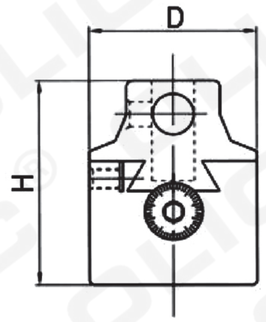
F1型粗镗头 F1 Rough Boring Heads

OLICNC®

F1-25mm(4”)　F1-18mm(3”)　F1-12mm(2”)



Model	D	H	Max Offset	Boring Bar Dia.	Min Graduation	Dia.of Boring
F1–2”	2”	2–7/16”	5/8”	1/2”	0.01mm	3/8” –5”
F1–3”	3”	3–5/32”	1”	3/4”	0.01mm	1/2” –9”
F1–4”	4”	3–1/2”	1–5/8”	1”	0.01mm	8/5” –25”
F1–12mm	50	63	16mm	12mm	0.01mm	10–125mm
F1–18mm	75	80	25mm	18mm	0.01mm	12–225mm
F1–25mm	100	88	41mm	25mm	0.01mm	15–320mm

F1型镗刀F1 Rough Boring Cutters

OLICNC®

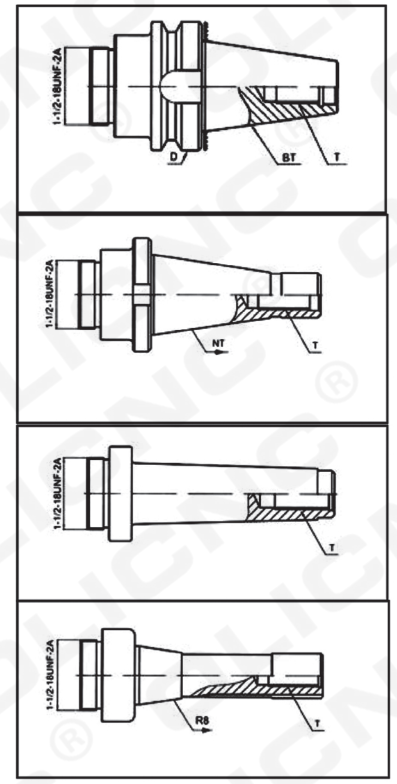
9PCS for 12mm　12PCS for 18mm　6PCS for 25mm

Metric			Inch		Qty.of Boring Cutters	Bar Thread
Dia.of Boring Holes	Dia.of Boring Heads	Boring Capacity	Dia.of Boring Heads	Dia.of Boring Heads		
F1–12mm	50mm	10–125mm	F1–2”	1/2”	9PCS	7/8–20 1–1/2–18
F1–18mm	75mm	12–225mm	F1–3”	3/4”	12PCS	1–1/2–18
F1–25mm	100mm	15–320mm	F1–4”	1”	6PCS	1–1/2–18

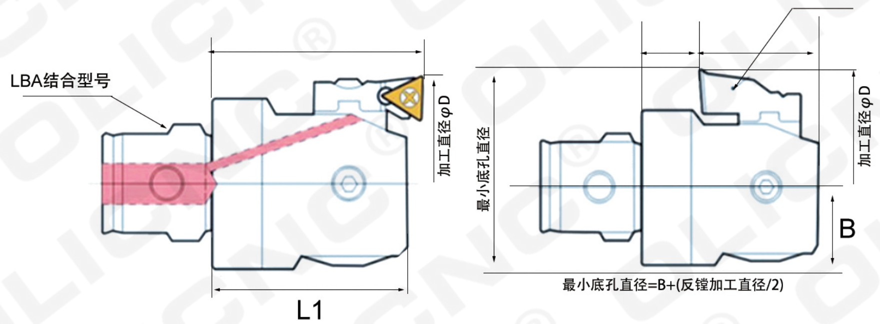
F1 型镗头连接柄 F1 Rough Boring Heads Shanks

OLICNC®

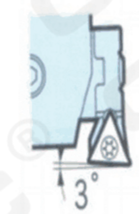
Model	T	L	Wt.
BT40	M16–2.0P	102	1.24
BT50	M24–3.0P	134	3.97
NT30	1/2–UNC	102	0.6
NT30	M12–1.75P	102	0.6
NT40	5/8–UNC	135	1.2
NT40	M16–2.0P	135	1.2
NT50	1” –8UNC	168	3.14
NT50	M24–3.0P	168	3.14
MT2	3/8–16UNC	93	0.4
MT2	M10–1.5P	108	0.4
MT3	3/8–16UNC	110	0.44
MT3	1/2–13UNC	110	0.44
MT3	1/2–12UNC	110	0.44
MT3	M12–1.75P	128	0.44
MT4	5/8–11UNC	133	0.95
MT4	M16–2.0P	154	0.95
MT5	1” –8UNC	160	1.7
MT5	M24–3.0P	185	1.7
R8	7/16–20UNF	132.5	0.6



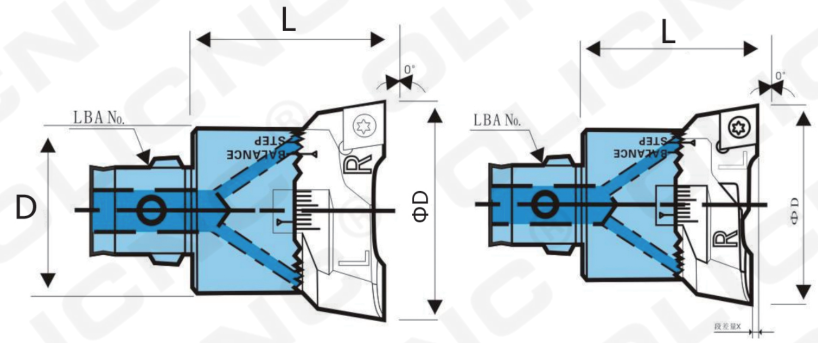
***Please state the detailed size when ordering;　e.g.: F1- R8-18mm**

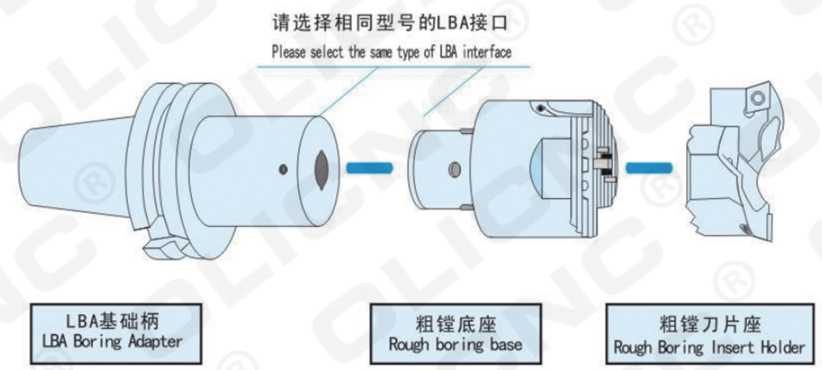


Specifcation	可选配刀片座延长镗孔范围 Optionalinsert holder to extend boring range	正镗 boring			反镗 Back boring				刀柄接口 Interface	刀片型号/螺丝/扳手 Insert/Screw/Wrench	KG
		镗孔范围 Boring range	L	L1	镗孔范围 Boring range	L2	L3	B			
CBA 16 (16-20)	本体1号刀片座ENH1-1 No.1insert holder ENH1-1	16-20mm	60	57	/	/	/	/	C16-150L		0.2
CBA 20 (20-36)	No.1 insert holder ENH1-1	20-26mm	35	32		1.5	1.9	10	LBA1		0.7
	No.2 insert holder ENH1-2	25-31mm			30-31mm						
	No.3 insert holder ENH1-3	30-36mm			30-36mm						
CBA 25 (25-47)	No.1 insert holder ENH2-1	25-33mm	40	37	/	11.5	2.1	12.5	LBA2		0.12
	No.2 insert holder ENH2-2	32-40mm			36-40mm					TPG*08020*L M2.0/T6	
	No.3 insert holder ENH2-3	39-47mm			39-47mm						
CBA 32 (32-60)	No.1 insert holder ENH3-1	32-42mm	40	37	/	10	25	16	LBA3		0.21
	No.2 insert holder ENH3-2	41-51mm			46-51mm						
	No.3 insert holder ENH3-3	50-60mm			50-60mm						
CBA 40 (40-79)	No.1 insert holder ENH4-1	40-55mm	50	47	/	14	29	20	LBA4		0.4
	No.2 insert holder ENH4-2	51-66mm			53-63mm						
	No.3 insert holder ENH4-3	64-79mm			64-79mm						
CBA 52 (52-112)	No.1 insert holder ENH5-1	52-75mm	60	56	62-70mm	19	34	25.5	LBA5		1.1
	No.2 insert holder ENH5-2	70-93mm			65-82mm						
	No.3 insert holder ENH5-3	89-112mm			78-95mm						
CBA 68 (68-150)	No.1 insert holder ENH6-1	68-100mm	70	66	80-100mm	22	45.2	32.5	LBA6		1.74
	No.2 insert holder ENH6-2	94-125mm			94-126mm						
	No.3 insert holder ENH6-3	118-150mm			118-150mm						
CBA 100 (100-203)	No.1 insert holder ENH6-1	100-153mm	70	66	112-153mm	22	45.2	45.5	LBA6	TPG*11020*L M2.5/T8	2.46
	No.2 insert holder ENH6-2	126-179mm			126-179mm						
	No.3 insert holder ENH6-3	150-203mm			150-203mm						
CBA 150 (150-210)	No.1 insert holder ENH6-1	150-210mm	70	66	150-200mm	38	45.2	45.5	LBA6/LST		2.96
	No.2 insert holder ENH6-2	176-236mm			176-226mm						
	No.3 insert holder ENH6-3	200-260mm			200-250mm						

镗头型号 Specfcation	形状图 Figure	对应镗头 Boring head	镗孔范围 Boring range
刀片座ENH1-1 Insert holder Enh1-1	 对应刀片 TP08	CBA20	20-26mm
刀片座ENH1-2 Insert holder Enh1-2			25-31mm
刀片座ENH1-3 Insert holder Enh1-3			30-36mm
刀片座ENH2-1 Insert holder Enh2-1		CBA25	25-33mm
刀片座ENH2-2 Insert holder Enh2-2			32-40mm
刀片座ENH2-3 Insert holder Enh2-3			39-47mm
刀片座ENH3-1 Insert holder Enh3-1		CBA32	32-42mm
刀片座ENH3-2 Insert holder Enh3-2			41-51mm
刀片座ENH3-3 Insert holder Enh3-3			50-60mm

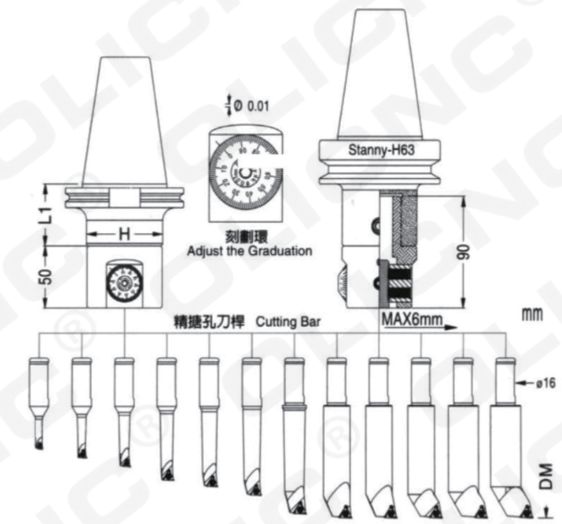
镗头型号 Specfcation	形状图 Figure	对应镗头 Boring head	镗孔范围 Boring range
刀片座ENH4-1 Insert holder Enh4-1	 对应刀片 TP08	CBA40	40-55mm
刀片座ENH4-2 Insert holder Enh4-2			51-66mm
刀片座ENH4-3 Insert holder Enh4-3			64-79mm
刀片座ENH5-1 Insert holder Enh5-1	 对应刀片 TC11	CBA52	52-75mm
刀片座ENH5-2 Insert holder Enh5-2			70-93mm
刀片座ENH5-3 Insert holder Enh5-3			89-112mm
刀片座ENH6-1 Insert holder Enh6-1		CBA68	68-100mm
刀片座ENH6-2 Insert holder Enh6-2			94-125mm
刀片座ENH6-3 Insert holder Enh6-3			118-150mm





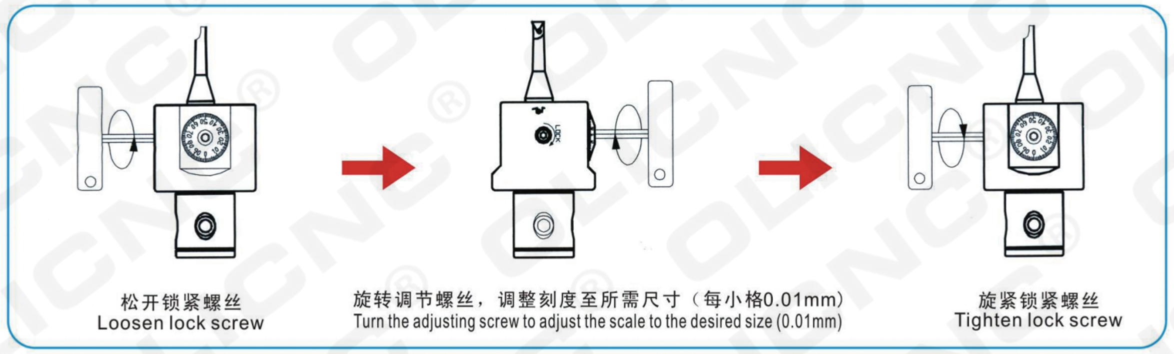
型号 Model	结合型号 Boring Adapter	镗孔范围 Boring range	L	φD1	刀片 Insert	重量 Weight
RBA19-25RL-C	LBA1	19-25	30	18	CCMT060204	0.15
RBA25-35RL-C	LBA2	25-35	35	24	CCMT060204	0.3
RBA32-45RL-C	LBA3	32-45	40	31	CCMT060204	0.5
RBA40-55RL-C	LBA4	40-55	50	39	CCMT09T304	1
RBA52-75RL-C	LBA5	52-75	60	50	CCMT09T304	2.5
RBA68-110RL-C	LBA6	68-110	70	66	CCMT120408	3.1
RBA110-160RL-C	BST Series	110-160	95	100	CCMT120408	4.2
RBA160-204RL-C		160-204		130	CCMT120408	5.3

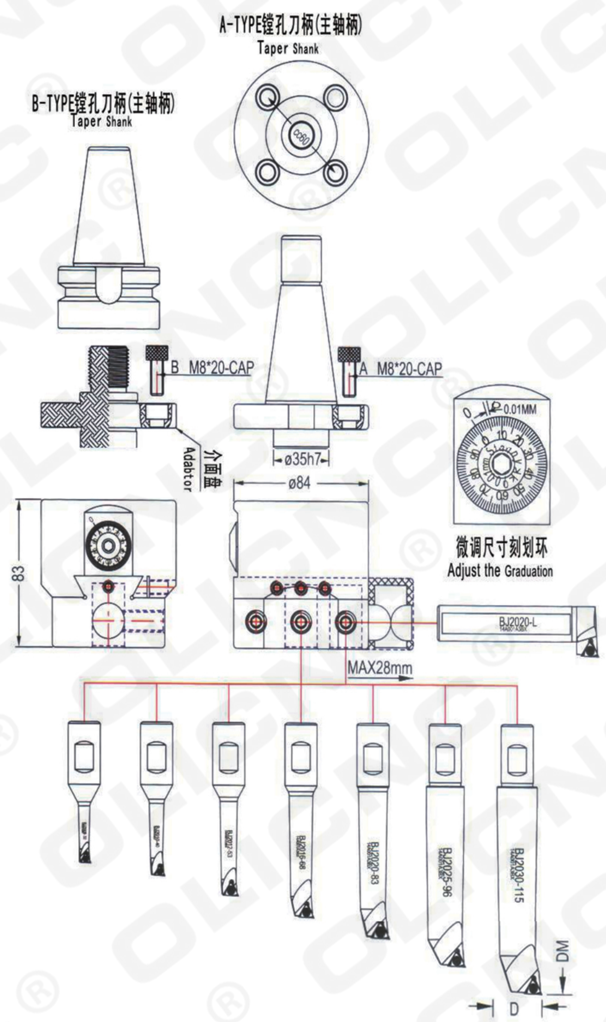
- 使用单刃镗孔，双刃镗孔及高低阶镗孔。镗孔范围：LBA分体式Φ19-Φ110,BST分体式Φ110-Φ204.
- 新型刀刃滑座设计，刀被补强。加工时滑座承受的两个作用力互相抵消，产生最大刚性和切削力。适用各形态的镗孔作业。
- 可依照不同加工需求，轻易调整镗刀，作少量多样的加工。加工深度可配合延长杆至所需长度。
- 精准的侧边刻度，协助使用者轻易调整到所需的孔径范围。
- 适用在各型切削中心机或镗床配合使用，并可配合各种厂牌规格相同的刀片。节省刀具研磨时间并大幅度增加镗孔效率。
- 高低断差设计，平刃和高低刃均可采用。
- 直径Φ100以上大孔径镗刀，使用直接组件结构简单钢性强。
- The head is suitable for single bit boring,twin-bit boring and step boring.Boring range:φ19-110mm for LBA
- Serrated design of insert holder can produce the highest rigidity and cutting force and is suitable for various kinds of boring
- Boring head can be easily adjusted to different boring needs for machining on demand.Boring depth can be extended by extension bar.
- Clear side division provides a convenient adjustment without using a tool pre-setter.
- Most Suitable for biring ov various machine centers or boring mill,Universal design accepts inserts of any brands which will reduce tool grinding time and greatly improve boring and step boring.
- Patented step boring design,suitable for both level boring effciency.
- Boring tools of more than φ100mm adopt the modular design and are characterized by simplicity and high rigidity.



型号Cat.No	镗孔范围Boring range	调整精度 Adjustment precision	调整行程 Stroke	重量 Weight
SBJ16	φ6-φ51	φ0.01mm/格 φ0.01mm/scale division	6.0mm	1.2

镗孔刀杆 Boring	范围 Range	深度 Depth	镗刀片 Insert	螺丝 Screw	扳手 Wrench	重量 Weight
BJ1606-24	6-9	24	WBGT0601..L	SB-1STR-M2	T6	0.08
BJ1608-32	8-11	32	TBG0601..L	SB-1STR-M2	T6	0.08
BJ1610-40	10-13	40				0.08
BJ1612-53	12-15	53	TPGH0902..L	SB2TR-M2.5	T8	0.10
BJ1614-60	14-17	60				0.10
BJ1616-68	16-21	68				0.12
BJ1620-83	20-26	83	TPGH1103..L	SB-3TR-M3	T8	0.20
BJ1625-90	25-31	90				0.30
BJ1630-90	30-36	90				0.32
BJ1635-90	35-41	90				0.32
BJ1640-90	40-46	90				0.38
BJ1645-90	45-51	90				0.38
BJ1616-150（加长）	16-21	90				0.45
BJ1620-150（加长）	20-26	150				0.45
BJ1625-150（加长）	25-31	150				0.45
BJ1630-150（加长）	30-36	150				0.45
		150				0.45





八只套装 Eightsuit NBJ20-8pcs	镗刀型号Boring bar type		
	NBJ2010-40	NBJ2016-68	NBJ20-20L
	NBJ2008-32	NBJ2020-83	NBJ2030-115

型号 Model	镗孔范围(mm) Boring range	组合系统-主轴柄规格 Spinde models	内附零件 Items	重量（kg) Weight
BT40-NBH2084-8pcs	8-280	MAS403-BT40-NBH2084	1.NBH-主轴刀柄一把 One boring adapter NBH2084. 2.NBH2084精密镗刀头一支 One micro boring head NBH2084 3.NBJ20精镗刀柄八只 Eight micro boring bars NBJ20 4.扳手六只 Six wrenches	9.5
BT50-NBH2084-8pcs	8-280	MAS403-BT50-NBH2084		12
NT30-NBH2084-8pcs	8-280	DIN2080 ISO30-NBH2084		8
NT40-NBH2084-8pcs	8-280	DIN2080 ISO40-NBH2084		9.5
NT50-NBH2084-8pcs	8-280	DIN2080 ISO50-NBH2084		10.8
R8-NBH2084-8pcs	8-280	R8-7/16-20UNF-NBH2084		10.0
SK40-NBH2084-8pcs	8-280	DIN69871A ISO40-NBH2084		9.5
SK50-NBH2084-8pcs	8-280	DIN69871A ISO50-NBH2084		12.0
MT4-NBH2084-8pcs	8-280	DIN228AMT4-NBH2084		8.5
MT5-NBH2084-8pcs	8-280	DIN228AMT5-NBH2084		9.0

使用步骤/Operating Instructions

步骤一：选择加工范围内刀杆（图），置于镗头安装孔内（A图 B图 C图），使刀杆削平面对准固定螺丝紧固方向,并确认刀尖处于镗头微调下方向;

步骤二：松开微调锁紧螺钉（图）逆时针旋转;

步骤三：调整微调旋钮（图）逆时针使加工尺寸增大，反之减少。调整尺寸时，请按同方向微调，以确保微调精度,精度为每小格0.01mm.

步骤四：微调至所需尺寸后，以适当扭力锁紧微调锁紧螺钉（图）顺时针旋转.

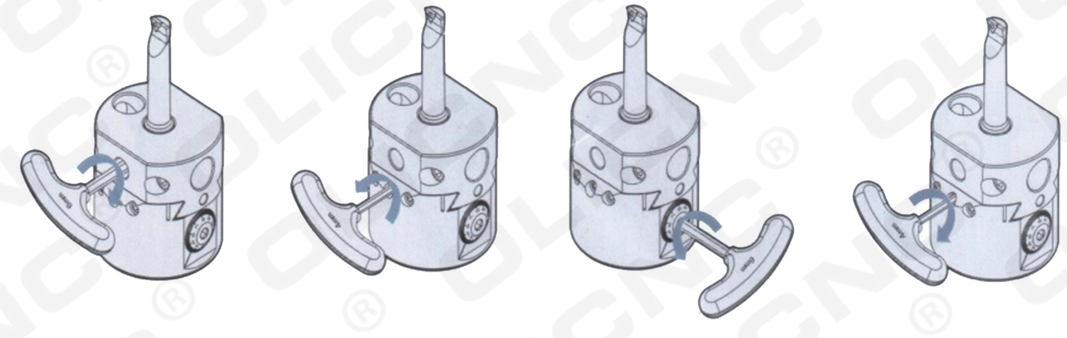
Step1: Hold right boring bar (See figure 6) in right hole (See pic A, B, C). Make sure weldon part of bar is to the position of lock screw and cutting edge of boring bar is to the position of adjusting panel.

Step2: Loosen adjusting screw anti-clockwise .

Step3: Enlarge the boring diameter by adjusting on the adjusting panel (See figure 2) anti-clockwise, while adjusting clockwise is to reduce the boring range.

Step4: Adjust till the boring diameter required and lock the adjusting screw properly.

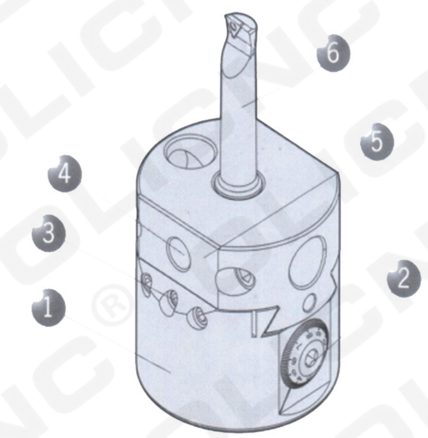
操作示意图 Instruction



步骤一Step1 步骤二Step2 步骤三Step3 步骤四Step4

产品结构/Manuals

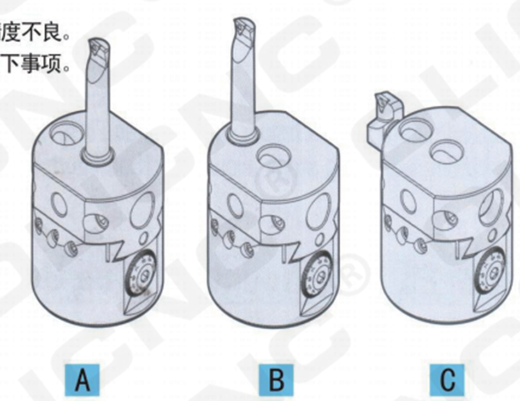
1. 镗头本体 Tool body
2. 微调旋钮 Adjusting Panel
3. 微调锁紧螺钉 Adjusting screw
4. 镗刀杆锁紧螺钉 Locking screw
5. 移动滑块 Part
6. 镗刀杆 Boring bar



使用者注意事项/Notices Of The User

1. 请在加工范围内（Φ8-Φ280mm）使用。
2. 调整微调旋钮前必须松开微调锁紧螺钉，否则会导致微调机构损坏。
3. 请使用专用扳手固定微调锁紧螺钉，扭力要适当，过紧会导致芯轴移位。过松会造成精度不良。
4. 本产品为精密机构，当阻力过大微调刻度盘无法旋转时，请立刻停止调整，并确认以下事项。
   A. 微调锁紧螺钉是否松开;
   B. 是否超出调整范围;
   C. 当过度旋转调整刻度盘会微调导致精密机构损坏。

1. Please use this tool within work range (ф6-ф50mm).
2. Please loosen the adjusting screw before adjusting.
3. Please fasten the adjusting knob by means of special wrench properly.
4. Please stop the adjustment when it is faced with a strong resistance, Or it is not able to go on. And make sure.
   A. If the locking screws is unlocked;
   B. If the adjustment is within the suggested work range;
   C. Over adjustment will bring damage to the tool irreversibly.

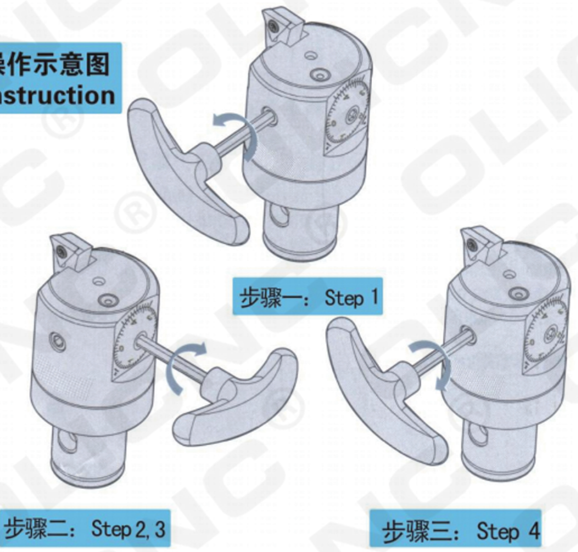


使用步骤/Operating Instructions

准备工作：须先确认刀片按照是否匹配，刀片座坚固螺丝是否锁紧
步骤一：松开微调锁紧螺钉（逆时针旋转）图
步骤二：旋转微调刻度盘（图）顺时针旋转使加工直径增大，逆时针旋转加工直径缩小（刻度盘每一格为直径0.01mm）
步骤三：调整尺寸加工时，请按同方向选转结束，以确保微调精度
步骤四：以适当力度扭紧微调锁紧螺钉（顺时针旋转）图完成调整

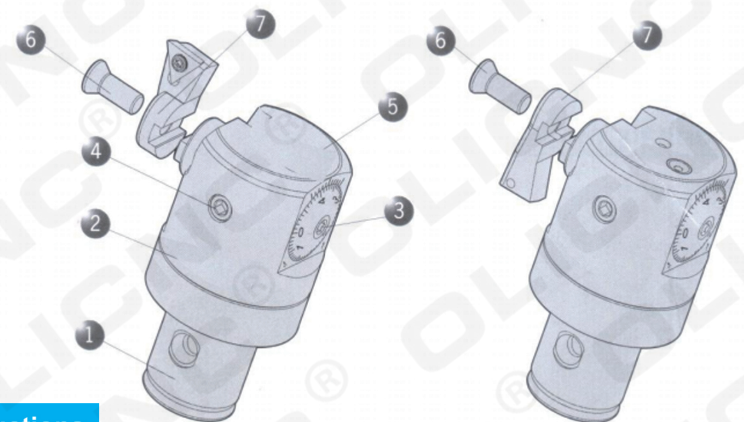
Checking before adjustment:Make sure right inserts mounted and screw for insert holder fastened properly.
Step 1:Unlock the clamping screw(See figure 1)anti-clockwise.
Step 2:Move the insert holder(See figure 2,3)to the required working diameter according to the reference line marked on the tool and insert holdet.
Step 3:Fasten the clamping screws(See figure 4)clockwise.
Step 4:Loosen the locking screw(See finure 1)anti-clockwise.

操作示意图 Instruction



产品结构/Manuals

1. 镗头柄部 Connection part
2. 镗头本体 Tool body
3. 微调刻度盘 Adjusting scales
4. 微调锁紧螺钉 Locking screw
5. 注油孔 Oil-feed hole
6. 刀片座锁紧螺钉 Clamping screw
7. 刀片座 Insert holder



使用者注意事项/Operating Instructions

1. 请在调整范围内加工使用。
2. 调整微调刻度盘前，必须松开微调锁紧螺钉，否则会对内部精调机构造成损坏。
3. 本品是由调整微调刻度盘带动精密螺杆旋转，来实现刀片座移动。
   在阻力过大或无法旋转时，请立即停止调整，并确认以下事项：
   A. 微调锁紧螺钉是否松开；
   B. 是否超出调整范围。
4. 使用反镗功能时，主轴必须反转。
5. 用户须注入润滑油(图)，润滑油脂的注入量以从刻度盘周围渗出为止，润滑油脂的作用不但起到润滑的作用，还可以清除渗入冷却液和杂质，为了防止长时间不使用而使润滑油脂硬化，请定期转动刻度盘.
6. 请客户不要自行拆开镗头。

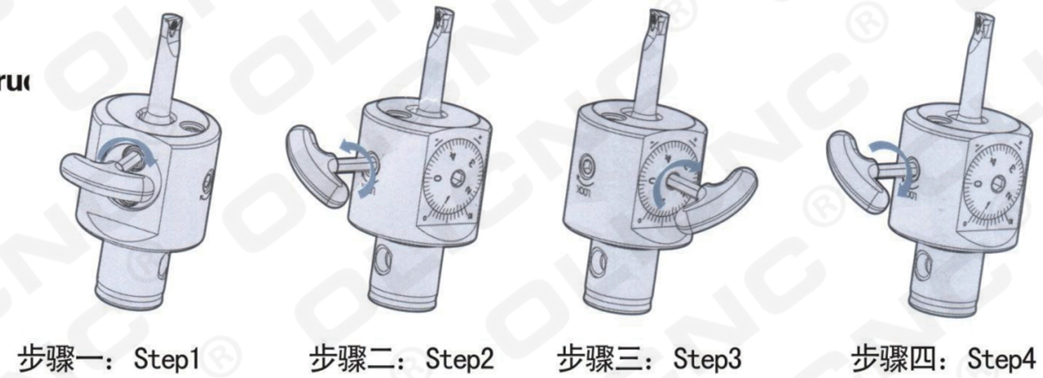
1. Use this tool within the suggested boring range.
2. Please loosen the adjusting screw before adjusting.
3. Please stop the adjustment when it is faced with a strong resistance. And make sure:
   A. If the locking screws is unlocked;
   B. If the adjustment is within the suggested work range;
4. The machine spindle shall run anti-clockwise when the function of back boring is adopted.
5. Lubrication grease shall be injected through the oil-feed hole properly(till some lubrication grease can be found on the face of adjusting panel).
6. Disassembling of the tool without suggestion is not suggested.

使用步骤/Operating Instructions

步骤一：选择加工范围内刀杆，至于镗头按照孔内，使刀杆削平面对准固定螺丝紧固方向，并确认刀尖处于镗头微调正方向，扭紧刀杆锁紧螺钉（图）
步骤二：松开微调锁紧螺钉（图）逆时针旋转。
步骤三：调整微调旋钮（图）顺时针使加工尺寸增大，反之减少。调整尺寸时，请按同方向微调，以确保微调精度。精度为筐一格0.01mm
步骤四：微调至所需尺寸后，以适当扭力锁紧微调锁紧螺钉（图）顺时针旋转。

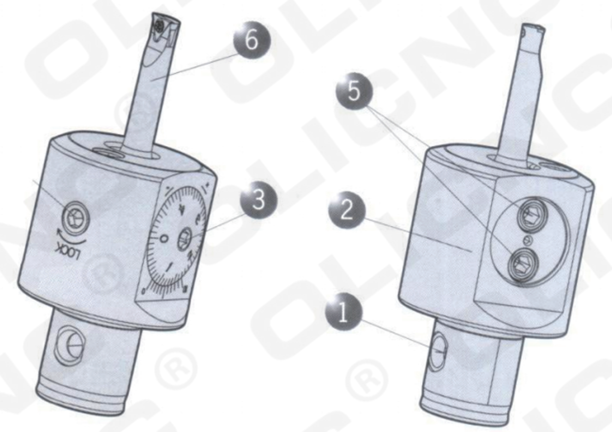
Step1: Hold right boring bar in right hole. Make sure weldon part of boring bar is to the position of lock screw and cutting edge of boring bar is to the position of adjusting panel. Fasten the locking screw properly.
Step2: Loosen adjusting screw(see figure 4)anti-clockwise .
Step3: Enlarge the boring diameter by adjusting on the adjusting panel(See figure 2)anti-clockwise, while adjusting clockwise is to reduce the boring range.
Step4: Adjust till the boring diameter required and lock the adjusting screw properly.

操作示意图/Instruc



产品结构/Manuals

1. 镗头柄部 Connection part
2. 镗头本体 Tool body
3. 微调旋钮 Adjusting knob
4. 微调锁紧螺钉 Locking screw
5. 镗刀杆锁紧螺钉 Mounting screw
6. 镗刀杆 Boring bar



使用者注意事项/Notices Of the User

1. 请在加工范围内（ф6-ф50mm）使用。
2. 调整微调旋钮前必须松开微调锁紧螺钉，否则会导致微调机构损坏。
3. 请使用专用扳手固定微调锁紧螺钉，扭力要适当，过紧会导致芯轴移位。过松会造成精度不良。
4. 本产品为精密机构，当阻力过大微调刻度盘无法旋转时，请立刻停止调整，并确认以下事项。
   A. 微调锁紧螺钉是否松开；
   B. 是否超出调整范围；
   C. 当过度旋转调整刻度盘会微调导致精密机构损坏。

1. Please use this tool within work range(ф6-ф50mm)
2. Please loosen the adjusting screw before adjusting.
3. Please fasten the adjusting knob by means of special wrench properly
4. Please stop the adjustment when it is faced with a strong resistance or is unable to continue adjustment, check immediately the offlowing points:
   A. If the locking screws is unlocked;
   B. If the adjustment is within the suggested work range;
   C. Over adjustment will bring damage to the tool irreversibly.