

镗孔刀具系列

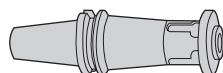
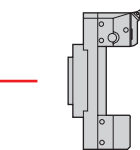
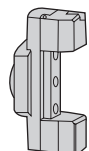
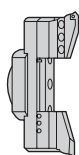
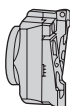
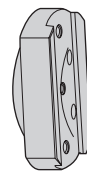
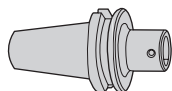
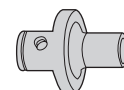
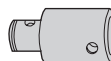
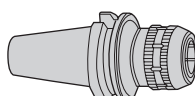
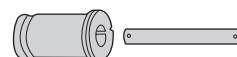
BORING HEAD

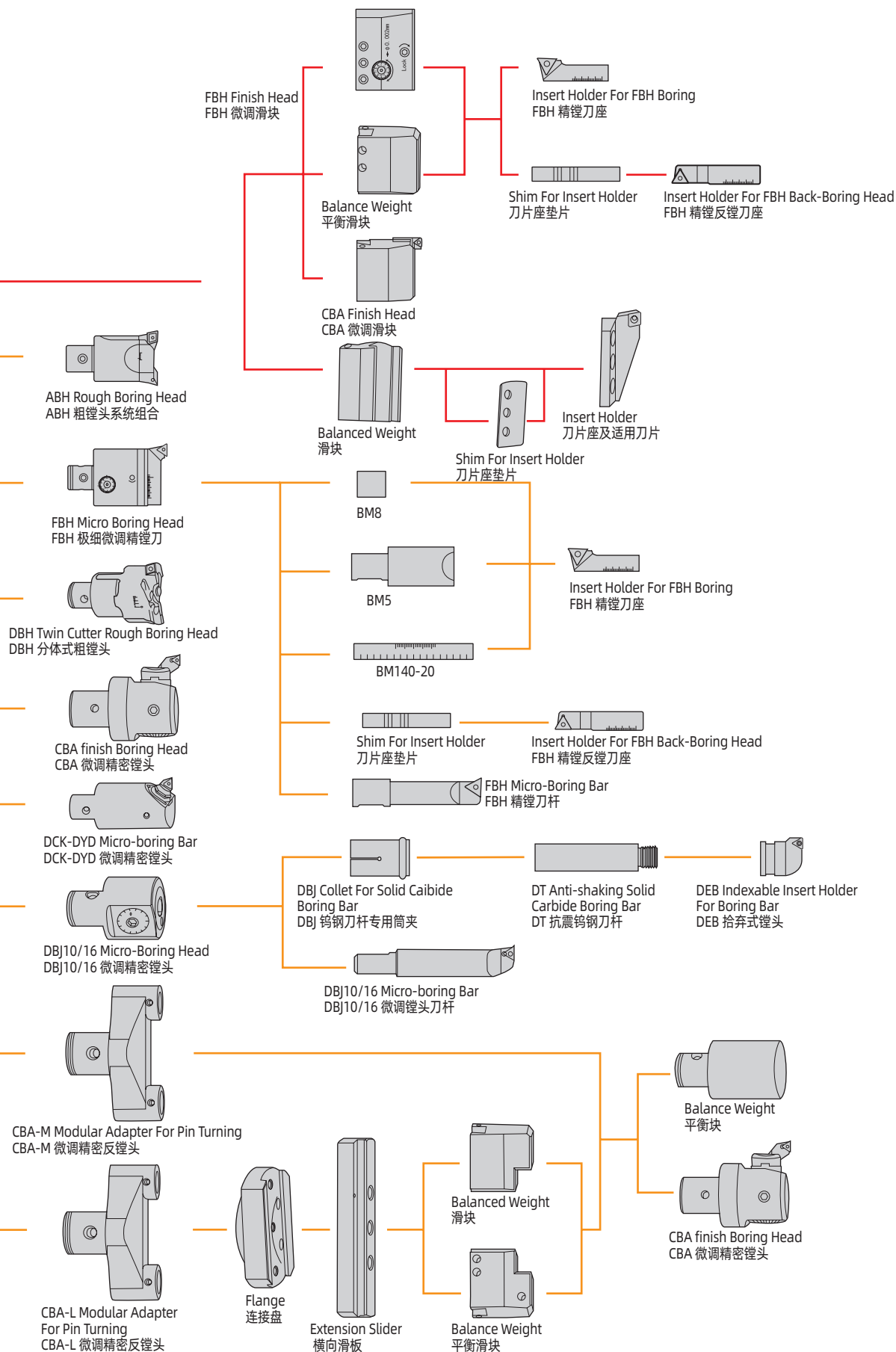


镗孔刀具系列
BORING HEAD

·模块式精镗系列

MODULAR FINE BORING SYSTEM

BST BORING SYSTEM
BST 系列BST Basic Boring Holder
BST 镗头刀柄FBH Large Diameter Modular Micro
Boring Head
FBH 大径极细微调精镗头CBA Large Diameter Boring Head
CBA 大径微调精密镗头DBH Large Diameter Rough Boring Head
DBH 大径双刃粗镗头DBH Twin Cutter Rough Boring Head(DBH120)
DBH 分体式粗镗头 (DBH120)DBH Twin Cutter Rough Boring Head(DBH160)
DBH 分体式粗镗头 (DBH160)Flange
连接盘Extension Slider
横向滑板DCK BORING SYSTEM
DCK 系列DCK Taper Shank For Boring Head
DCK 镗头刀柄DCK Reduction Adapter
DCK 异径转换接柄 (大接小)DCK Extension Adapter
DCK 等径延长接柄SCB Boring Bar With Solid Carbide Shank
SCB 超硬整体碳化钨钢镗刀杆SSB-C32 Boring Bar With Straight Shank
SSB-C32 直柄镗刀杆

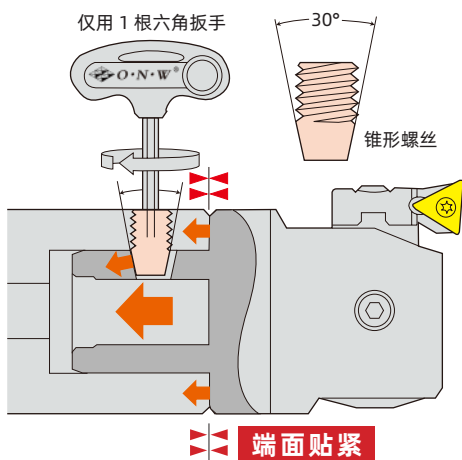


·CK 模块式镗刀系列

CK MODULAR BORING BAR

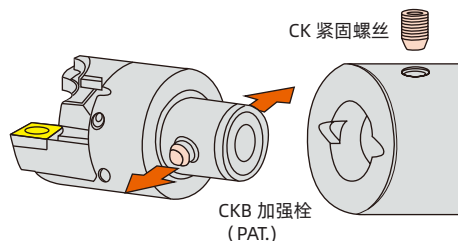
高精度 强力 操作方便——最理想的连接方式

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。

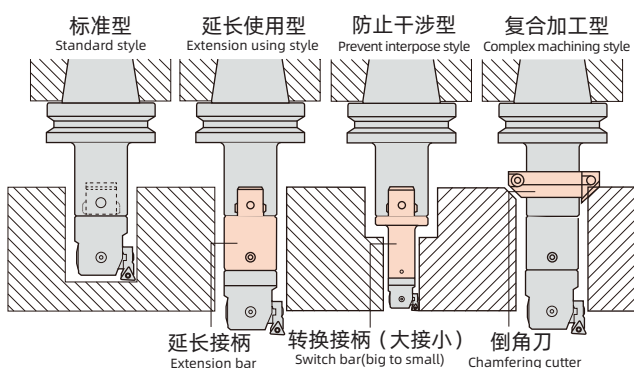
要点: 2 配有 CKB 加强栓 (PAT.), 以承受如粗镗等高扭矩加工。



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

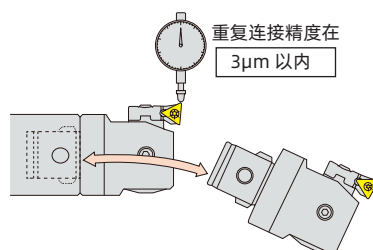
因为是模块式 能够自由设定
加工直径和有效加工深度

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。



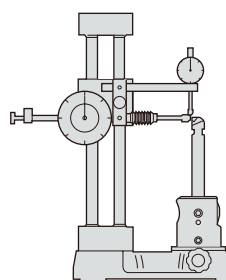
虽然是模块式 重复连接精度在 3μm 以内

同一镗头多次重复拆、装, 刀尖的位置误差不超过 3μm。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

由于镗头与本体间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。



CK 对刀仪

CKP150ZA..... 对应 CK1-CK6
CKP550..... 对应 CK7

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, 配用。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

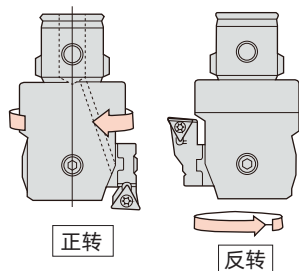
加工范围 : $\phi 20-\phi 203$


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。

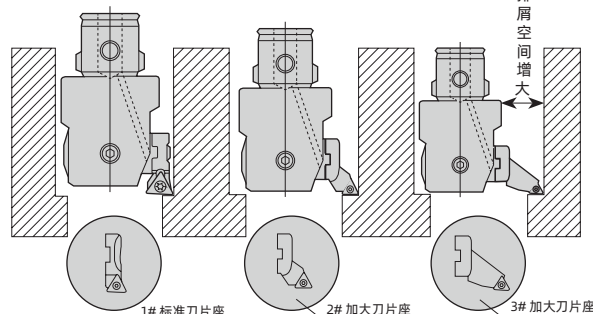
(※ 用 1# 刀片座不能进行反镗加工。)

特点 1:



只需交换刀片座

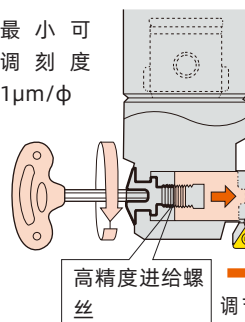
◎增大加工范围 改善切削排出性



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 3:

◎高信赖性进给螺丝

最小可
调刻度
1 μ m/ ϕ


调节直径时，轴向尺寸无变化。

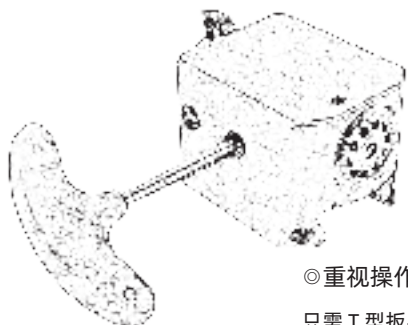
进给螺丝是精镗头的命脉，采用配对生产法，将螺丝与螺母间的齿隙限制在最小，获得最高的信赖性。

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。

·EWN 150 精镗头 (大孔径用)

EWN 150 FINE BORING HEAD

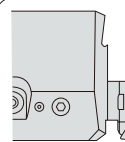
特点 1:



◎重视操作性

只需 T 型扳手 1 把，方便，迅速

特点 2: 加工范围 : $\phi 150-\phi 880$



ENH6-1



ENH6-2

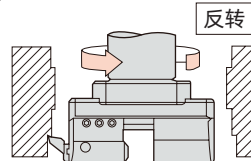
+26/ ϕ


ENH6-3

+50/ ϕ

◎加工范围增大

通过交换刀片座，增大加工范围



反转

◎对应反镗加工

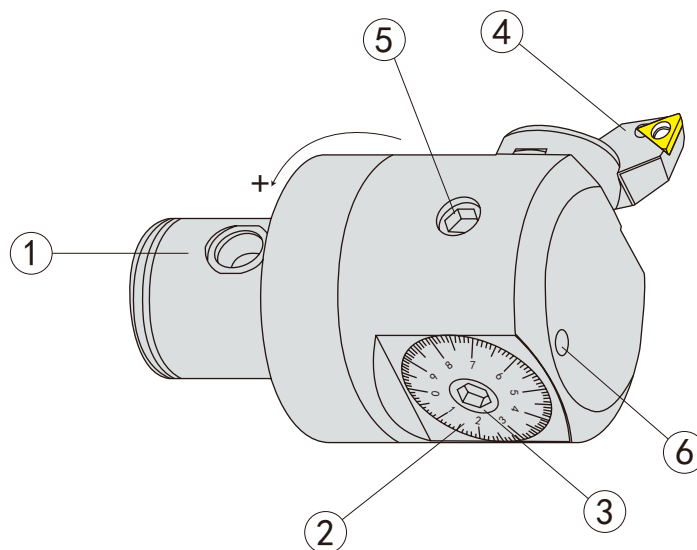
只要将刀片座反装，就可以进行反镗。

(※ 用 1# 刀片座不能进行反镗加工)

·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 $\phi 0.01\text{mm}$ 。

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 $\phi 0.01\text{mm}$.

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：

①固定螺丝是否松开。

②是否超出调整范围。

③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:

① Whether the fixed screw is loosened.

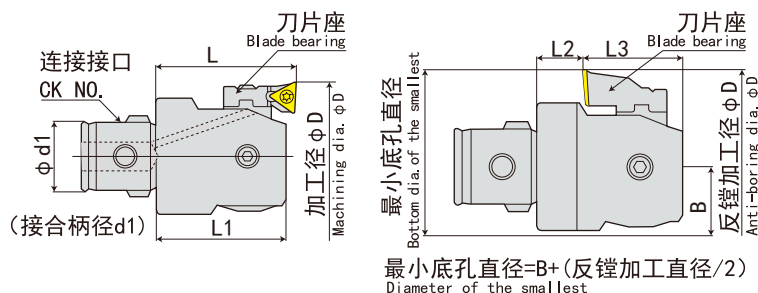
② Whether it is out of the adjustment range.

③ 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



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 ϕD	L	L1	镗孔范围 Boring Range ϕD	L2	L3	B				
EWN20-36-CK1	CK1	11	ENH1-1	20-26	32.5	29.5	-	10.5	19	10	TPGH0802	M2.2*5	T6	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	TPGH0802	M2.2*5	T6	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	TCGT110204	M2.5*6	T8	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	62-70	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	TCGT110204	M2.5*6	T8	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	22	45.2	45.5	TCGT110204	M2.5*6	T8	2.46
			ENH6-2	126-179			126-179							
			ENH6-3	150-203			150-203							

规格说明:

EWN - 20-36 - CK1

- CK NO.
- 加工范围 Processing Range
- EWN 精镗头 (不附带刀片) WN Fine Boring Head (without insert)

·EWN-ENH 刀片座

EWN-ENH INSERT HOLDER



ENH(1-6)-1



ENH(1-6)-2



ENH(1-6)-3

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				EWN25-47-CK2	ENH5-1	53-70				EWN53-95-CK5
ENH2-2	32-40					ENH5-2	65-82				
ENH2-3	39-47					ENH5-3	78-95				
ENH3-1	32-42	EWN32-60-CK3				ENH6-1	68-100				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

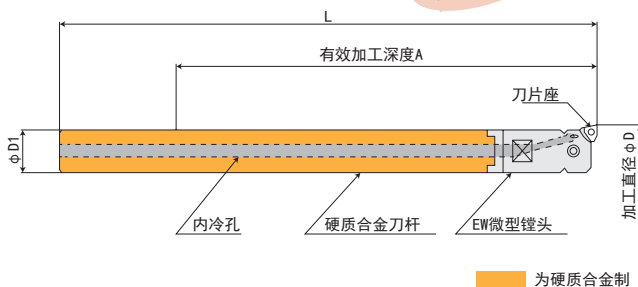
加工范围 $\Phi 15-\Phi 22$ 高信赖性、最小刻度 0.01mm/ ϕ 的精密调整机构微型化

- ◎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



型号说明

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



规格 / 型号 Model	$\phi D1$	加工直径 ϕD	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 $\Phi 20-\Phi 60$

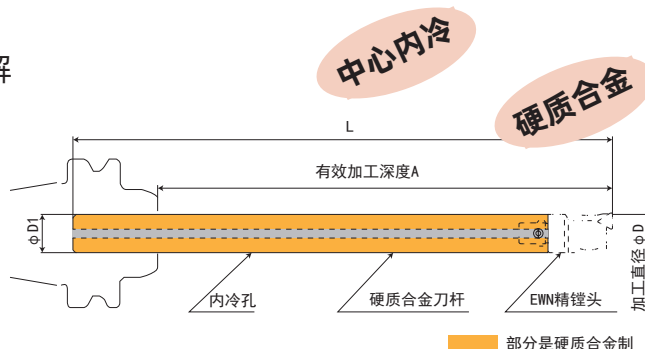
利用硬质合金将不可能变成可能

- ◎利用硬质合金刀杆，深孔加工的难题迎刃而解



型号说明

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



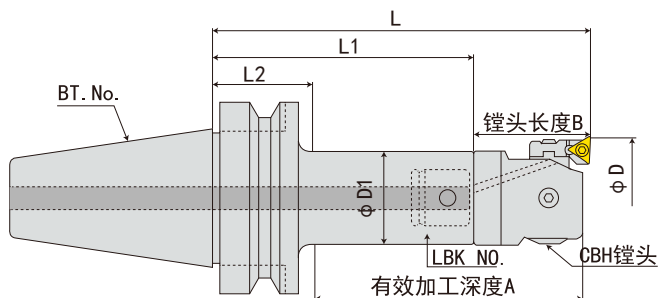
规格 / 型号 Model	$\phi D1$	加工范围 ϕD	L	A	适用精镗头
ST19W-CK1-130L	19	20-36	172.5	130	EWN20-36-CK1
-180L			222.5	180	
-230L			272.5	230	
ST24W-CK2-150L	24	25-47	195.5	150	EWN25-47-CK2
-210L			255.5	210	
-280L			325.5	280	
ST31W-CK3-160L	31	32-60	240	160	EWN32-60-CK3
-240L			320	240	
-310L			390	310	

- ◎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]

·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 φD1	镗孔范围 Boring RangeφD	有效 深度 A	重量 KGS
	CK 刀柄 CK Shank	EWN 镗头 Boring head									
BT30-EWN20-87.5	BT30-LBK1-55	EWN20-36CKB1	LBK1	87.5	55	22	32.5	19	20-36	65.5	0.77
-102.5	-70			102.5	70					80.5	0.77
BT30-EWN25 -116.5	BT30-LBK2-80	EWN25-47CKB2	LBK2	116.5	80		36.5	24	25-47	94.5	0.92
BT30-EWN32 -122.5	BT30-LBK3-80	EWN32-60CKB3	LBK3	122.5	80		42.5	31	32-60	100.5	0.92
BT30-EWN41 -121.5	BT30-LBK4-70	EWN41-74CKB4	LBK4	121.5	70		51.5	39	41-74	99.5	1.4
BT30-EWN53 -119.5	BT30-LBK5-60	EWN53-95CKB5	LBK5	119.5	60		59.5	50	53-95	97.5	2.2
BT30-EWN68 -130	BT30-LBK6-60	EWN68-105CKB6	LBK6	130	60		70	63	68-150	108	2.94
BT40-EWN20 -107.5	BT40-LBK1-75	EWN20-36CKB1	LBK1	107.5	75		32.5	19	20-36	80.5	1.07
-137.5	-105			137.5	105					110.5	1.27
BT40-EWN25 -121.5	BT40-LBK2-85	EWN25-47CKB2	LBK2	121.5	85		36.5	24	25-47	94.5	1.32
-151.5	-115			151.5	115					124.5	1.42
-201.5	-165			201.5	165					174.5	1.52
-236.5	-200			236.5	200					209.5	1.67
BT40-EWN32 -137.5	BT40-LBK3-95	EWN32-60CKB3	LBK3	137.5	95		42.5	31	32-60	110.5	1.51
-167.5	-125			167.5	125					140.5	1.41
-197.5	-155			197.5	155					170.5	1.81
-227.5	-185			227.5	185					200.5	1.91
-247.5	-205			247.5	205					220.5	2.01
BT40-EWN41 -136.5	BT40-LBK4-85	EWN41-74CKB4	LBK4	136.5	85		51.5	39	41-74	109.5	1.85
-181.5	-130			181.5	130					154.5	1.9
-226.5	-175			226.5	175					199.5	2.5
-256.5	-205			256.5	205					229.5	2.6
-301.5	-250			301.5	250					274.5	2.7
BT40-EWN53 -134.5	BT40-LBK5-75	EWN53-95CKB5	LBK5	134.5	75	27	59.5	50	53-95	107.5	2.8
-184.5	-125			184.5	125					157.5	3.05
-234.5	-175			234.5	175					207.5	4.1
-264.5	-205			264.5	205					237.5	4.3
-309.5	-250			309.5	250					282.5	4.6
BT40-EWN68 -135	BT40-LBK6-65	EWN68-150CKB6	LBK6	135	65		70	63	68-150	108	3.89
-185	-115			185	115					158	5.24
-235	-165			235	165					208	5.59
-275	-205			275	205					248	5.85
-320	-250			320	250					293	6.14
-370	-300			370	300					343	6.44
BT40-EWN100-136	BT40-LBK6-65	EWN100-203CKB6	LBK6	136	65		71	63	100-203	109	4.61
-186	-115			186	115					159	5.96
-236	-165			236	165					209	6.31
-276	-205			276	205					249	6.56
-321	-250			321	250					294	6.86
-371	-300			371	300					344	7.16

BT30 - EWN20 - 105

- 全长 L
- EWN20-36-CK1 S
- BT 刀柄 BT Tool Holder

·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 φD1	镗孔范围 Boring RangeφD	有效 深度 A	重量 KGS	
	CK 刀柄 CK Shank	EWN 镗头 Boring head										
BT50-EWN20 -122.5	BT50-LBK1-90	EWN20-36CKB1	LBK1	122.5	90	38	32.5	19	20-36	84.5	3.77	
-147.5	-115			147.5	115					109.5	3.97	
-177.5	-145			177.5	145					139.5	4.47	
-207.5	-175			207.5	175					169.5	4.57	
-237.5	-205			237.5	205					199.5	5.07	
BT50-EWN25-126.5	BT50-LBK2-90	EWN25-47CKB2	LBK2	126.5	90		36.5	24	25-47	88.5	3.8	
-146.5	-110			146.5	110					108.5	4	
-176.5	-140			176.5	140					138.5	4.3	
-211.5	-175			211.5	175					173.5	4.6	
-241.5	-205			241.5	205					203.5	4.9	
BT50-EWN32 -132.5	BT50-LBK3-90	EWN32-60CKB3	LBK3	132.5	90	42.5		31	32-60	94.5	4.61	
-167.5	-125			167.5	125					129.5	4.91	
-197.5	-155			197.5	155					159.5	5.01	
-227.5	-185			227.5	185					189.5	5.21	
-257.5	-215			257.5	215					219.5	5.41	
BT50-EWN41 -141.5	BT50-LBK4-90	EWN41-74CKB4	LBK4	141.5	90		51.5	39	41-74	103.5	5	
-166.5	-115			166.5	115					128.5	5.2	
-196.5	-145			196.5	145					158.5	5.6	
-226.5	-175			226.5	175					188.5	5	
-256.5	-205			256.5	205					218.5	5.25	
-301.5	-250			301.5	250	263.5				5.6		
-351.5	-300			351.5	300	313.5				5.9		
-401.5	-350			401.5	350	363.5				6.2		
BT50-EWN53 -154.5	BT50-LBK5-95	EWN53-95CKB5	LBK5	154.5	95	59.5		50	53-95	116.5	6.5	
-164.5	-105			164.5	105					126.5	6.6	
-209.5	-150			209.5	150		171.5			7.1		
-239.5	-180			239.5	180		201.5			7.3		
-299.5	-240			299.5	240		261.5			7.5		
-329.5	-270			329.5	270		291.5			7.8		
-359.5	-300			359.5	300		321.5			8.1		
-409.5	-350			409.5	350		371.5			8.4		
BT50-EWN68 -160	BT50-LBK6-90	EWN68-150-CKB6	LBK6	160	90		39	70	63	68-150	122	7.64
-175	-105			175	105						136	7.84
-220	-150			220	150	182					8.04	
-240	-170			240	170	202					8.24	
-250	-180			250	180	212					8.44	
-300	-230			300	230	262					9.19	
-340	-270			340	270	302					9.94	
-370	-300			370	300	332					11.24	
-420	-350			420	350	382					12.54	
-470	-400			470	400	432					13.54	
-520	-450			520	450	482					14.54	
-570	-500			570	500	532					15.54	
BT50-EWN100-161	BT50-LBK6-90	EWN100-203-CKB6			161	90	38	71		100-153	123	8.36
-176	-105				176	105					137	8.56
-221	-150				221	150					183	8.74
-241	-170				241	170					203	8.96
-251	-180				251	180					213	9.16
-301	-230				301	230					263	9.91
-341	-270				341	270					303	10.66
-371	-300				371	300					333	11.96
-421	-350				421	350					383	13.26
-471	-400				471	400					433	14.26
-521	-450				521	450					483	15.26
-571	-500				571	500					533	16.26

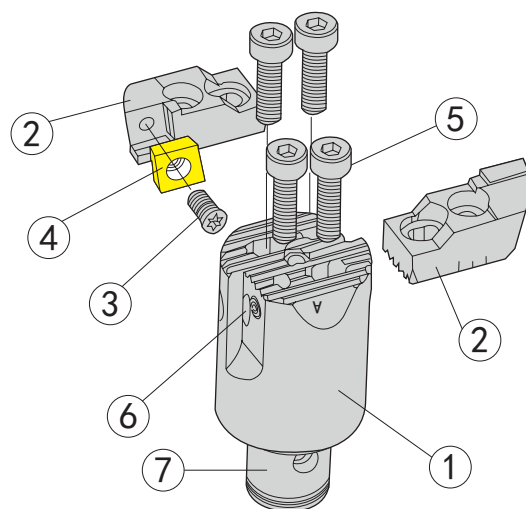
BT30 - EWN20 - 105

- 全长 L
- EWN20-36-CK1 S
- BT 刀柄 BT Tool Holder

·RBC 新型带齿双刃粗镗刀头及段差型粗镗头使用说明

RBC INSTRUCTIONS 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

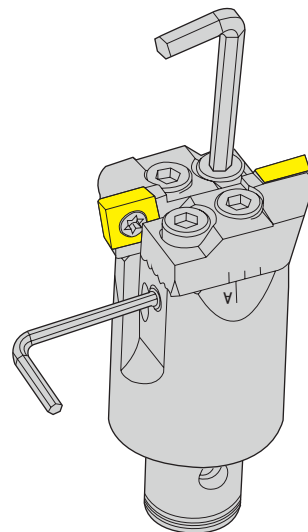


使用顺序 /Sequence of Use

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.

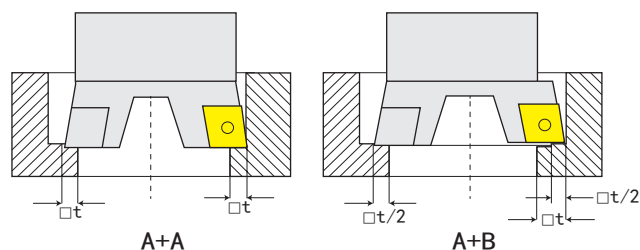


使用者注意事项 /Notices of The User

1. 平刃式切削加工，A、B 两刃等高等高径切削，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。

1During 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.

2During 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.



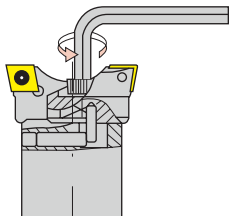
- a.When A and B blade bearing be mutual exchanged side to form high-low blade,i.e. A blade bearing to match B matching face,B blade bearing to math A matching face.
- b.Be careful that the adjusted cutting output of high blade and low blade should be same.in that case the two sides cutting and counteractive 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 INSTRUCTIONS OF TWIN-CUTTER ROUGH BORING HEAD AND STEPPED ROUGH BORING METHOD

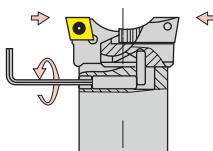
双刃等高调节方法

1 松开2颗锁紧螺丝

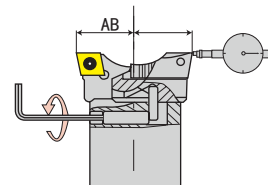


2

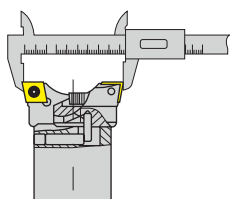
寸小约2mm, 稍微拧紧2颗锁紧



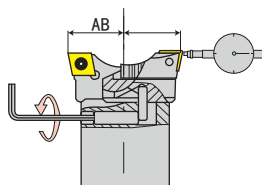
3 旋转调节螺丝, 使A、B尺寸在
±0.05之内。



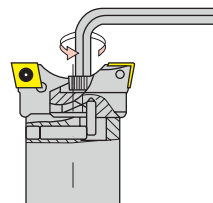
4 测量当前尺寸, 计算刀片座调
节量。



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。

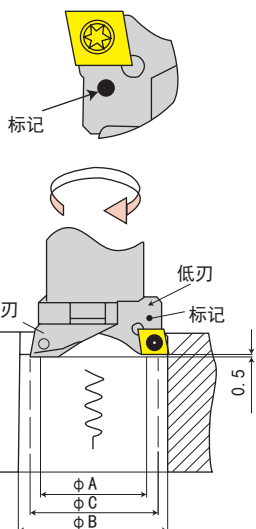


6 拧紧2颗锁紧螺丝。

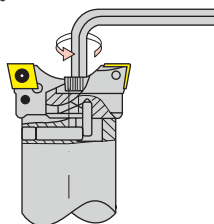


段差加工调节方法

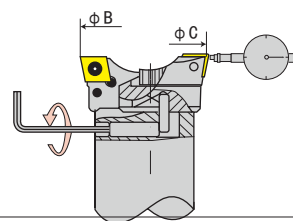
高刃加工直径计算方法:
 $\phi C = (\text{加工前直径 } \phi A + \text{加工直径 } \phi B) / 2$



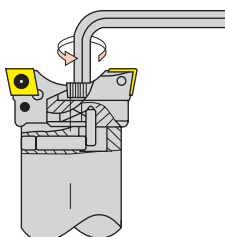
1 松开两颗锁紧螺丝, 再略微拧
紧。



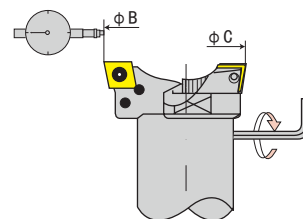
2 旋转调节螺丝推动刀片座, 观
察刻度线, 将高刃调至 ϕC 尺
寸, 低刃略小于B尺寸



3 拧紧两颗锁紧螺丝。

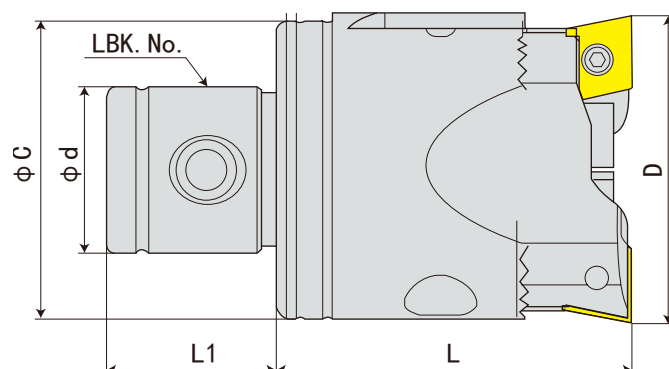


4 试切, 看尺寸再调节低刃。



·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 φDmm Boring Range	L mm	φC mm	φd 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			CCMT120408	3.1
-LBK6-T							TCMT16T304	
-LBK6-S							SCMT120404	
RBC100-122-LBK7A-C	LBK7	100~122	100	88	58	50	CCMT120408	3.8
-LBK7A-T							TCMT220408	
-LBK7A-S							SCMT120404	
RBC120-164AC	LBK7 BST	120~164	95	100			CCMT120408	4.7
RBC120-164AT							TCMT220408	
RBC120-164AS							SCMT120404	
RBC160-204AC	LBK7 BST	160~204	95	130			CCMT120408	5.6
RBC160-204AT							TCMT220408	
RBC160-204AS							SCMT120404	

特点:

注:

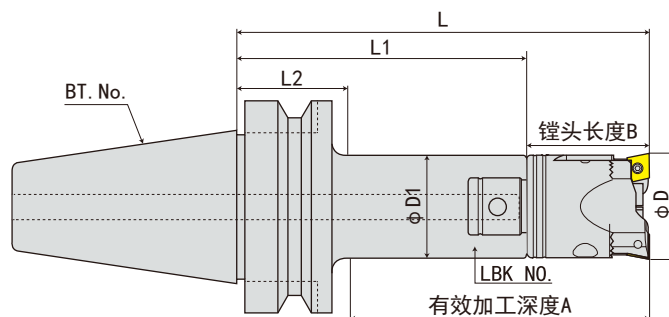
- ◎刀片支持座采用排齿式设计，刚性增强适合重切削。
- ◎内藏式水孔，直接冷却，刀片寿命长。
- ◎排屑槽设计，增加深孔排屑功能。
- ◎连接压板使刀头与刀座一体，增加切削刚性。
- 5. 独特高低段差设计，平刃或高低刃均可采用。

Features:

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

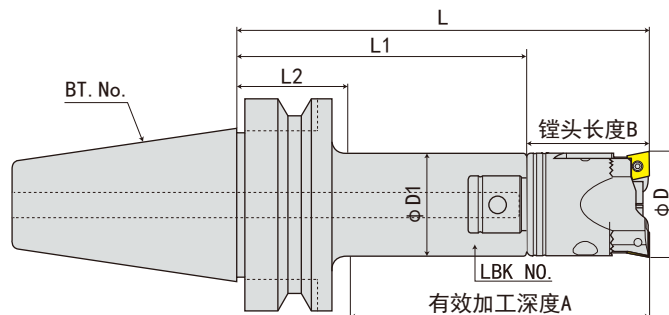
RBC INDEXABLE TWIN-BIT ROUGH BORING HEAD+LBK SHANK



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 ϕD1	重量 KG
BT30-RBC20 -C -85	BT30-LBK1-55	RBC20-25-LBK1-C	20-25	63	LBK1	85	55	22	30	19	0.85
-100	-70			78		100	70				
BT30-RBC25 -C -115	-LBK2-80	RBC25-35-LBK2-C	25-35	93	LBK2	115	80		35	24	0.95
BT30-RBC32 -C -125	-LBK3-80	RBC32-45-LBK3-C	32-45	93	LBK3	125	80		45	31	1.2
BT30-RBC40 -C -124	-LBK4-70	RBC40-55-LBK4-C	40-55	102	LBK4	124	70		54	39	1.6
BT30-RBC52 -C -124	-LBK5-60	RBC52-75-LBK5-C	52-75	102	LBK5	124	60		64	50	2.1
BT30-RBC68 -C -135	-LBK6-60	RBC68-92-LBK6-C	68-92	113	LBK6	135	60		75	63	6.2
BT40-RBC20 -C -105	BT40-LBK1-75	RBC20-25-LBK1-C	20-25	78	LBK1	105	75	27	30	19	1.12
-135	-105			108		135	105				1.32
BT40-RBC25 -C -120	BT40-LBK2-85	RBC25-35-LBK2-C	25-35	93	LBK2	120	85		35	24	1.35
-150	-115			123		150	115				1.45
-200	-165			173		200	165				1.55
-235	-200			208		235	200				1.7
BT40-RBC32 -C -140	BT40-LBK3-95	RBC32-45-LBK3-C	32-45	113	LBK3	140	95		45	31	1.6
-170	-125			143		170	125				1.7
-200	-155			173		200	155				1.9
-230	-185			203		230	185				2
-205	-205			223		250	205				2.1
BT40-RBC40 -C -139	BT40-LBK4-85	RBC40-55-LBK4-C	40-55	112	LBK4	139	85		54	39	1.45
-184	-130			157		184	130				1.5
-229	-175			202		229	175				2.1
-259	-205			232		259	205				2.2
-304	-250			277		304	250				2.3
-354	-300			327		354	300				2.4
BT40-RBC52 -C -139	BT40-LBK5-75	RBC52-75-LBK5-C	52-75	112	LBK5	139	75		64	50	2.7
-189	-125			162		189	125				2.95
-175	-175			212		239	175				4
-205	-205			242		269	205				4.2
-250	-250			287		314	250				4.5
BT40-RBC68 -C -140	BT40-LBK6-65	RBC68-92-LBK6-C	68-92	113	LBK6	140	65		75	63	4.65
-190	-115			163		190	115				6
-240	-165			213		240	165				6.35
-280	-205			253		280	205				6.6
-325	-250			298		325	250				6.9
-375	-300			348		375	300				7.2
BT40-RBC90 -C -165	BT40-LBK6-65	RBC90-122-LBK6-C	90-122	138	LBK6	165	65		100	63	5.75
-215	-115			188		215	115				7
-265	-165			238		265	165				7.45
-305	-205			278		305	205				7.7
-350	-250			323		350	250				8
-400	-300			373		400	300				8.3
BT40-RBC120AC-195	BT40-BST-100	RBC120-164AC	120-164	168	BST	195	100		95	95	8.05
-245	-150			218		245	150		95	95	8.2
-295	-200			268		295	200		95	95	9.2
-345	-250			318		345	250		95	95	9.7
-395	-300			368		395	300		95	95	10.7
BT40-RBC160AC-195	BT40-BST-100	RBC160-204AC	160-204	168	BST	195	100		95	95	8.95
-245	-150			218		245	150		95	95	9.1
-295	-200			268		295	200		95	95	10.1
-345	-250			318		345	250		95	95	10.6
-395	-300			368		395	300		95	95	11.6

·RBC 带齿可调式双刃粗镗头 +LBK 刀柄

RBC INDEXABLE TWIN-BIT ROUGH BORING HEAD+LBK SHANK



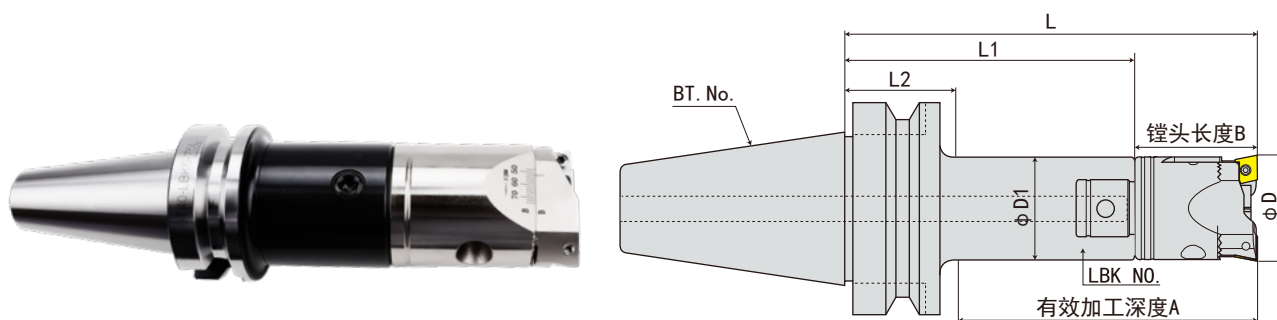
规格 / 型号 Model	LBK 刀柄 LBK Shank	RBC 镗头	镗孔范围 Boring Range	有效加工 深度 A	接合型号 LBK No.	全长 L	刀杆长 L1	L2	镗头 长度 B	刀杆 外径 φD1	重量 KG
BT50-RBC20-C-120	BT50-LBK1-90	RBC20-25-LBK1-C	20-25	82	LBK1	120	90	38	30	19	3.82
-145	-115			107		145	115				4.02
-175	-145			137		175	145				4.52
-205	-175			167		205	175				4.62
-235	-205			197		235	205				5.12
BT50-RBC25-C-125	BT50-LBK2-90	RBC25-35-LBK2-C	25-35	87	LBK2	125	90	38	35	24	3.8
-145	-110			107		145	110				4
-175	-140			137		175	140				4.3
-210	-175			172		210	175				4.6
-240	-205			202		240	205				4.9
BT50-RBC32-C-135	BT50-LBK3-90	RBC32-45-LBK3-C	32-45	97	LBK3	135	90	38	45	31	4.7
-170	-125			132		170	125				4.8
-200	-155			162		200	155				4.9
-230	-185			192		230	185				5.1
-260	-215			222		260	215				5.3
BT50-RBC40-C-144	BT50-LBK4-90	RBC40-55-LBK4-C	40-55	106	LBK4	144	90	38	54	39	5.2
-169	-115			131		169	115				5.4
-199	-145			161		199	145				5.9
-229	-175			191		229	175				5.2
-259	-205			221		259	205				5.15
-304	-250			266		304	250				5.8
-354	-300			316		354	300				6.1
-404	-350			366		404	350				6.4
BT50-RBC52-C-159	BT50-LBK5-95	RBC52-75-LBK5-C	52-75	121	LBK5	159	95	38	64	50	6.4
-169	-105			131		169	105				6.5
-214	-150			176		214	150				7
-244	-180			206		244	180				7.2
-304	-240			266		304	240				7.4
-334	-270			296		334	270				7.7
-364	-300			326		364	300				8
-414	-350			376		414	350				8.3
BT50-RBC68-C-165	BT50-LBK6-90	RBC68-92-LBK6-C	68-92	127	LBK6	165	90	38	75	63	8.4
-180	-105			142		180	105				8.6
-225	-150			187		225	150				8.8
-245	-170			207		245	170				9
-255	-180			217		255	180				9.2
-305	-230			267		305	230				9.95
-345	-270			307		345	270				10.7
-375	-300			337		375	300				12
-425	-350			387		425	350				13.3
-475	-400			437		475	400				14.3
-525	-450			487		525	450				15.3
-575	-500			537		575	500				16.3

规格说明:

BT30 - **RBC20** - **C** - **85**
 ● L 长度 Length (L)
 ● 接口大小 Collect model
 ● RBC 镗头 RBC Boring
 ● BT 刀柄 BT Tool Holder

·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 φD1	重量 KG
BT50-RBC90 -C -190	BT50-LBK6-90	RBC90-122-LBK6-C	90-122	152		190	90		100		9
-205	-105			167		205	105				9.2
-250	-150			212		250	150				9.4
-270	-170			232		270	170				9.6
-280	-180			242		280	180				9.8
-330	-230			292		330	230				10.55
-370	-270			332		370	270				11.3
-400	-300			362		400	300				12.6
-450	-350			412		450	350				13.9
-500	-400			462		500	400				14.9
-550	-450			512		550	450				15.9
-600	-500			562		600	500				16.9
BT50-RBC120AC-195	BT50-BST-100	RBC120-164AC	120-164	157		195	100		95	95	9.8
-245	-150			207		245	150				11.55
-295	-200			257		295	200				13.8
-345	-250			307		345	250				14.2
-395	-300			357		395	300				18.1
-445	-350			407		445	350				20.45
-495	-400			457		495	400				23.9
-545	-450			507		545	450				29.2
-595	-500			557		595	500				29.2
-645	-550			607		645	550				
-695	-600			657		695	600				
BT50-RBC160AC-195	BT50-BST-100	RBC160-204AC	160-204	157	BST	195	100		95	95	10.7
-245	-150			207		245	150				12.45
-295	-200			257		295	200				14.7
-345	-250			307		345	250				15.1
-395	-300			357		395	300				19
-445	-350			407		445	350				21.35
-495	-400			457		495	400				24.8
-545	-450			507		545	450				27.1
-595	-500			557		595	500				30.1
-645	-550			607		645	550				
-695	-600			657		695	600				

规格说明:

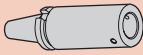
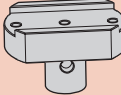
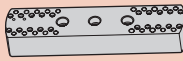
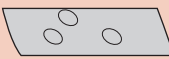
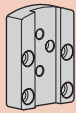
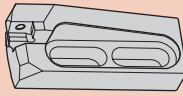
BT30 - RBC20 - C - 85

- L 长度 Length (L)
- 接口大小 Collect model
- RBC 镗头 RBC BORING
- BT 刀柄 BT Tool Holder

· $\phi 200$ 以上 RBC 组合式大径粗镗刀系列 《镗孔范围 $\phi 200$ - $\phi 1010\text{mm}$ 》

RBC LARGE DIAMETER MODULAR ROUGH BORING HEAD WITH DIAMETER OVER $\phi 200\text{MM}$ 《BORING RANGE FROM $\phi 200$ - $\phi 1010\text{MM}$ 》



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 φD(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:

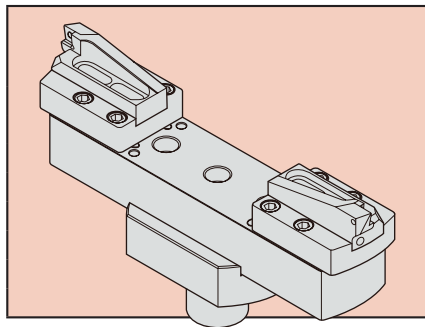
- ◎ 通用 $\phi 200 \sim \phi 1010\text{mm}$ 大型孔径加工使用。
- ◎ 粗、精镗刀使用同基础组件，且可另选配附件搭配使用。
- ◎ 粗搪刀，具有多种刀片选择，可通用于多种材料及加工方式。
- ◎ 可依客户需求订制 1M 以上规格。

Features:

- ◎ This type is suitable for large diameter boring with ranges from $\phi 200\text{mm}$ to $\phi 1010\text{mm}$.
- ◎ 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 $\phi 110\text{mm}$ 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.

· ϕ 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)

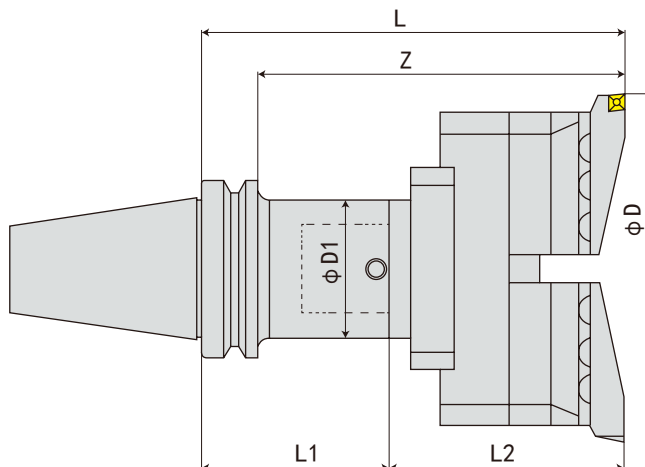
镗孔范围 ϕ 200- ϕ 1010mm Boring Range from ϕ 200- ϕ 1010mm

镗头型号 Boring Head Type	接合型号 LBK No.	镗孔范围 ϕ 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	117		17.3
RBC900		900-1010			18.8

· $\phi 200$ 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 $\phi 200$ - $\phi 1010$ mm Boring Range from $\phi 200$ - $\phi 1010$ mm

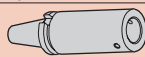
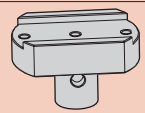
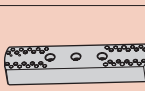
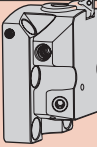


型号 Type	镗孔范围 ϕD Boring Range	有效长 Z	组合内容 Tool Connection		接合型号 LBK No.	全长 L	刀杆长 L1	刀杆 外径 $\phi D1$	重量 KGS
			BST 刀杆 BST Shank	RBC 镗头 RBC Boring Head					
BT50-RBC200-230	200-310		BT50-LBK7-100	RBC200	7	230	100	88	12
-280			-150			280	150		13.74
-330			-200			330	200		15.24
-380			-250			380	250		16.24
-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		230
-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			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		230
-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		190	75
-RBC700-190	700-810	RBC700					23.6		
-RBC800-190	800-910	RBC800					24.6		
-RBC900-190	900-1010	RBC900			190		26.1		

· $\phi 200$ 以上 BMB 组合式大径微调精镗刀系列《镗孔范围 $\phi 200$ - $\phi 1010\text{mm}$ 》

BMB LARGE DIAMETER MODULAR FINIS BORING HEAD WITH DIAMETER OVER $\phi 200$ 《BORING RANGE FROM $\phi 200$ - $\phi 1010\text{MM}$ 》



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 $\phi D(\text{mm})$		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:

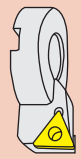
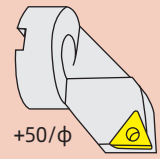
注:

- ◎通用 $\phi 200 \sim \phi 1010\text{mm}$ 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。
- 5. 独特高低段差设计，平刃或高低刃均可采用。

Features:

- ◎ This type is suitable for large diameter boring with ranges from $\phi 200\text{mm}$ to $\phi 1010\text{mm}$.
- ◎ 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 $\phi 110\text{mm}$ 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

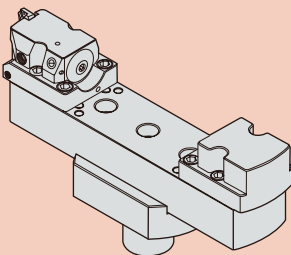
附件	另售品	
ENH7-1 	ENH7-2  +25/ ϕ	ENH7-3  +50/ ϕ
对应刀片 TC11		

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）

· $\phi 200\text{mm}$ 以上 BMB 大孔径微调精镗刀 +LBK 和 FMA47.625 刀柄 (MAS 403 BT)

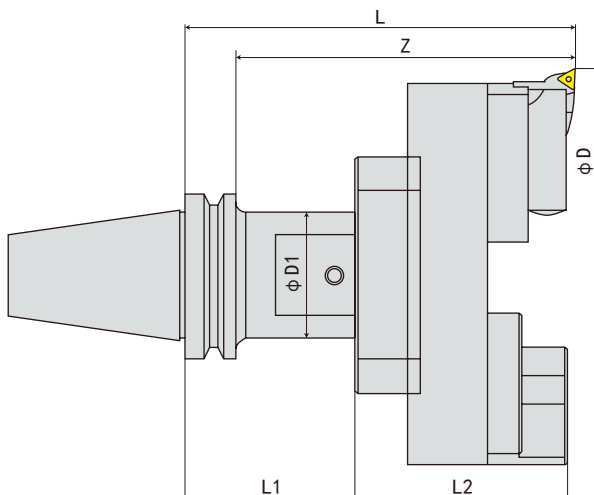
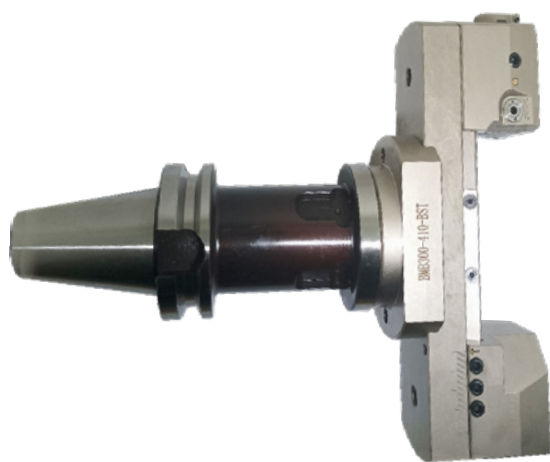
BMB LARGE DIAMETER MODULAR FINIS BORING HEAD +LBK/FMA(MAS 403 BT)

镗孔范围 $\phi 200\text{-}\phi 1010\text{mm}$ Boring Range from $\phi 200\text{-}\phi 1010\text{mm}$

	镗头型号 Boring Head Type	接合型号 LBK No.	镗孔范围 φD Boring Range	镗头长度 L2mm	刀片规格 Insert	重量 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		98	800-910		14.4
	BMB900			900-1010		15.8

· $\phi 200\text{mm}$ 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)

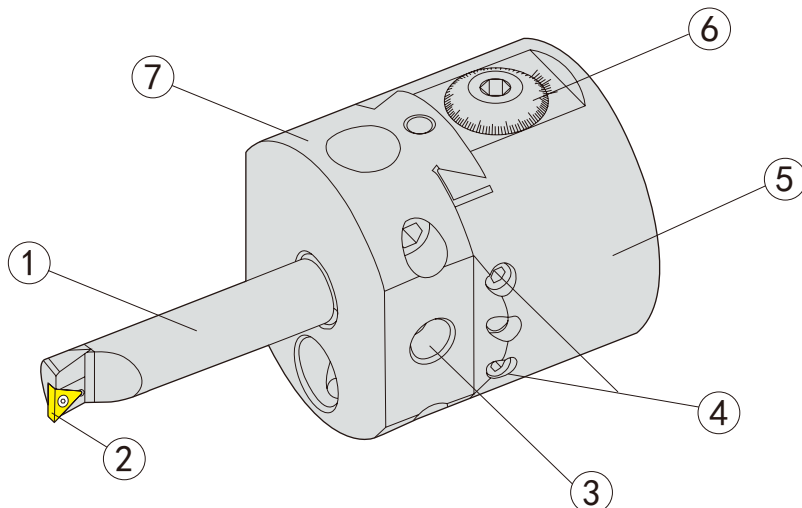
镗孔范围 $\phi 200\text{-}\phi 1010\text{mm}$ Boring Range from $\phi 200\text{-}\phi 1010\text{mm}$ 

型号 Type	镗孔范围 φD 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 φD1	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		230	100		12.7
-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		230	100		13.6
-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		230	100		14.5
-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	75	128	19.4
-BMB700-190	700-810			BMB700		190			20.4
-BMB800-190	800-910			BMB800		190			21.4
-BMB900-190	900-1010			BMB900		190			22.8

·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 $\phi 0.01\text{mm}$ 。
- 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 $\phi 0.01\text{mm}$.
- 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：
 - ① 导向轴固定螺丝是否松开。
 - ② 是否超出调整范围。
 - ③ 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.

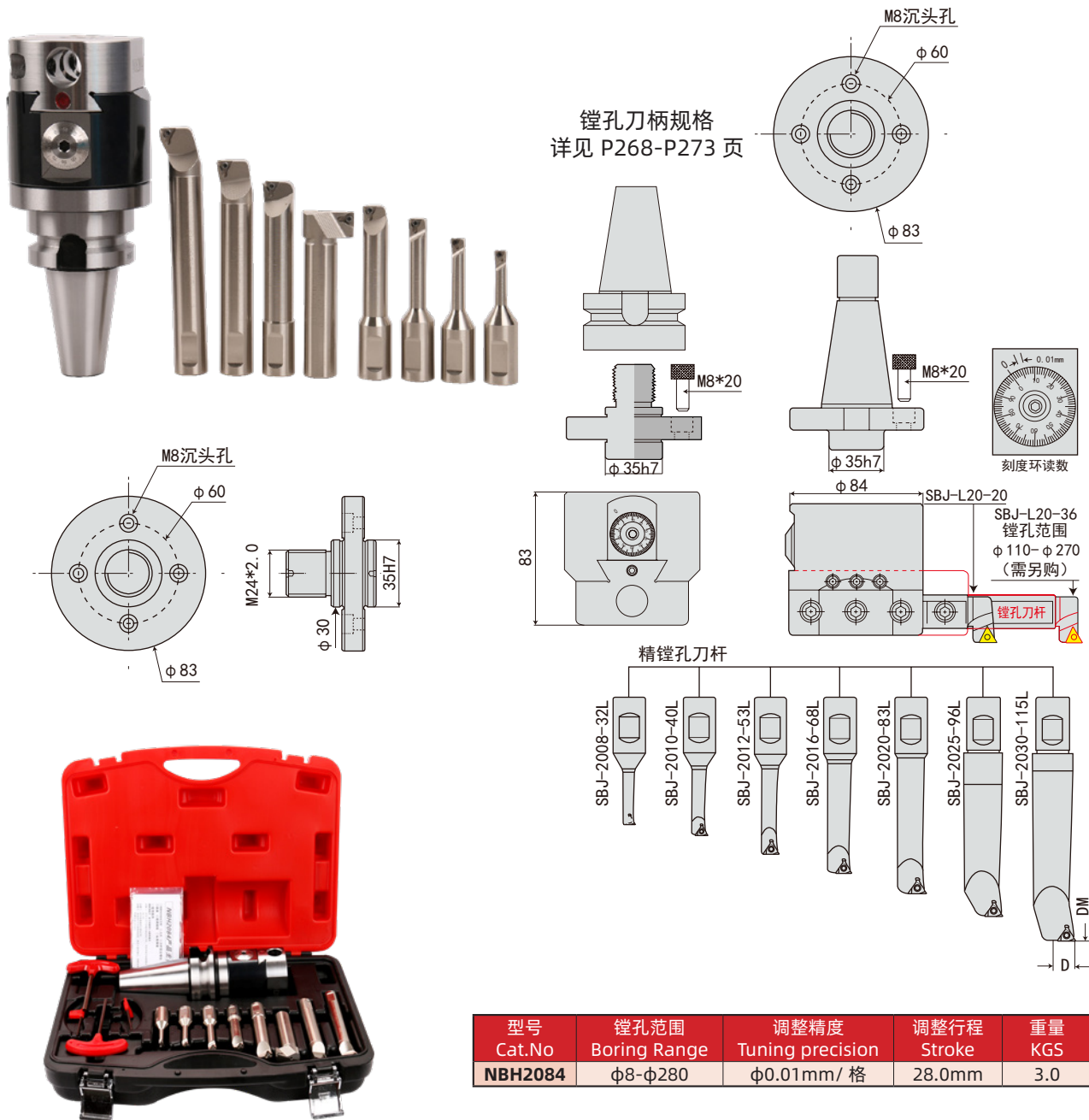
3Please use special wrench to fix the slide with two M8 screws,too much force will be seat shift, on the contrary,there will be accuracy of non-performing.

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:

- ① Whether the guiding shaft of the fixed screw is loosened.
- ② Whether it is out of the adjustment range.
- ③ 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	φ8-φ280	φ0.01mm/ 格	28.0mm	3.0

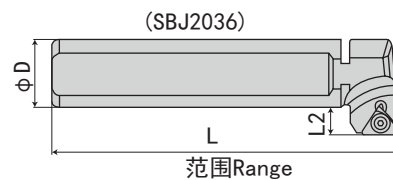
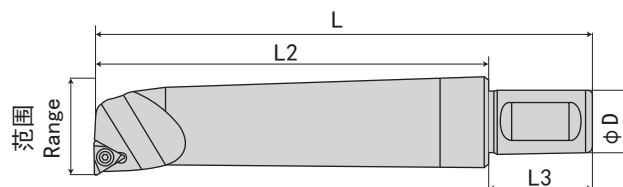
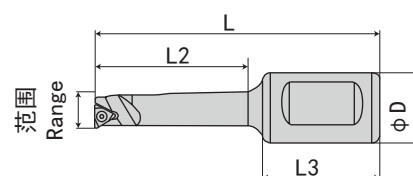
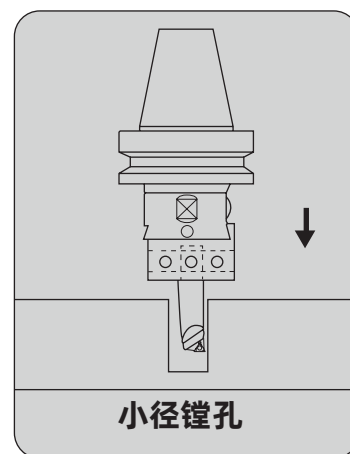
·NBH2084 微调精镗头套装

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					
SBJ2016-68L		16-21	110	68					
SBJ2020-83L		20-130	123	83					
SBJ2025-96L		25-135	137	96		 11°	TPGH090202 TPGH090204	SB-2TR-M2.5*6.0	T8
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:

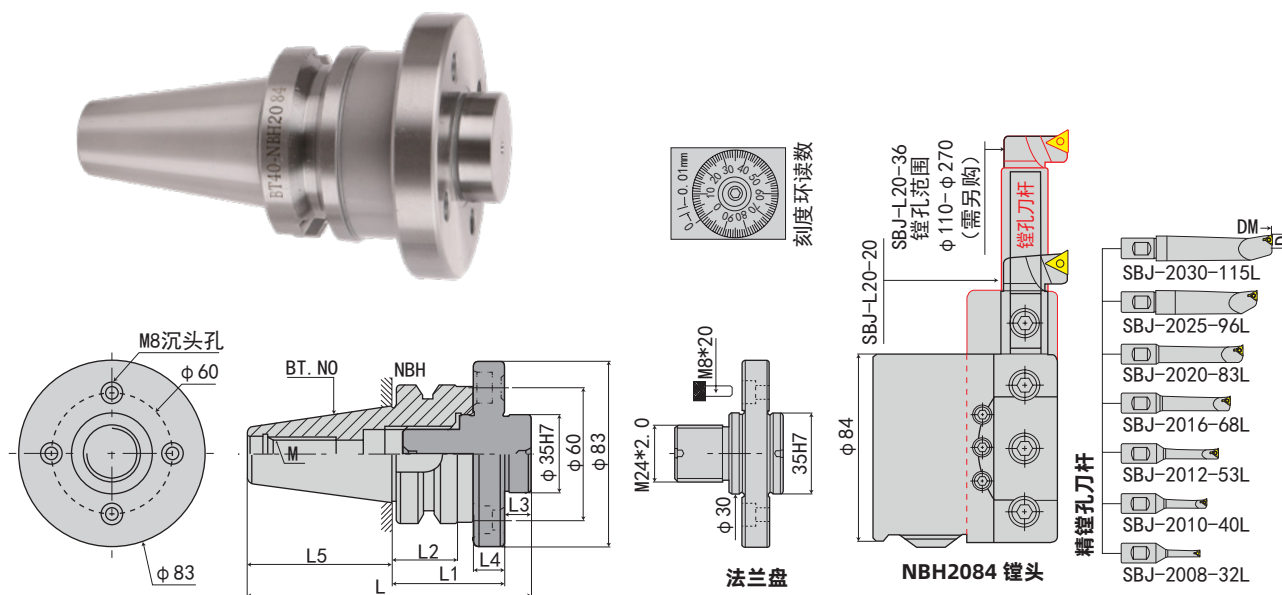
- ◎ 本套产品属经济型精密镗刀
- ◎ 最小调节刻度为 $\phi 0.01\text{mm}$, 半径 0.005mm
- ◎ 本镗孔器在位移量少时, 其最高转速不超 1600rpm 为宜

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 0.005mm .
- ◎ While moving in small scope, the highest speed $< 1600\text{rpm}$.

·BT-NBH2084A 镗孔组合刀柄

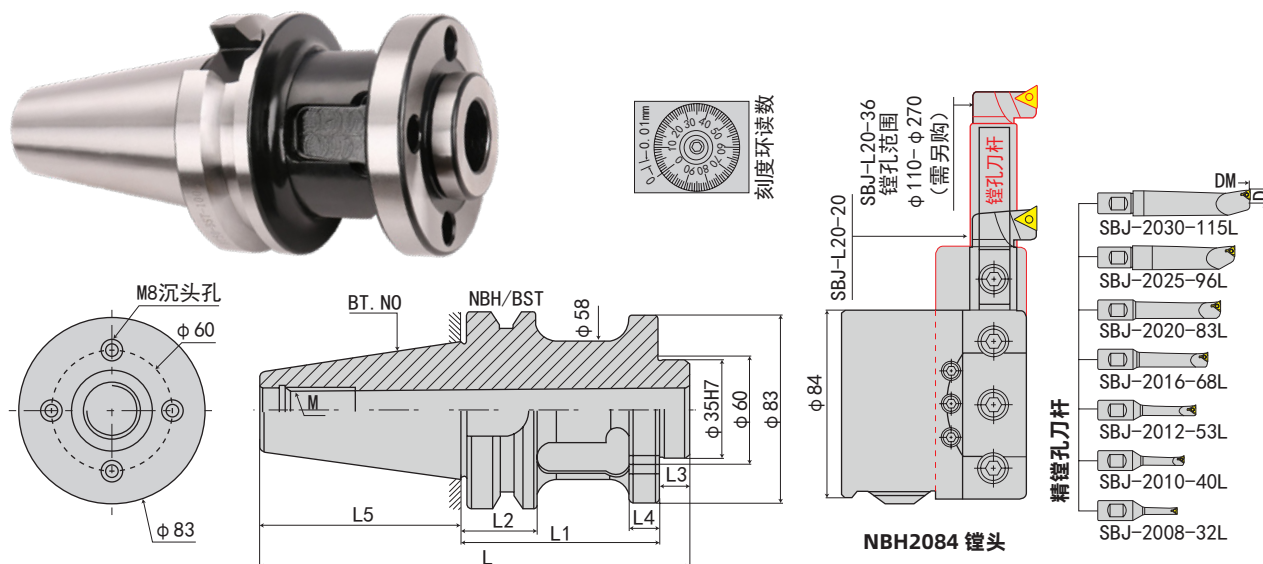
BT-NBH2084A BORING SYSTEM



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

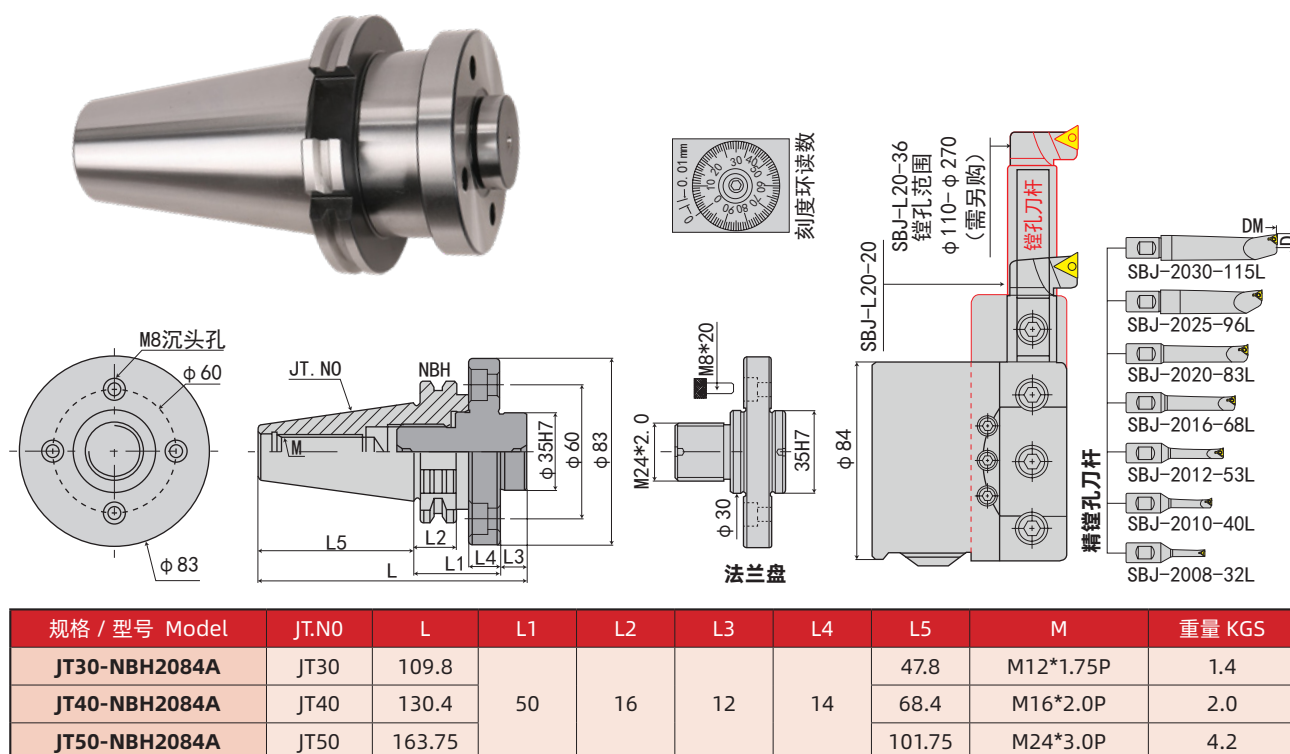
BT-NBH2084B BORING SYSTEM



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

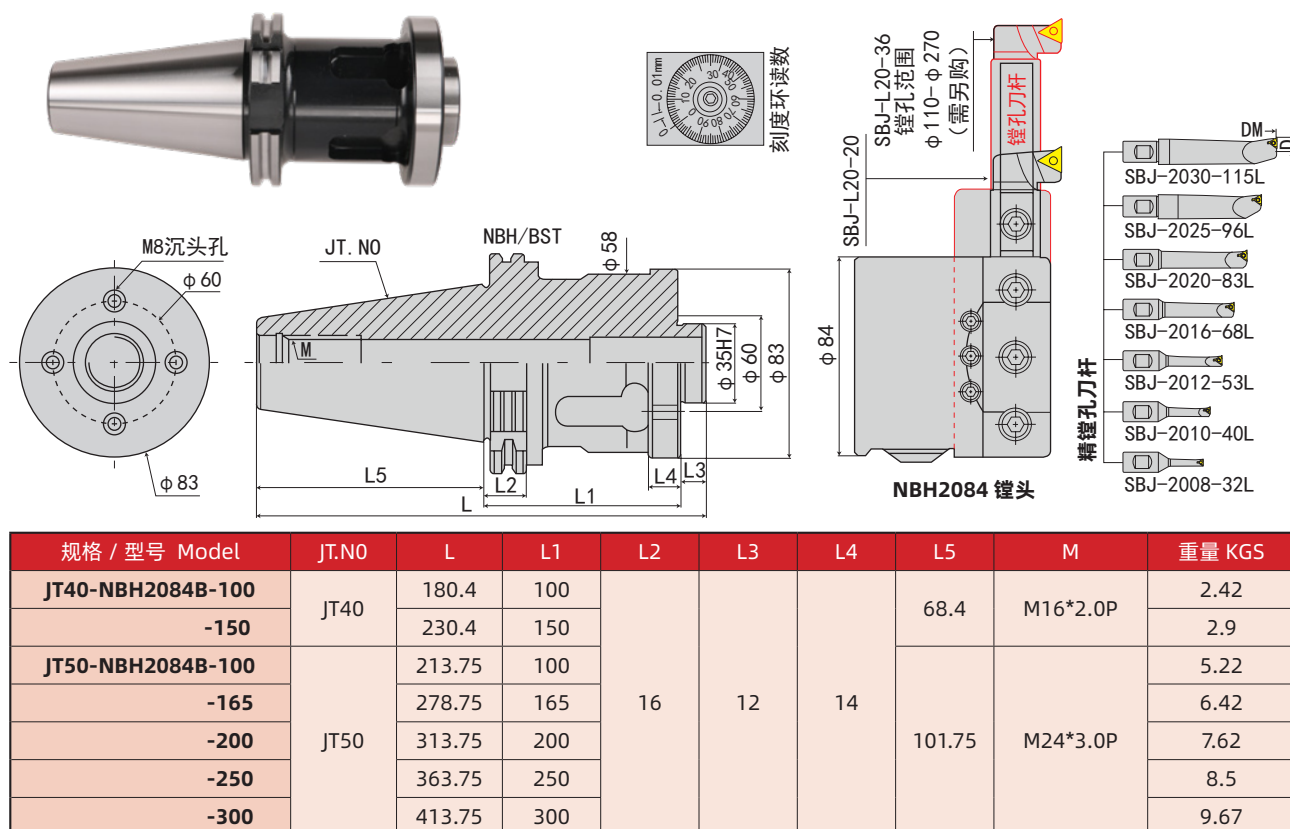
·JT-NBH2084A 镗孔组合刀柄

JT-NBH2084A BORING SYSTEM



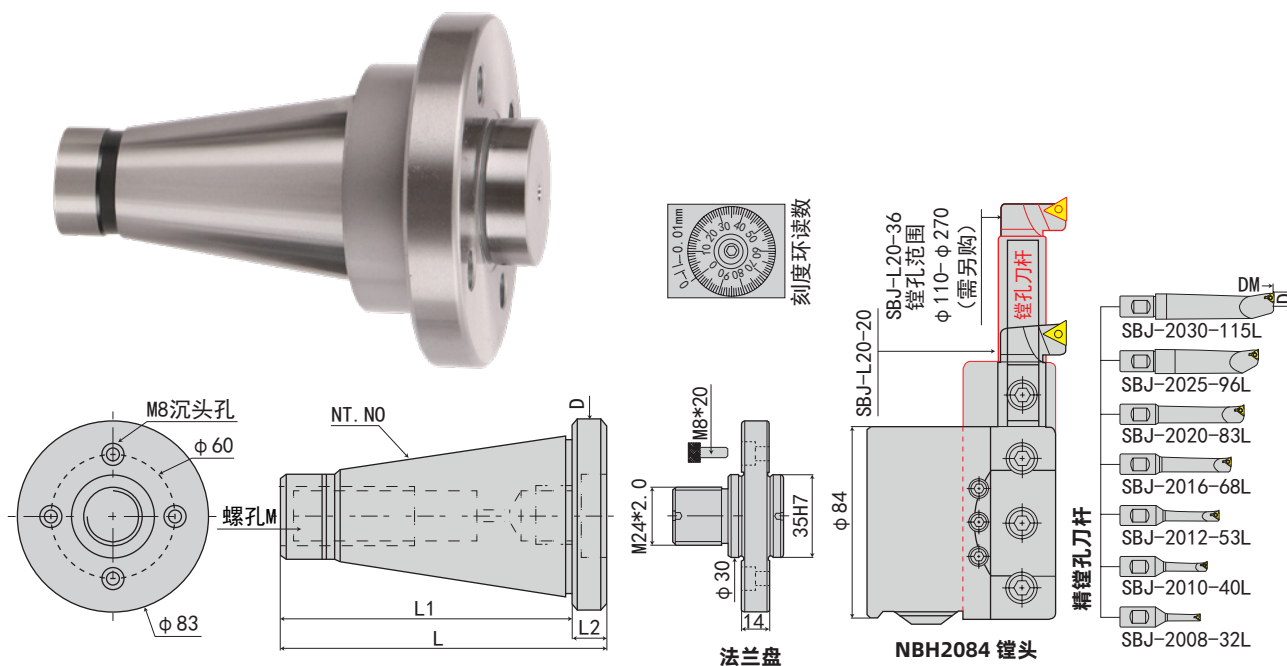
·JT-NBH2084B 镗孔组合刀柄

JT-NBH2084B BORING SYSTEM



·NT-NBH2084A 镗孔组合刀柄

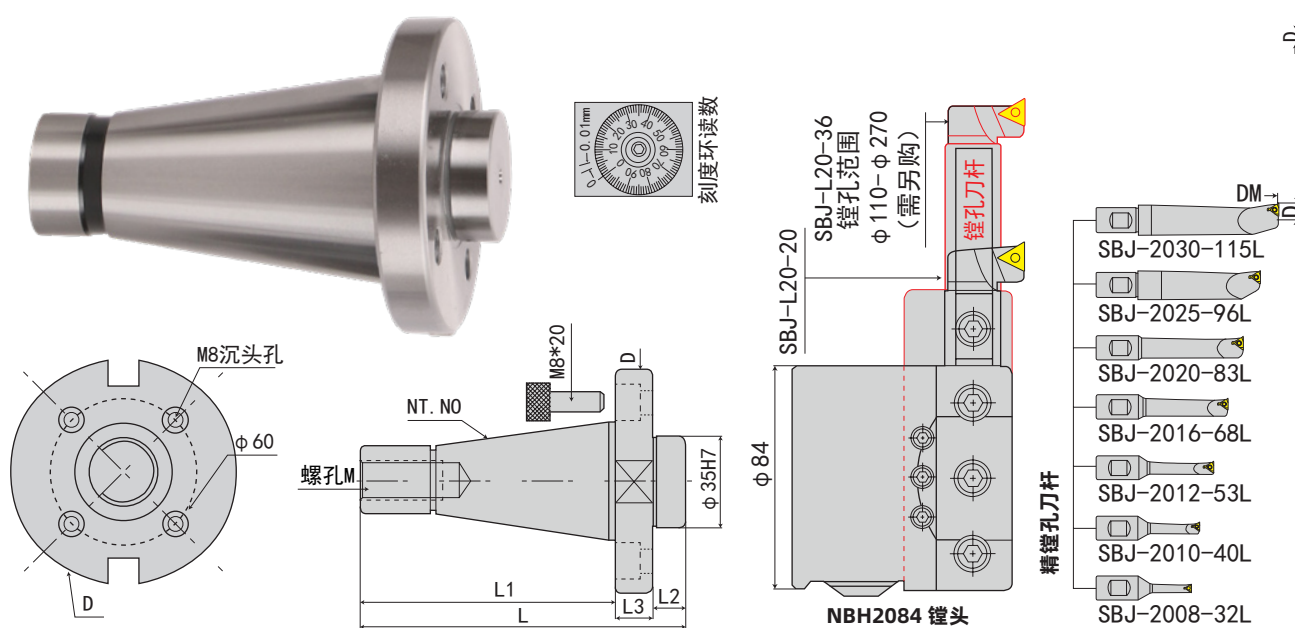
NT-NBH2084A BORING SYSTEM



规格 / 型号 Model	NT.N0	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

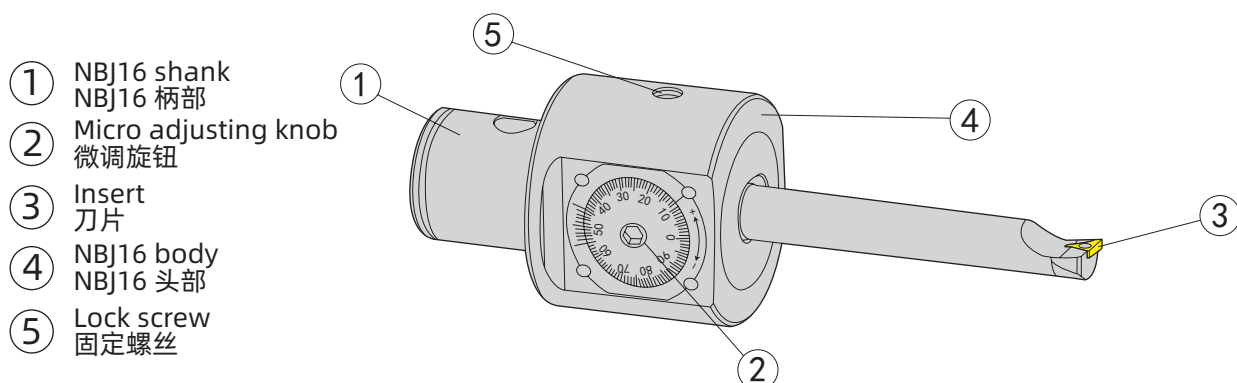
NT-NBH2084C BORING SYSTEM



规格 / 型号 Model	NT.N0	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 $\phi 0.01\text{mm}$ 。

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 $\phi 0.01\text{mm}$.

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 $\phi 11\text{mm}$ 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：

①导向轴固定螺丝是否松开。

②是否超出调整范围。

③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 $\phi 11\text{mm}$.

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:

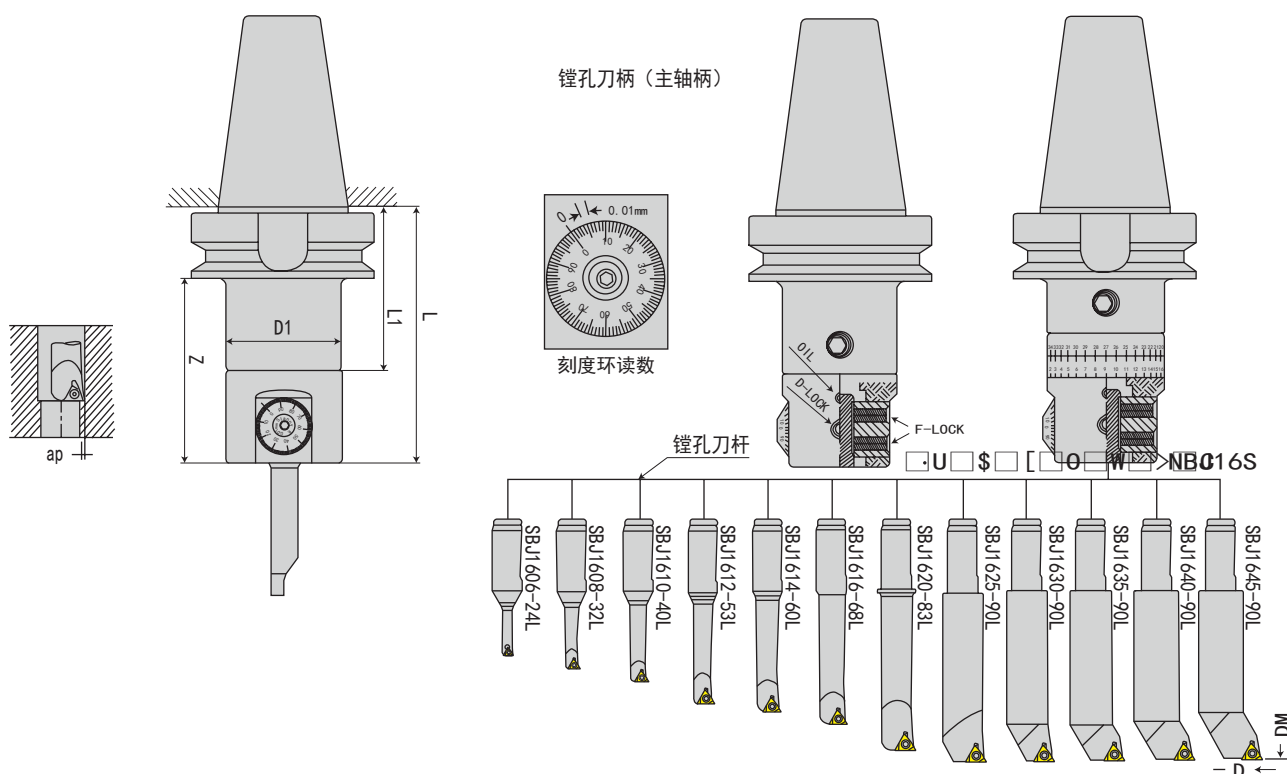
① Whether the guiding shaft of the fixed screw is loosened.

② Whether it is out of the adjustment range.

③ 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 $\phi D1$	内置刀杆 dmm	重量 KGS
			刀柄 Shank	镗头 Boring head							
BT30-NBJ16-110	0-5	88	BT30-LBK6-60	NBJ16	8-50mm	LBK6	110	60	64	16	2.4
BT40-NBJ16-115		88	BT40-LBK6-65				115	65			2.7
BT50-NBJ16-145		107	BT50-LBK6-95				145	95			5.9
JT30-NBJ16-110		91	JT30-LBK6-60				110	60			2.4
JT40-NBJ16-115		96	JT40-LBK6-65				115	65			2.7
JT50-NBJ16-145		126	JT50-LBK6-95				145	95			5.9
NT30-NBJ16-110		95	NT30-LBK6-60				110	60			2.4
NT40-NBJ16-115		100	NT40-LBK6-65				115	65			2.7
NT50-NBJ16-145		130	NT50-LBK6-95				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 $\phi 0.01\text{mm}$, 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

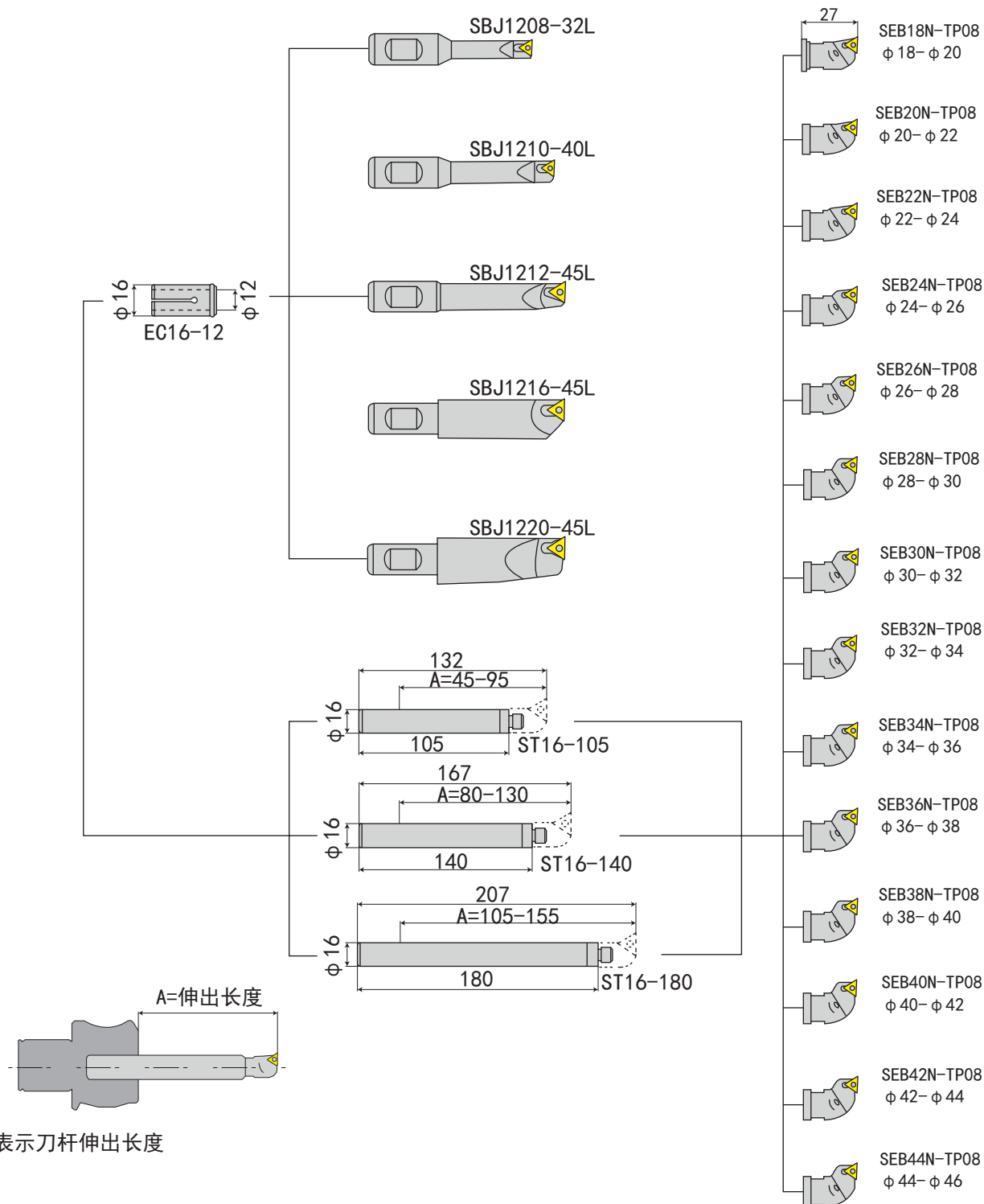
Features:

- ◎ 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 $< 1600\text{rpm}$.

·NB16 镗刀组合系统（小径精镗系列）

NB16 SMALL DIAMETER FINE BORING HEAD

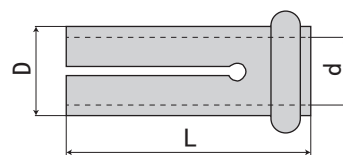
加工范围 $\phi 8$ - $\phi 50$

 （加工范围 $\phi 2$ - $\phi 8$ ，请选择另购进口极小径硬质合金镗杆）


·EC 钨钢刀杆专用筒夹

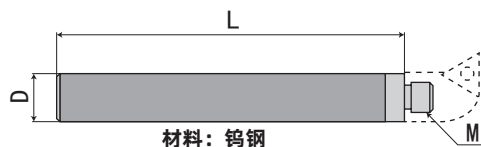
EC COLLET FOR SOLID CARBIDE BORING BAR

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			-
-140L		140			-
-180L		180			-

特点:

Features:

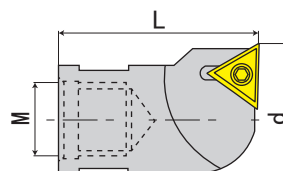
注:

◎ 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

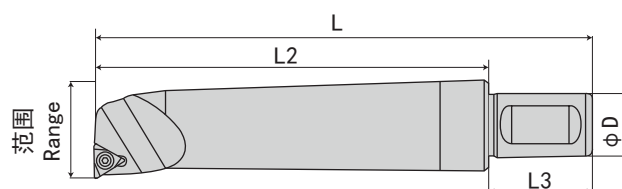
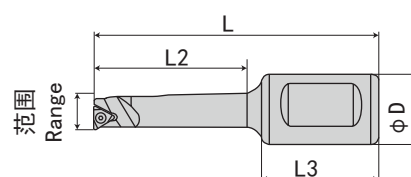
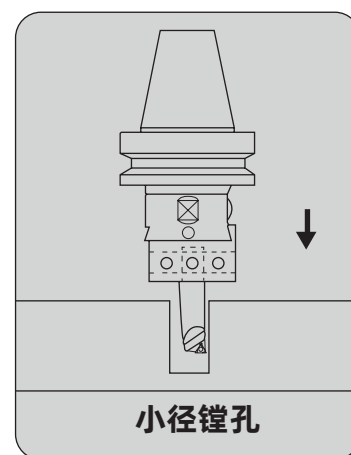
SEB INDEXABLE INSERT HOLDER FOR BORING BAR



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			TPGH110304	M3*8.0													
SBJ1614-60L		14-17	105	60																	
SBJ1616-68L		16-21	110	68			TPGH090202	M2.5*6.0													
SBJ1620-83L		20-26	125	83																	
SBJ1625-90L		25-31	128	90			TPGH110304	M3*8.0													
SBJ1630-90L		30-36																			
SBJ1635-90L		35-41					TPGH090202	M2.5*6.0													
SBJ1640-90L		40-46																			
SBJ1645-90L		45-51					TPGH110304	M3*8.0													
SBJ1616-150L(加长)		16-21	192	150																	
SBJ1620-150L(加长)		20-26																			
SBJ1625-150L(加长)		25-31	188																		
SBJ1630-150L(加长)		30-36																			

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 φ6-φ50mm
- ◎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 φ6-φ50mm.
- ◎ With 16mm shank trails Boring, with different cutting tools can be reached a variety of combinations, in order to facilitate customers to use.