

Handling notes for ICM90-C2/C4-Finishing

To achieve high surface qualities reliably during face milling, it is essential that all the indexable inserts are seated securely in the tool body and run perfectly.

MAPAL uses a simple setting system for the 90°-shoulder milling cutters. Finishing indexable inserts can be set precisely using an adjusting wedge and threaded spindle.

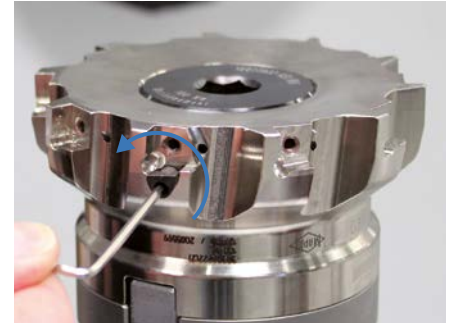
Changing and setting the wide finishing indexable insert

Requirements:

The milling cutter is clamped on the setting fixture and the milling cutter clamping screw/coolant screw is tightened (see tables "Tightening torque for milling cutter clamping screw/coolant screw" on page 307).

Note:

Only for trained personnel.



Condition as delivered:

The milling cutter is supplied without the wide finishing indexable inserts fitted.

The indexable inserts are fastened using TORX® clamping screws, the wide finishing indexable inserts can be adjusted for height using the setting system.

1. Undo the TORX® clamping screws and remove. Remove the wide finishing indexable inserts and clean the insert seats using compressed air.

2. Using a hex-wrench, unscrew the adjusting wedge counter-clockwise to approx. 1 mm above the tool body.

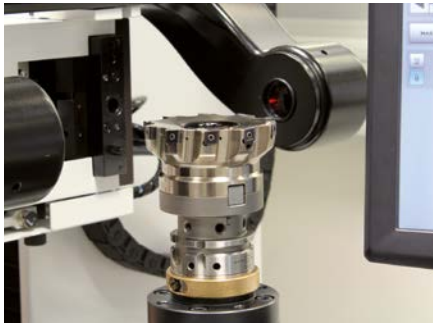
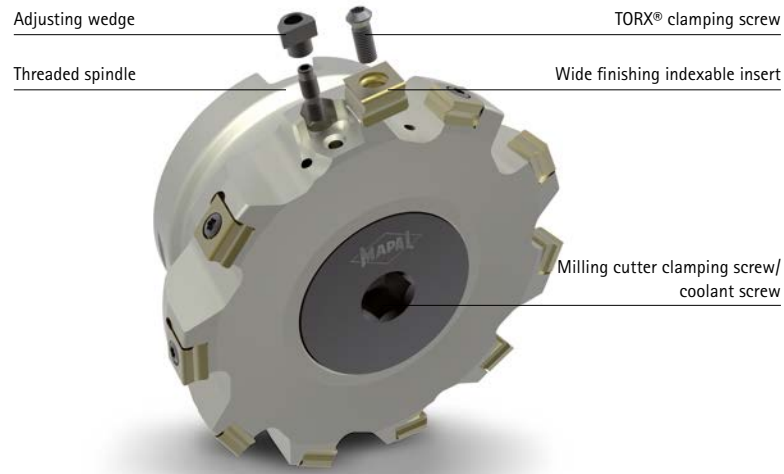


3. Fit the wide finishing indexable insert. Fit the TORX® clamping screw and tighten clockwise to 2.8 Nm using a TORX® torque wrench.

4. Screw in adjusting wedge clockwise using a hex-wrench until it is in contact with the wide finishing indexable insert.

5. Note: When rotating the milling cutter, do not leave the measuring probe in contact with the wide finishing indexable insert.

Establish the highest wide finishing indexable insert in the fixed insert seat and zero the dial gauge.



6. Turn milling cutter until the wide finishing indexable insert is in the measuring position. Then move to the highest axial point on the insert.

7. Turn the threaded spindle of the setting element clockwise using a hex-wrench until the wide finishing indexable insert protrudes 0.02 mm to maximum 0.04 mm in relation to the highest wide finishing indexable insert. The wide finishing indexable inserts should be set to < 5 μm axially in relation to each other.

Information:

The required preload on the wide finishing indexable inserts is generated by the adjusting element.

Tightening torque for milling cutter clamping screw/coolant screw without internal cooling

Clamping screw Order No.	For milling cutter arbor \varnothing [mm]	Dimensions	Wrench size	Tightening torque [Nm]
10041356	16	M8	SW 5	28
10009642	22	M10	SW 6	50
10006125	27	M12	SW 8	70
10009686	32	M16	SW 10	95
10006126	40	M20	SW 12	125

Tightening torque for milling cutter clamping screw/coolant screw with internal cooling

Clamping screw Order No.	For milling cutter arbor \varnothing [mm]	Dimensions	Wrench size	Tightening torque [Nm]
10053822	22	M10	SW 10	50
10049206	27	M12	SW 12	70
10073932	32	M16	SW 14	100
10064487	40	M20	SW 17	125