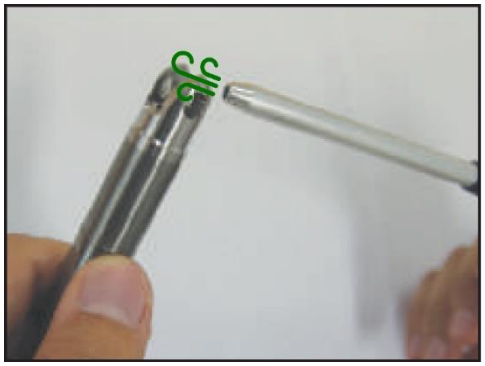
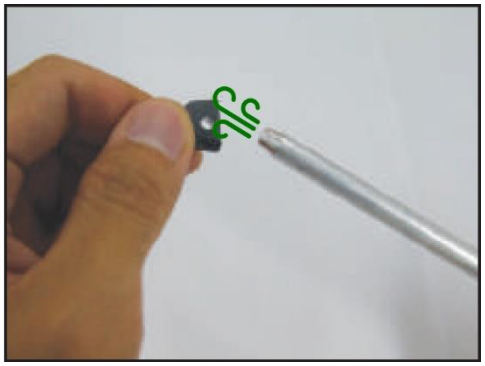
Technical Details

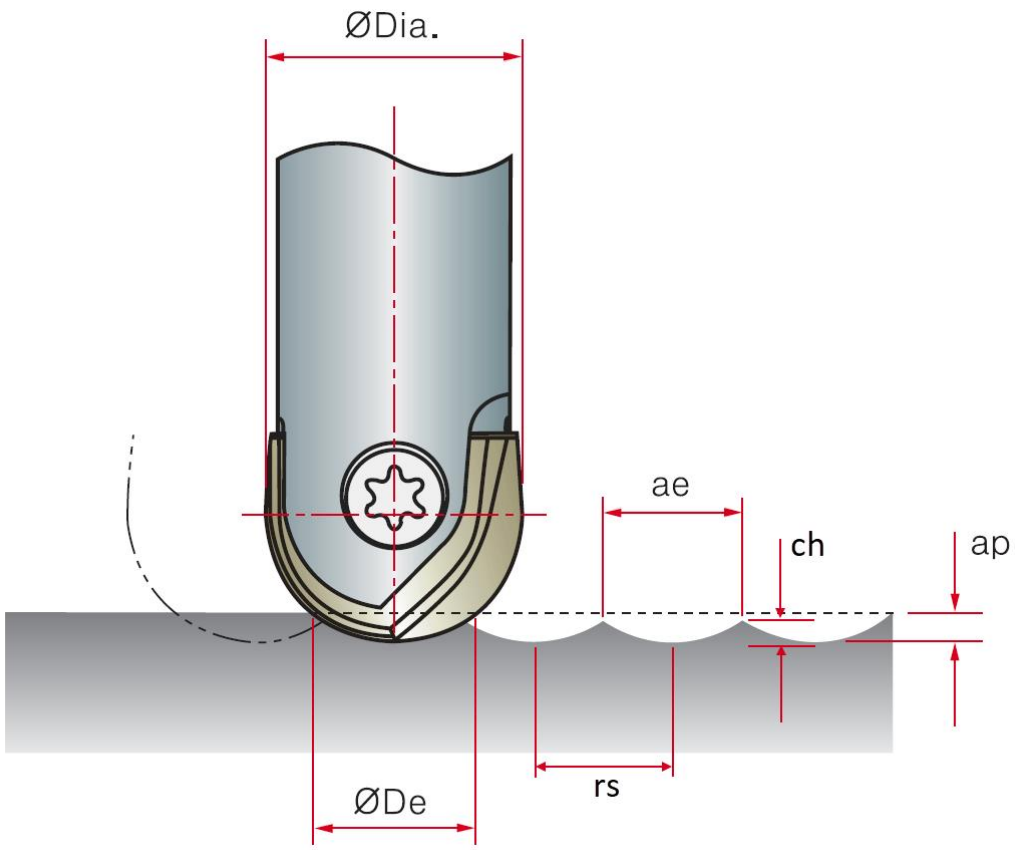



Clean the insert and the insert seat with compressed air.


- Slide the insert into the seat of the tool holder.
- Be sure the insert is installed with the “Torx” logo facing the screw as shown in the Clamping Direction image.
- Always use anti-seize grease on the screw.
- Do not press down on the insert while tightening the screw.
- Tighten the screw to the recommended clamping torque shown in the chart.

SIZE	CLAMPING TORQUE	
ØD	[in · lbs]	[N · m]
Ø 5/16 (Ø 8)	9.0	1.02
Ø 3/8 (Ø 10)	13.5	1.53
Ø 1/2 (Ø 12 - Ø 13)	22.5	2.54
Ø 5/8 (Ø 16 - Ø 17)	31.5	3.56
Ø 3/4 (Ø 20 - Ø 21)	44.5	5.03
Ø 1 (Ø 25 - Ø 26)	53.0	5.99
Ø 1-1/4 (Ø 30 - Ø 32)	58.0	6.55

Technical Details



Radial Stepover (rs) is the distance between centerlines of successive, parallel cuts. When the radial stepover is increased, the **cusp height** (ch) will increase. The cusp height is the primary factor that will determine the smoothness of the machined surface. A cusp height of .00003" to .00005" (.00076mm to .00127mm) will produce a very fine finish. Since the cusp height is controlled by the radial stepover and the effective tool diameter, this formula can be used to calculate the cusp height on a flat surface:

Cusp Height (ch) = $(\text{ØDe} \div 2) - \sqrt{((\text{ØDe}^2 - rs^2) \div 4)}$

The **Effective Tool Diameter** (ØDe) is the actual cutting diameter on the tool at a given **Depth of Cut** (ap). Use this formula to calculate the effective tool diameter.

Effective Tool Dia. (ØDe) = $2\sqrt{(ap) * (\text{ØDia.} - ap)}$

Tool Diameter (ØDia.)
Effective Tool Diameter (ØDe)
Depth of Cut (ap)
Width of Cut (ae)
Radial Stepover (rs)
Cusp Height (ch)