

CAUTION FOR USE

Procedure for attaching inserts

- 1) Use an air blower or brush to clean the insert seats before attaching the inserts.
- 2) Holding the inserts firmly against the insert seat, tighten the clamp screws using the wrench provided.
- 3) Tighten the clamp screws in the order shown in Figure 1.
- 4) Apply anti-seize lubricant to the clamp screws and tighten them with the torque specified.

The specified torque is as follows.

AXD7000 3.5N·m(2.58ft·lb)

AXD4000 1.5N·m(1.11ft·lb)

- 5) Clamp screws are important parts from the viewpoint of safety. Use clamp screws with the correct part number.
If the spindle speed is equal to or higher than the values shown in Table 2, it is recommended to replace the clamp screws with new ones when changing inserts.

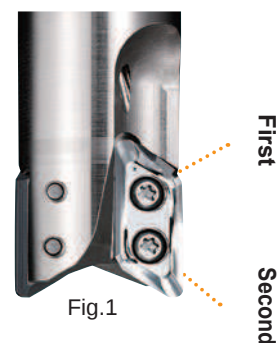
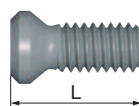


Fig.1

Type	AXD4000		AXD7000	
D1(mm)	ø20	ø25–ø125	ø32	ø40–ø125
Clamp Screw	TS3SBS	TS3SB	TS4SB	TS4SBL
Length L(mm)	6.5	8	9	10.5



- 6) Check that there are no gaps between the insert and the seat before use.

Procedure for attaching the cutter to an arbor

- 1) Before attaching the cutter to the arbor, carefully clean the socket and end of the cutter and the end of the arbor.
- 2) Place the cutter on the arbor and tighten the attachment bolt provided. See the table below for the tightening torque.
- 3) The attachment bolt provided with the AXD is a special bolt for through coolant. Take care not to lose it.

AXD4000

Geometry	Set Bolt	(N·m)	D1(mm)	Fig
	HFF08043H	11	ø40	1
	HSC10030H	40	ø50, ø63	2
	HSC12035H	80	ø80	2
	HSC16040H	150	ø100	2
	MBA20040H	320	ø120	3

AXD7000

Geometry	Set Bolt	(N·m)	D1(mm)	Fig
	HSC10030H	40	ø50, ø63	1
	HSC12035H	80	ø80	1
	HSC16040H	150	ø100	1
	MBA20040H	320	ø120	2

Table 1 Max. Allowable Revolution

AXD4000

Diameter D1(mm)	ø25	ø32	ø40	ø50	ø63	ø80	ø100	ø125
Max. Revolution (min ⁻¹)	49000	48000	41000	35000	30000	27000	23000	20000

AXD7000

Diameter D1(mm)	ø32	ø40	ø50	ø63	ø80	ø100	ø125
Max. Revolution (min ⁻¹)	41000	36000	30000	25000	23000	19000	16000

Even when operating under the maximum allowable spindle speed, if the spindle speed is equal to or higher than the values shown in table 2, it is recommended that the balance quality (with the arbor or milling chuck) conforms to G6.3 or better based on ISO1940.

It is also recommended to replace the clamp screws with new ones when changing inserts.

Furthermore, ensure to use machines that are provided with safety measures in case of cutter breakage.

(Note) The balance quality of the holder (without inserts and clamp screws) is G6.3 or better at 10,000min⁻¹.

Table 2 Maximum spindle speed when balancing with the arbor or milling chuck has not been achieved

AXD4000

Diameter D1(mm)	ø25	ø32	ø40	ø50	ø63	ø80	ø100	ø125
Max. Revolution (min ⁻¹)	12000	9500	7600	6000	4800	3800	3000	2400

AXD7000

Diameter D1(mm)	ø32	ø40	ø50	ø63	ø80	ø100	ø125
Max. Revolution (min ⁻¹)	9500	7600	6000	4800	3800	3000	2400

When setting the spindle speed, take into consideration the maximum allowable spindle speed of the arbor or milling chuck.

Use the specified set bolt when using the arbor type with through coolant.

The inserts have sharp cutting edges and handling them with bare hands may cause injuries.

Always wear safety gloves when handling the indexable inserts.