
BT40 - NBH2084		MAS403 BT40 - NBH2084	9.5
BT50 - NBH2084		MAS403 BT50 - NBH2084	12.0
MTA3 - NBH2084		MTA3 - NBH2084	8.5
MTA4 - NBH2084		MTA4 - NBH2084	8.5
MTA5 - NBH2084		MTA5 - NBH2084	9.5
MTA6 - NBH2084		MTA6 - NBH2084	10.5
MTB3 - NBH2084		MTB3 - NBH2084	8.0
MTB4 - NBH2084		MTB4 - NBH2084	8.5
MTB5 - NBH2084		MTB5 - NBH2084	9.5



· NBH2084 替换式镗孔刀杆 NBH2084 INTERCHANGEABLE BORING CUTTER



规格 / 型号 Model	尺寸 Size(mm)					刀片 Insert	螺丝 Screw	扳手 Wrench
	D	范围 Range	L	L2	L3			
SBJ2008-32L	20	8-11	80	32	32	5° TBGT060102 TBGT060104	SB-1STR-M2*5.0	T6
SBJ2010-40L		10-13	87	40				
SBJ2012-53L		12-17	98	53		11° TPGH090202 TPGH090204	SB-2TR-M2.5*6.0	T8
SBJ2016-68L		16-21	110	68				
SBJ2020-83L		20-130	123	83		11° TPGH110302 TPGH110304	SB-3TR-M3*8.0	T10
SBJ2025-96L		25-135	137	96				
SBJ2030-115L		30-140	152	115				
SBJ20-20-100L		120-280	97	100				
SBJ2020-150L(加长)		20-130	190	150				
-200L(加长)		20-130	240	200				
SBJ2025-150L(加长)		25-135	191	150				
-200L(加长)		25-135	241	200				
SBJ2030-150L(加长)		30-140	187	150				
-200L(加长)		30-140	237	200				
SBJ20-20-180L(加长)		120-280	177	180				

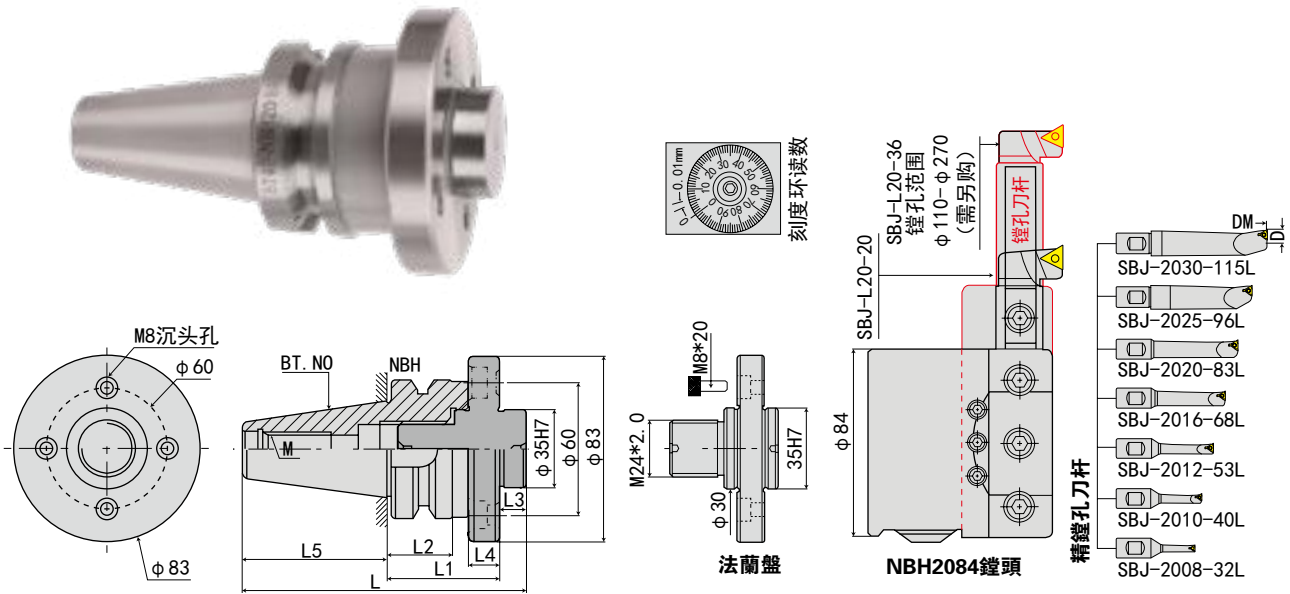
特点:

注：  
 本套产品属经济型精密镗刀  
 最小调节刻度为 0.01mm，半径 0.005mm  
 本镗孔器在位移量少时，其最高转速不超 1600 m 为宜

Features:

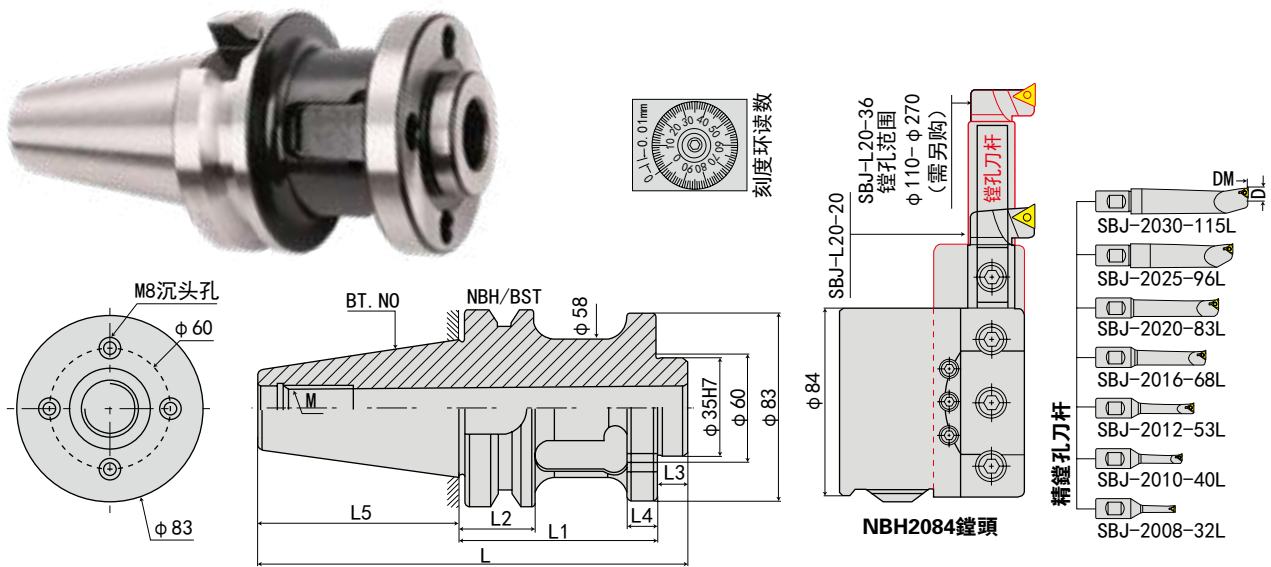
NBH2084 is a small diameter boring system in which diameter size ranges from 8-280mm.  
 The minimum dial is 0.001mm with semi diameter 0005mm.  
 While moving in small scope,the highest speed < 1600rpm.

· BT-NBH2084A 镗孔组合刀柄 BT-NBH2084A BORING SYSTEM



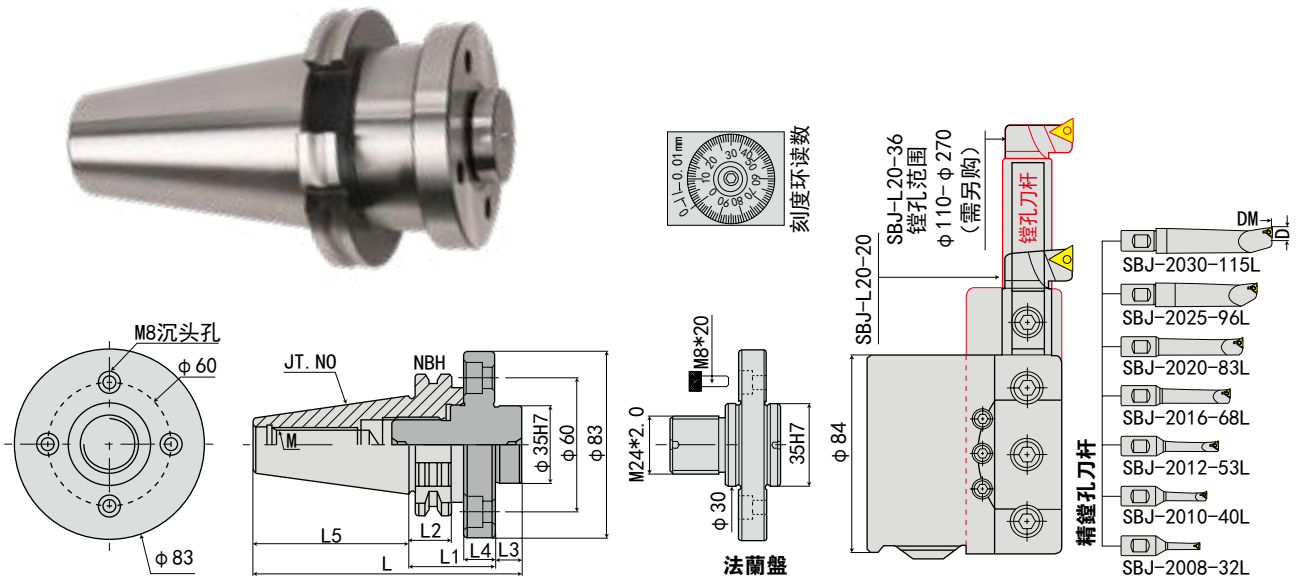
规格 / 型号 Model	BT.N0	L	L1	L2	L3	L4	L5	M	重量 KGS
BT30-NBH2084A	BT30	106.4	46	20	12	14	48.4	M12*1.75P	1.2
BT40-NBH2084A	BT40	128.4	51	25			65.4	M16*2.0P	1.6
BT50-NBH2084A	BT50	170.8	57	35			101.8	M24*3.0P	4.3

· BT-NBH2084B 镗孔组合刀柄 BT-NBH2084B BORING SYSTEM



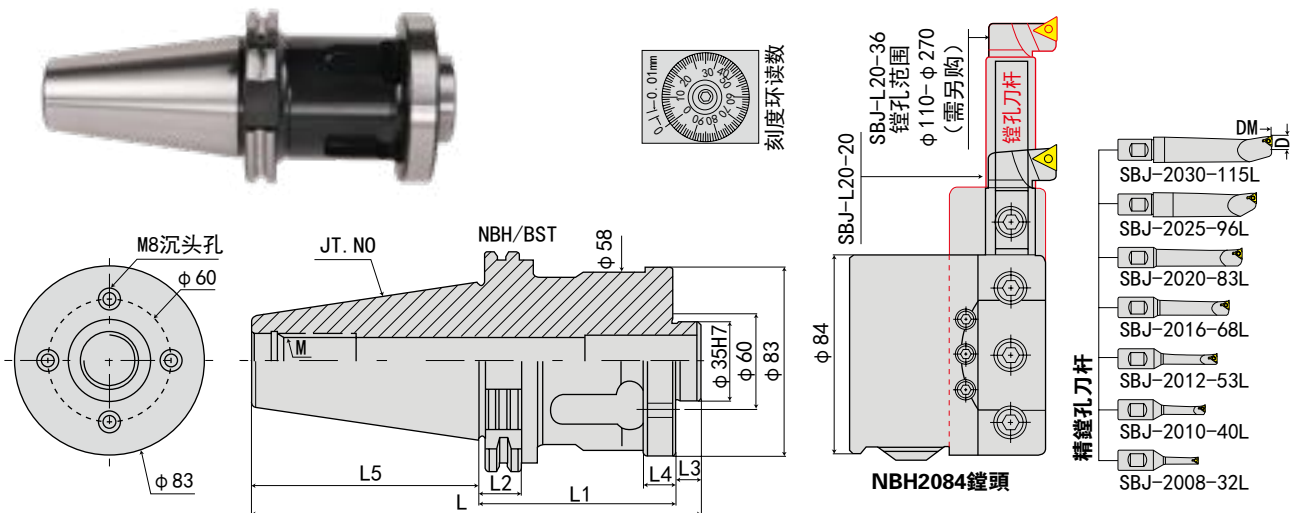
规格 / 型号 Model	BT.N0	L	L1	L2	L3	L4	L5	M	重量 KGS
BT40-NBH2084B-100L	BT40	177.4	100	25	12	14	65.4	M16*2.0P	2.42
-150L		227.4	150						2.9
BT50-NBH2084B-100L	BT50	213.8	100	35			101.8	M24*3.0P	5.22
-165L		278.8	165						6.42
-200L		313.8	200						7.62
-250L		363.8	250						8.5
-300L		413.8	300		9.67				

· JT-NBH2084A 镗孔组合刀柄 JT-NBH2084A BORING SYSTEM



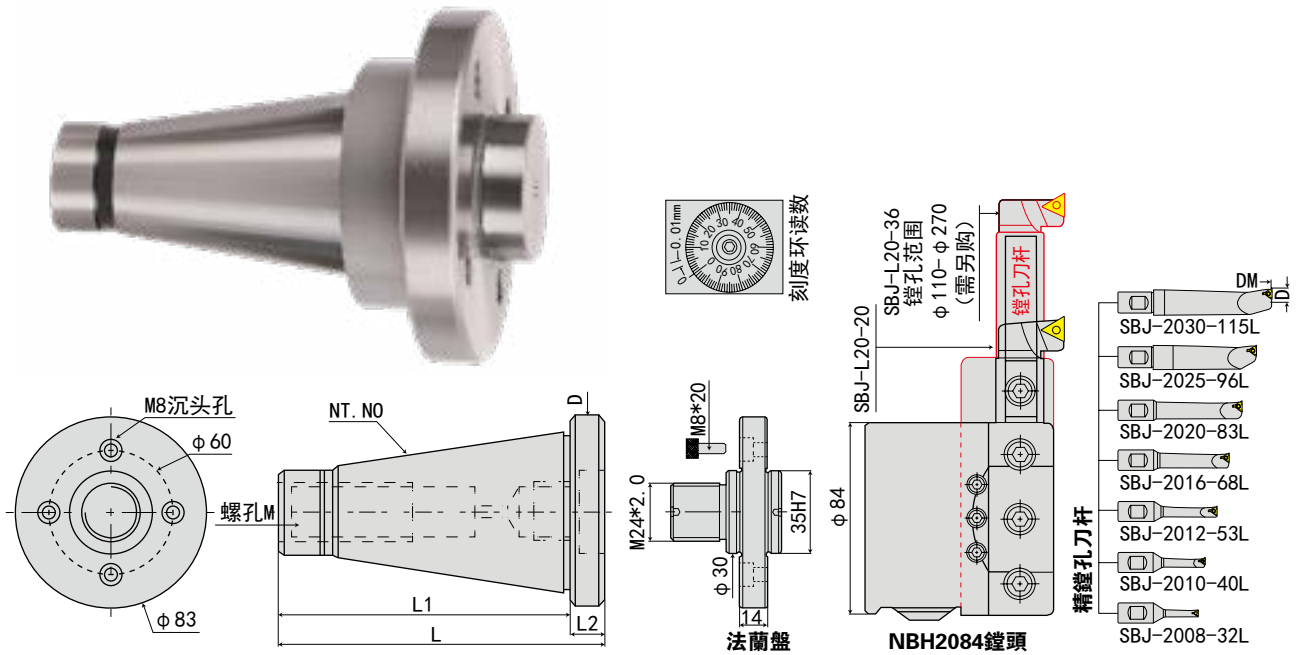
规格 / 型号 Model	JT.NO	L	L1	L2	L3	L4	L5	M	重量 KGS
JT30-NBH2084A	JT30	109.8	50	16	12	14	47.8	M12*1.75P	1.4
JT40-NBH2084A	JT40	130.4					68.4	M16*2.0P	2.0
JT50-NBH2084A	JT50	163.75					101.75	M24*3.0P	4.2

· JT-NBH2084B 镗孔组合刀柄 JT-NBH2084B BORING SYSTEM



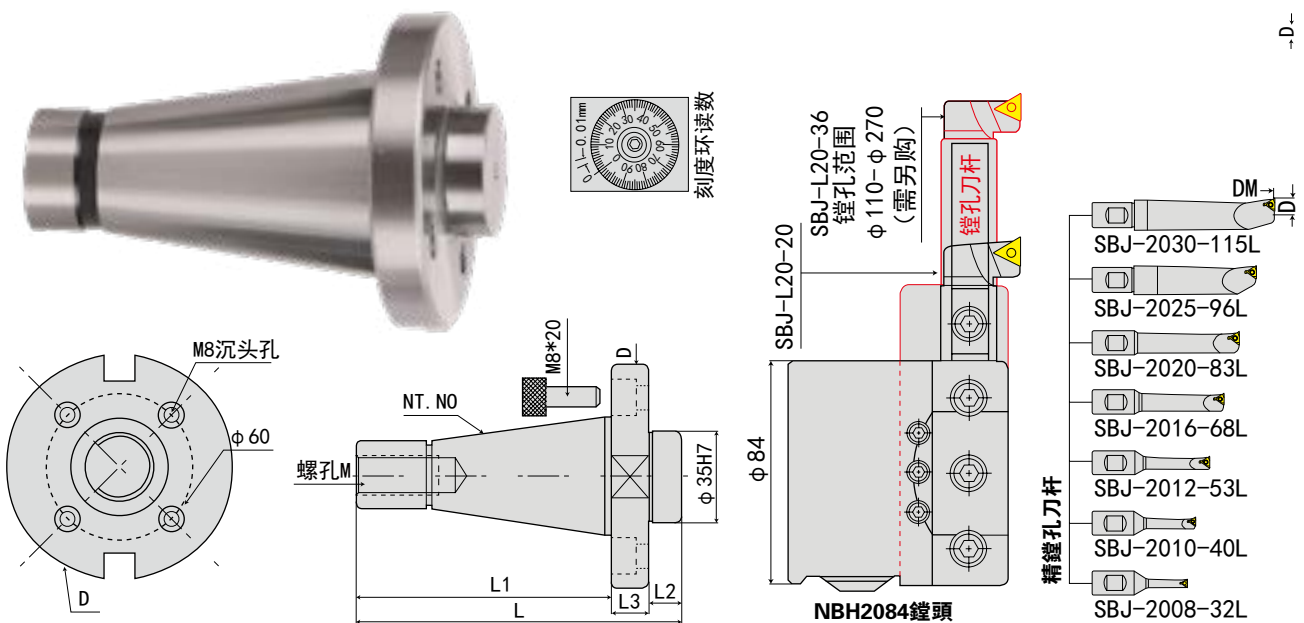
规格 / 型号 Model	JT.NO	L	L1	L2	L3	L4	L5	M	重量 KGS
JT40-NBH2084B-100L	JT40	180.4	100	16	12	14	68.4	M16*2.0P	2.42
-150L		230.4	150						2.9
JT50-NBH2084B-100L	JT50	213.75	100	16	12	14	101.75	M24*3.0P	5.22
-165L		278.75	165						6.42
-200L		313.75	200						7.62
-250L		363.75	250						8.5
-300L		413.75	300						9.67

· NT-NBH2084A 镗孔组合刀柄 NT-NBH2084A BORING SYSTEM



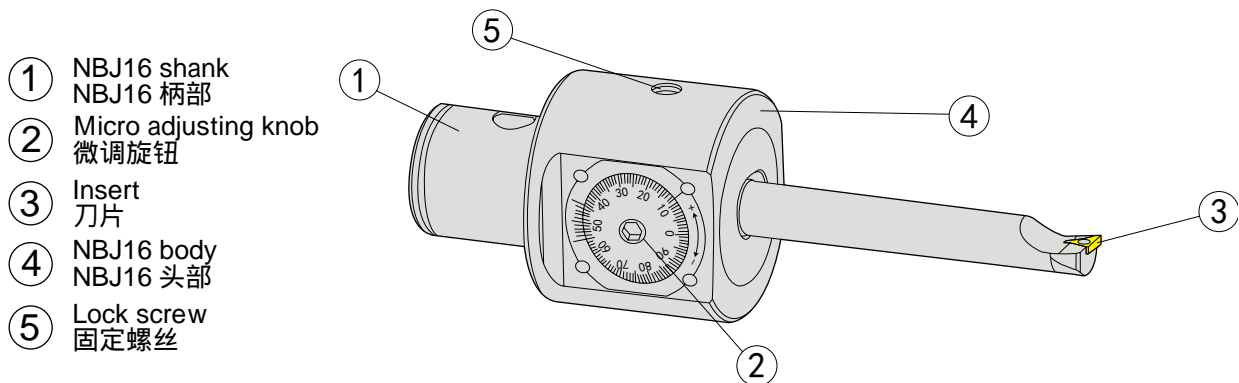
规格 / 型号 Model	NT.NO	L	L1	L2	M	D	重量 KGS
NT40-NBH2084A	NT40	111	95	16	M16*2.0P	63	2.4
NT50-NBH2084A	NT50	146	130	16	M24*3.0P	100	4.2

· NT-NBH2084C 镗孔组合刀柄 NT-NBH2084C BORING SYSTEM



规格 / 型号 Model	NT.NO	L	L1	L2	L3	M	D	重量 KGS
NT30-NBH2084C	NT30	98	70	12	16	M12*1.75P	83	1.9
NT40-NBH2084C	NT40	123	95	12	16	M16*2.0P	83	2.4

## · NBJ16 产品主要部位名称 THE NAME OF THE MAIN PART OF PRODUCTS WITH NBJ16



### 使用顺序 /Sequence of Use

请参照图示，按下列顺序 1 - 6 顺序操作：

步骤一：在加工尺寸范围内固定好刀杆，用专用扳手在导向主轴上固定好两攻 M10 螺丝，稳固刀杆。

步骤二：松开固定螺丝。

步骤三：按顺时针方向旋转调旋钮，使加工直径增大，调整旋钮刻度为 0.01mm。

步骤四：按逆时针方向旋转时则使加工直径减小。

步骤五：调整尺寸加工时，请按同方向微调，以确保微调精度。

步骤六：微调至所需尺寸时，请以适当扭力锁紧导向主轴，使主轴稳固定本体上。

Please operate the following step(1 - 6)according to the diagram figured;

Step1.Using special wrench to lock two M10 screws to fasten the cutting tools in the processing size range.

Step2.Loosening the fixed screws.

Step3.Rotating tune knob by clockwise to increase the processing diameter,the graduate is 0.01mm.

Step4.Rotating by anti - clockwise will decrease the processing diameter.

Step5.When adjusting the size of processing,please fine - tuning by the same direction to ensure mirco adjustment Precision.

Step6.When meet the demanded size,please use the proper force to lock the spindle orientation to makespindle fix into the substance.

### 使用者注意事项 /Notices of The User

1. 请使用在加工范围在 11mm 内。

2、当导向主轴在已锁紧状态下，请勿旋转调整旋钮，否则会导致调整机构被破坏。

3. 导向轴固定，请使用专用扳手，固定本体上的 M10 螺丝，锁紧导向主轴，过度锁紧会导致座体移位，过松会造成精度不良。

4、本产品是由精密螺丝、移动滑座旋转调整旋钮，在阻力很大或无法转动时，请停止调整，并确认以下事项：

导向轴固定螺丝是否松开。

是否超出调整范围。

当过度旋转调整旋钮时，会导致刀杆和本体卡死，镗头精度被破坏。

1Using in the processing range 11mm.

2Do not rotate the adjustment knob when the slide is tightly locked,or the adjusting mechanism will be destroyed.

3Please use special wrench to fix the slide with three M10 screws,too much force will be axis - oriented shift, on the contrary,there will be accuracy of non - performing.

4Our products use micro screws,spindle orientation to rotate adjusting knob. You should make sure the following notices and adjusting with great resistance or it can not move:

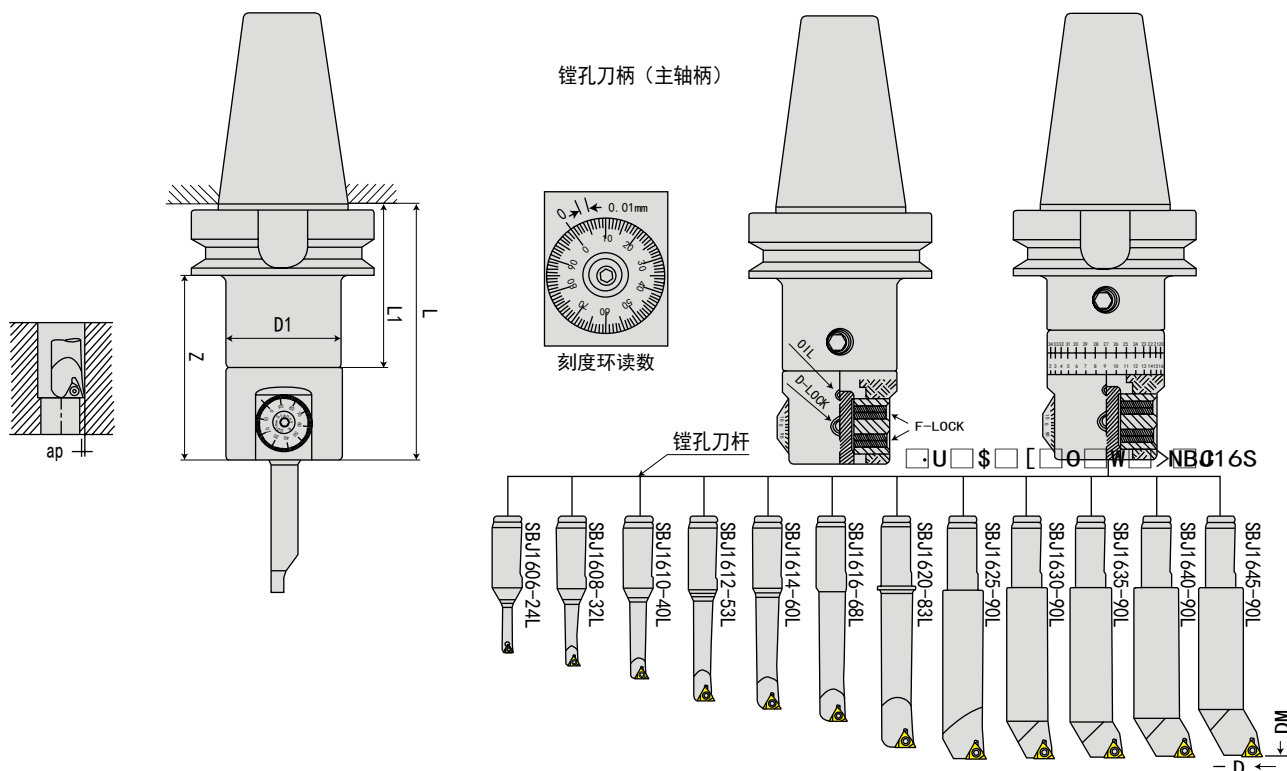
Whether the guiding shaft of the fixed screw is loosened.

Whether it is out of the adjustment range.

Too much force will make cutting tools dead and the precision of boring head destroyed.



· NBJ16 小径微调精镗头 NBJ16 MICRO BORING BAR TOOL HOLDER



规格 / 型号 Model	移动量 Dmm	延伸长 Z	组合内容 Tool Connection		镗孔范围 Boring range	接口型号 LBK No	全长 L	刀杆长 L1	刀杆外径 D1	内置刀杆 dmm	重量 KGS
			刀柄 Shank	镗头 Boring head							
BT30-NBJ16-110L	0-5	88	BT30-LBK6-60L	NBJ16	8-50mm	LBK6	110	60	64	16	2.4
BT40-NBJ16-115L		88	BT40-LBK6-65L				115	65			2.7
BT50-NBJ16-145L		107	BT50-LBK6-95L				145	95			5.9
JT30-NBJ16-110L		91	JT30-LBK6-60L				110	60			2.4
JT40-NBJ16-115L		96	JT40-LBK6-65L				115	65			2.7
JT50-NBJ16-145L		126	JT50-LBK6-95L				145	95			5.9
NT30-NBJ16-110L		95	NT30-LBK6-60L				110	60			2.4
NT40-NBJ16-115L		100	NT40-LBK6-65L				115	65			2.7
NT50-NBJ16-145L		130	NT50-LBK6-95L				145	95			5.9

特点:

注:

- 本体锥柄规格: JIS MAS 403 BT
- 高刚性、高精度、高灵敏, 调节方便, 安全可靠
- 最小调节刻度为 0.01mm, 半径为 0.005mm
- 本镗孔器在位移量少时, 其最高转速不起 1600rpm 为宜

Features:

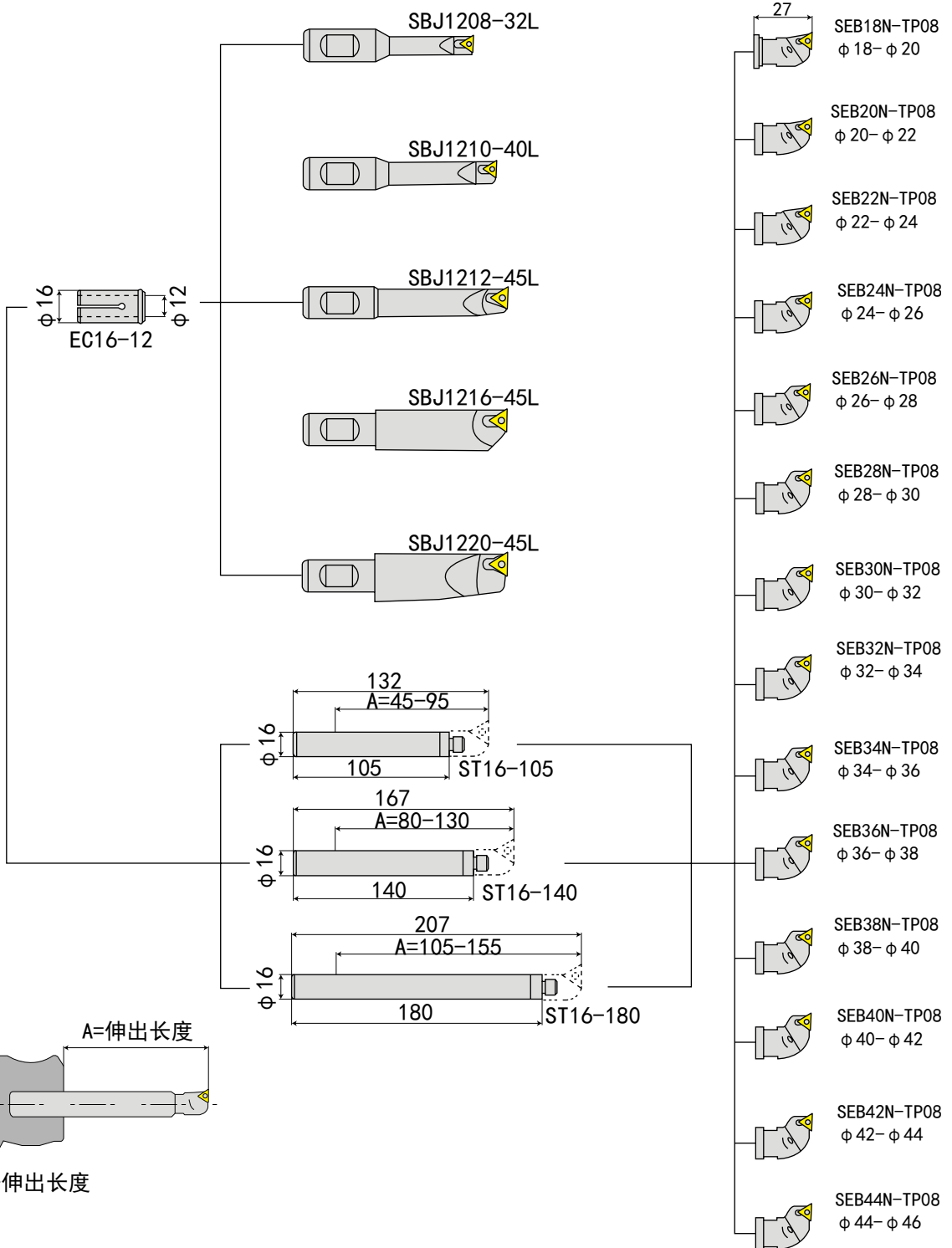
- Spindle conicity reference: JIS MAS 403 BT.
- Having high rigidity and precision, easily operated with safety.
- The minimum dial is 0.001mm with semi diameter 0.005mm.
- While moving in small scope, the highest speed < 1600rpm.



· NBJ16 镗刀组合系统 (小径精镗系列) NBJ16 SMALL DIAMETER FINE BORING HEAD

加工范围 8 - 50

(加工范围 2 - 8, 请选择另购进口极小径硬质合金镗杆)

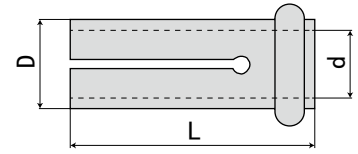


A: 表示刀杆伸出长度

· EC 钨钢刀杆专用筒夹

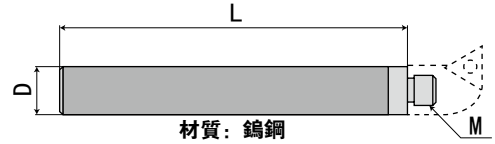
EC COLLET FOR SOLID CARBIDE BORING BAR

规格 / 型号 Model	外形尺寸			组合钨钢刀杆 Anti - shaking Solid Carbide Boring Bar
	D	d	L	
EC16-06	16	6	37	-
-08		8		ST08/HC08
-10		10		ST10/HC10
-12		12		ST12/HC12
-14		14		ST14/HC14



· ST 抗震钨钢刀杆

ST ANTI - SHAKING SOLID CARBIDE BORING BAR



规格 / 型号 Model	外形尺寸			组合镗头 Throw Away Boring Head	组合筒夹 Collet For Solid Carbide Boring Bar
	D	L	M		
ST08 - W5 - 115L	8	115	M5*0.8P	SEB09N SEB11N	EC16 - 08
ST10 - W6 - 115L	10	115	M6*1.0P	SEB12N SEB14N SEB16N	EC16 - 10
- 135L		135			
- 160L		160			
ST12 - W6 - 135L	12	135	M10*1.25P	SEB18N - - SEB50N	EC16 - 12
- W10 - 165L		165			
ST16 - W10 - 105L	16	105	M10*1.25P	SEB18N - - SEB50N	-
- 140L		140			-
- 180L		180			-

特点:

Features:

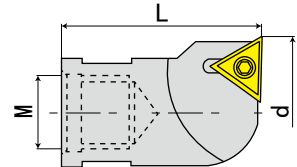
注:

The boring depth do not surpass aperture six times.

镗孔深度不得超过孔径六倍

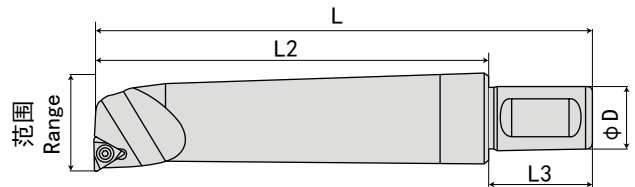
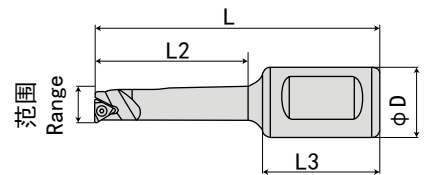
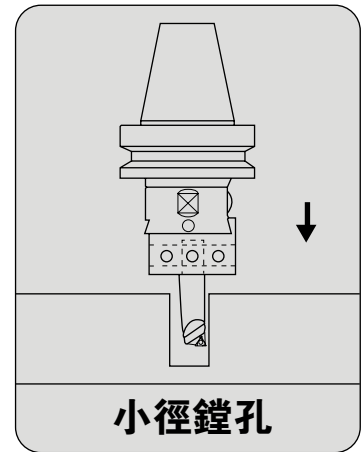
· SEB 舍弃式小径镗头

SEB INDEXABLE INSERT HOLDER FOR BORING BAR



规格 / 型号 Model	外形尺寸			镗孔范围 Boring Range		刀片型号 Insert	螺丝 Screw	扳手 Wrench
	d	L	M	Min	Max			
SEB09N - TP08	9	18	M5*0.8P	9	11	TPGH080202	M2.2*5	T6
SEB11N - TP08	11	18	M5*0.8P	11	12	TPGH080202	M2.2*5	T6
SEB12N - TP08	12	23	M6*1.0P	12	14	TPGH080202	M2.2*5	T6
SEB14N - TP08	14	23	M6*1.0P	14	16	TPGH080202	M2.2*5	T6
SEB16N - TP08	16	23	M6*1.0P	16	18	TPGH080202	M2.2*5	T6
SEB18N - TP08	18	27	M10*1.25P	18	20	TPGH080202	M2.2*5	T6
SEB20N - TP08	20	27	M10*1.25P	20	22	TPGH080202	M2.2*5	T6
SEB22N - TP08	22	27	M10*1.25P	22	24	TPGH080202	M2.2*5	T6
SEB24N - TP08	24	27	M10*1.25P	24	26	TPGH080202	M2.2*5	T6
SEB26N - TP08	26	27	M10*1.25P	26	28	TPGH080202	M2.2*5	T6
SEB28N - TP08	28	27	M10*1.25P	28	30	TPGH080202	M2.2*5	T6
SEB30N - TP08	30	27	M10*1.25P	30	32	TPGH080202	M2.2*5	T6
SEB32N - TP08	32	27	M10*1.25P	32	34	TPGH080202	M2.2*5	T6
SEB34N - TP08	34	27	M10*1.25P	34	36	TPGH080202	M2.2*5	T6
SEB36N - TP08	36	27	M10*1.25P	36	38	TPGH080202	M2.2*5	T6
SEB38N - TP08	38	27	M10*1.25P	38	40	TPGH080202	M2.2*5	T6
SEB40N - TP08	40	27	M10*1.25P	40	42	TPGH080202	M2.2*5	T6
SEB42N - TP08	42	27	M10*1.25P	42	44	TPGH080202	M2.2*5	T6
SEB44N - TP08	44	27	M10*1.25P	44	46	TPGH080202	M2.2*5	T6
SEB46N - TP08	46	27	M10*1.25P	46	48	TPGH080202	M2.2*5	T6
SEB48N - TP08	48	27	M10*1.25P	48	50	TPGH080202	M2.2*5	T6
SEB50N - TP08	50	27	M10*1.25P	50	52	TPGH080202	M2.2*5	T6

· NBJ16 替换式镗孔刀杆 NBJ16 INTERCHANGEABLE BORING CUTTER



规格 / 型号 Model	尺寸					刀片 Insert	螺丝 Screw	扳手 Wrench	
	D	范围 Range	L	L2	L3				
SBJ1606-24L	16	6-9	73	24	32	5°	WBG060102	M2*3.8	T6
SBJ1608-32L		8-11	80	32			TBGT060102	M2*5.0	
SBJ1610-40L		10-13	87	40		11°	TPGH090202	M2.5*6.0	T8
SBJ1612-53L		12-15	98	53					
SBJ1614-60L		14-17	105	60					
SBJ1616-68L		16-21	110	68					
SBJ1620-83L		20-26	125	83					
SBJ1625-90L		25-31	128	90					
SBJ1630-90L		30-36							
SBJ1635-90L		35-41	192	150					
SBJ1640-90L		40-46							
SBJ1645-90L		45-51							
SBJ1616-150L(加长)		16-21	188			TPGH090202	M2.5*6.0		
SBJ1620-150L(加长)		20-26				TPGH110304	M3*8.0		
SBJ1625-150L(加长)		25-31				TPGH090202	M2.5*6.0		
SBJ1630-150L(加长)		30-36				TPGH110304	M3*8.0		

特点:

注:

可搭配 SCK6 刀杆并可与 CK6 系统刀杆相容

采用特殊表面处理, 加强防锈效果

微调单位: 每刻度移动量为 0.01mm, 另有副尺可做更精确之调整, 镗孔范围 6- 50mm

搭配 16mm 柄径的小径镗刀, 并搭配不同切削刀具, 达成多样化的组合, 以利客户加工使用。

Features:

Suitable for combining with SCK6 series of tool holders as well as CK6 series of tool holders.

With special coating treatment, to strengthen the anti-corrosion effect.

Micro-adjustment unit: each unit is 0.01mm. Available is a sub-dial for finer adjustment, boring range 6- 50mm.

With 16mm shank trails Boring, with different cutting tools can be reached a variety of combinations, in order to facilitate customers to use.