

**Easy adjustment mechanism:**

- The boring head adapter is 20mm shank; the receiving hole is eccentric from the center of the shank. The diameter is adjusted by rotating the boring bar.
- Boring bar has preloaded by spring and M6 screw to fix boring bar and adapter together securely. The recommended torque is 0.9-1.0 Nm.
- Boring bar is locked by M8 setscrew; clamping torque is 8-9 Nm.
- Repair and replace boring bars easily.

**Economical**

- The e-boring bar is more economical than solid carbide reamer. Nine 9 e-boring bars are adjustable to compensate the wearing of insert, but the solid carbide reamer has to be replaced by new reamer.

**Applications**

- For fine boring operation to get IT7 tolerance; Using Nine9 fine ground inserts, tolerance IT6 is also possible.
- To replace solid carbide reamer for machining precise hole for dowel pin and other small diameter applications; this should be done by reamer in traditional.

**Procedures For Assembly**

1. Use 4 mm allen-key to **loosen locking screw M8**, take care not to remove the screw.
2. Use 3 mm allen-key to **loosen pre-load screw M6**, take care not to remove the screw.
3. Remove the original boring bar and insert the new boring bar.
4. **Tighten the M6 pre-load screw** using the torque screwdriver with hex head key.  
(Recommended torque = 0.9~1.0 Nm)
5. Ensure the boring head and boring bar fit together securely.
6. Measure the boring diameter of the boring bar using tool presetter and adjust it to the required diameter.
7. **Tighten the M8 locking screw** using the torque screwdriver with hex head key (Recommended torque = 8~9Nm)

**Procedures For Adjustment**

1. **Loosen locking screw M8.**
2. Put a 4 mm allen-key into the adjustable driving hole.
3. Turn to " + " to increase and turn to " - " to reduce boring diameter.
4. **Tighten the M8 locking screw** using the torque screwdriver with hex head key.  
(Recommended torque = 8~9Nm)

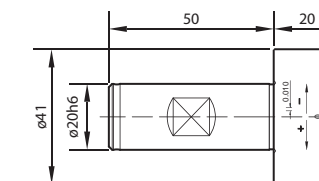


*To replace reamer!*



**Boring Head Adapter**

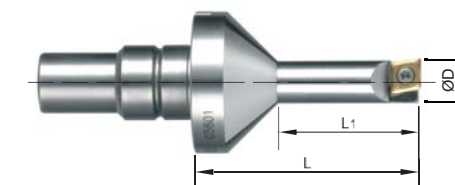
- 2 size adapters are designed for receiving all 00-99111-xxA boring bars.
- Change the boring bar in just one minute.
- 20mm shank to fit any kind of tool holder properly.



Ordering Code	Part No.	Shank (h6)	Adjustable range	Each division
00-99111-01-20HB	SB20-111-01	20mm	±0.1mm	0.01mm
00-99111-03-20HB	SB20-111-03	20mm	±0.5mm	0.03mm

**Interchangeable Boring Bar**

- Made by high alloy tool steel, the rigidity is enough for 3xD boring depth.
- All of 00-99111-xxA boring bars are interchangeable to fit same boring head adapter.



\* H type with internal coolant can be order on request. ordering code:00-99111-07AH

Ordering Code	Part No.	ØD		L1	L	Insert	Key / Screw
		99111-03-20HB	99111-01-20HB				
00-99111-05A	C16-0515	-	4.9-5.1	15	34	CC030102	NK-T6 NS-16030
00-99111-06A	C16-0618	-	5.9-6.1	18	37		
00-99111-07A	C16-0721	6.5-7.5	6.9-7.1	21	40	CC040102	NK-T6 NS-20036
00-99111-08A	C16-0824	7.5-8.5	7.9-8.1	24	43		
00-99111-09A	C16-0927	8.5-9.5	8.9-9.1	27	45	CC060204	NK-T7 NS-25045
00-99111-10A	C16-1030	9.5-10.5	9.9-10.1	30	48		
00-99111-11A	C16-1133	10.5-11.5	10.9-11.1	33	50		
00-99111-12A	C16-1236	11.5-12.5	11.9-12.1	36	53		
00-99111-13A	C16-1339	12.5-13.5	12.9-13.1	39	55		
00-99111-14A	C16-1442	13.5-14.5	13.9-14.1	42	58		
00-99111-15A	C16-1545	14.5-15.5	14.9-15.1	45	60	CC060204	NK-T7 NS-25060
00-99111-16A	C16-1648	15.5-16.5	15.9-16.1	48	63		
00-99111-17A	C16-1751	16.5-17.5	16.9-17.1	51	65		
00-99111-18A	C16-1850	17.5-18.5	17.9-18.1	50	62		
00-99111-19A	C16-1950	18.5-19.5	18.9-19.1	50	62		
00-99111-20A	C16-2050	19.5-20.5	19.9-20.1	50	62		
00-99111-21A	C16-2150	20.5-21.5	20.9-21.1	50	62		
00-99111-22A	C16-2250	21.5-22.5	21.9-22.1	50	62		
00-99111-23A	C16-2350	22.5-23.5	22.9-23.1	50	62		
00-99111-24A	C16-2450	23.5-24.5	23.9-24.1	50	62		
00-99111-25A	C16-2550	24.5-25.5	24.9-25.1	50	62		