

**Nine<sup>9</sup>** **EMB**  
Eccentric Mechanism Boring bars



**No Backlash**

- Adjusted by eccentric mechanism, it is simple and backlash free.  
(Patented in ROC Taiwan, patent no. 108599, PR China ZL96 2 01178.9)
- It can replace end mill and brazed tool bits.

**Easy Handling**

- Dimensions are easy to read. They are indicated on the tools and are easily adjustable on the tool presetter or machine.
- Minimum readout division is 0.01 mm, it is easy for setting up fine boring.

**Ideal for Machining Small Holes**

- Ideal as small hole boring tool with excellent accuracy.
- For fine boring operation on milling machines, machining centres and special purpose machines.

**Economic**

- Low cost, high efficiency.
- The indexable insert allows a variety of materials to be cut .

Easy Handling

Application

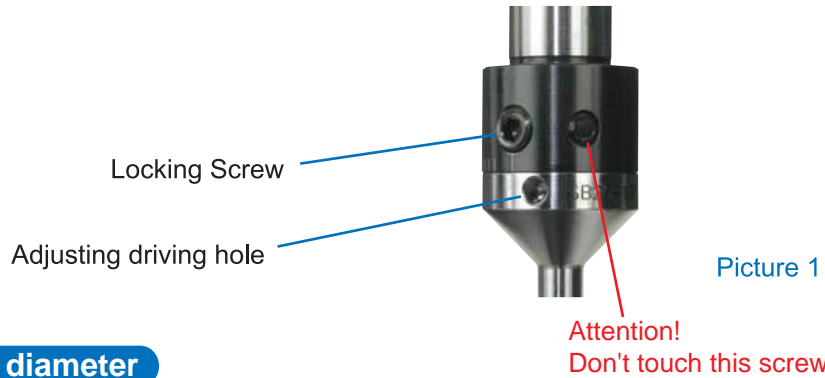
## Principle

Boring bars are adjusted by eccentric mechanism on the holder.

Maximum adjustable range:

00-99121: +/- 0.1 mm

00-99101: +/- 0.5 mm



## Procedures for setting boring diameter

• on tool presetter.

1. Clamp the boring bar 99101/99121 using the weldon tool holder.  
All of these boring bars have a 20mm shank.
2. Set the boring bar at the neutral position, as [picture 2](#).
3. Measure the boring diameter using the tool presetter and compare with the required diameter.
4. If boring diameter is too big or too small, please put an allen-key into the adjusting driving hole. Turn to " + " to increase and turn to " - " to reduce boring diameter. ([picture 3](#))



## Procedures for setting boring diameter

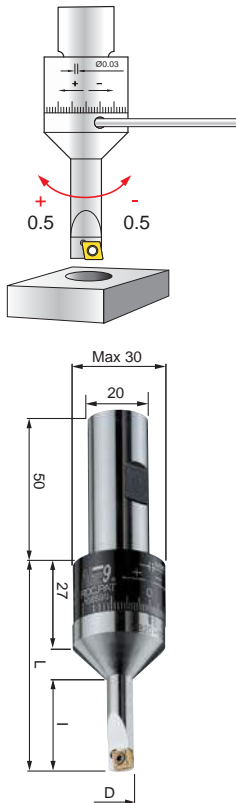
• on milling machine and machining centers.

1. Clamp the boring bar 99101/99121 using the weldon tool holder.  
All of these boring bars have a 20mm shank.
2. Set the boring bar at the neutral position, as [picture 2](#).
3. Test cut on work piece, about 3-5mm depth.
4. Measure the boring diameter of workpiece and compare with the required diameter.
5. If boring diameter is too big or too small, please put an allen-key into the adjusting driving hole. Turn to " + " to increase and turn to " - " to reduce boring diameter.
6. All of these boring tools can be set to required diameter on tool presetter.



## 99101

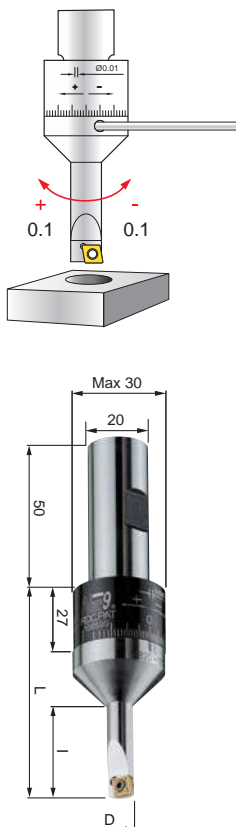
\* H type with internal coolant can be ordered on request from Dia. 7mm.  
Ordering example: 00-99101-07H.



Ordering Code	Part No.		ØD	I	L	Insert	Key / Screw	
00-99101-07	SB20-0721-03	Adjustment range:±0.5mm Each Division 0.03mm	6.5-7.5	21	60	CCGT040102	NK-T6 NS-20036	
00-99101-08	SB20-0824-03		7.5-8.5	24	63			
00-99101-09	SB20-0927-03		8.5-9.5	27	65	CCGH060204 CCFT060204 CCMW060204	NK-T7 NS-25045	
00-99101-10	SB20-1030-03		9.5-10.5	30	68			
00-99101-11	SB20-1133-03		10.5-11.5	33	70			
00-99101-12	SB20-1236-03		11.5-12.5	36	73			
00-99101-13	SB20-1339-03		12.5-13.5	39	75			
00-99101-14	SB20-1442-03		13.5-14.5	42	78			
00-99101-15	SB20-1545-03		14.5-15.5	45	80			
00-99101-16	SB20-1648-03		15.5-16.5	48	83			
00-99101-17	SB20-1751-03		16.5-17.5	51	85			NK-T7 NS-25060
00-99101-18	SB20-1850-03		17.5-18.5	50	82			
00-99101-19	SB20-1950-03		18.5-19.5	50	82			
00-99101-20	SB20-2050-03		19.5-20.5	50	82			
00-99101-21	SB20-2150-03		20.5-21.5	50	82			
00-99101-22	SB20-2250-03		21.5-22.5	50	82			
00-99101-23	SB20-2350-03		22.5-23.5	50	82			
00-99101-24	SB20-2450-03		23.5-24.5	50	82			
00-99101-25	SB20-2550-03		24.5-25.5	50	82			

## 99121

\* H type with internal coolant can be ordered on request from Dia. 7mm.  
Ordering example: 00-99121-07H.



Ordering Code	Part No.		ØD	I	L	Insert	Key / Screw	
00-99121-05	SB20-0515-01	Adjustment range:±0.1mm Each Division 0.01mm	4.9-5.1	15	54	CCGT030102	NK-T6 NS-16030	
00-99121-06	SB20-0618-01		5.9-6.1	18	57			
00-99121-07	SB20-0721-01		6.9-7.1	21	60	CCGT040102	NK-T6 NS-20036	
00-99121-08	SB20-0824-01		7.9-8.1	24	63			
00-99121-09	SB20-0927-01		8.9-9.1	27	65	CCGH060204 CCFT060204 CCMW060204	NK-T7 NS-25045	
00-99121-10	SB20-1030-01		9.9-10.1	30	68			
00-99121-11	SB20-1133-01		10.9-11.1	33	70			
00-99121-12	SB20-1236-01		11.9-12.1	36	73			
00-99121-13	SB20-1339-01		12.9-13.1	39	75			
00-99121-14	SB20-1442-01		13.9-14.1	42	78			
00-99121-15	SB20-1545-01		14.9-15.1	45	80			
00-99121-16	SB20-1648-01		15.9-16.1	48	83			
00-99121-17	SB20-1751-01		16.9-17.1	51	85			NK-T7 NS-25060
00-99121-18	SB20-1850-01		17.9-18.1	50	82			
00-99121-19	SB20-1950-01		18.9-19.1	50	82			
00-99121-20	SB20-2050-01		19.9-20.1	50	82			
00-99121-21	SB20-2150-01		20.9-21.1	50	82			
00-99121-22	SB20-2250-01		21.9-22.1	50	82			
00-99121-23	SB20-2350-01		22.9-23.1	50	82			
00-99121-24	SB20-2450-01		23.9-24.1	50	82			
00-99121-25	SB20-2550-01		24.9-25.1	50	82			

New



# ECONOMIC PACK

Selected any Three  
**99121, 99101**  
Boring Bar

**SPECIAL  
OFFER**

## Precision Ground Inserts

**CCGT030102-NC30, CCGT040102-NC30,  
CCGH060204-NC30**

- TiAlN grade - Universal grade.

**CCFT060204HP-NC9031**

- TiN grade for Al, Al-alloy, Copper, Non-ferrous metal.

**CCFT060204-NC2033**

- TiAlN grade for Carbon steel, Alloy steel, Stainless steel.

**CCFT060204-NC9036**

- DLC coated, for Al, Al-alloy, Copper and Non-ferrous metal.

**CCFW06024-NC2032**

- AlTiN grade for Cast iron.

**CCGH0602-U-NC9036**

- Diamond like coated grade,  
super fine finishing.

**CCMW060204-DM**

- PCD diamond grade,  
super fine finishing.



NC30



NC9031

NC2032



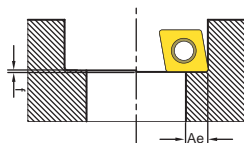
NC2033

U-NC9036



NC9036

DM



## Cutting Data

Material	Cutting conditions or surface finishes	Grade of insert	Ae Max mm	Cutting Speed Vc(m/min.)	feed rate f (mm/rev.)
Carbon Steel	Regular cutting	NC2033	0.5	120-150-200	0.05-0.07-0.10
	Interrupted cutting	NC30	0.3	100-120-140	0.04-0.05-0.08
Alloy Steel	Regular cutting	NC2033	0.5	100-120-140	0.05-0.07-0.10
	Interrupted cutting	NC30	0.3	80-100-120	0.04-0.05-0.08
Hardened Steel <HRC 50	Regular cutting	NC30	0.3	80-100-120	0.04-0.06-0.08
Stainless Steel	Regular cutting	NC2033	0.5	80-100-120	0.05-0.07-0.10
	Interrupted cutting	NC30	0.3	70-80-100	0.05-0.07-0.10
Casting Iron	Regular cutting	NC2032 NC30	0.5	80-100-120	0.05-0.07-0.10
Brass, Bronze and Al-alloy si >6%	Regular cutting	NC9036 NC9031	0.5	150-200-300	0.05-0.07-0.10
	Super mirror finish	U-NC9036	0.15	150-200-300	0.15-0.2-0.25
Al, Al-alloy, non-ferrous metal	Regular cutting	NC9036 NC9031	0.5	150-200-300	0.05-0.07-0.10
	Super finished	DM	0.3	500-1000-2000	0.05-0.07-0.10
	Super mirror finish	U-NC9036	0.15	150-200-300	0.15-0.20-0.25

Distributor :

 **Jimmore International Corp.**  
<http://www.jic-tools.com.tw>