

M610

Milling cutter for finishing bi-metal materials

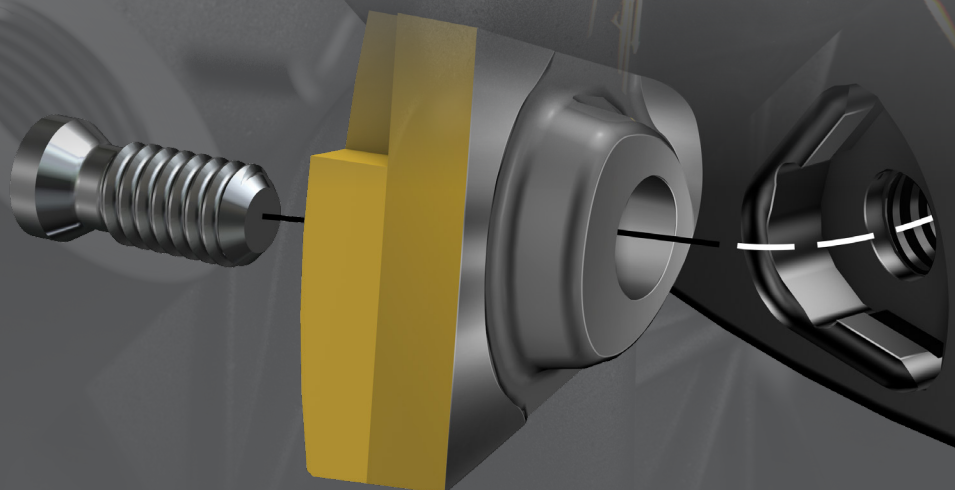
Current bi-metal milling cutters are complex and require adjustment, resulting in low feed rates. Additionally, these cutters often cause chipping on gray cast iron (GCI) product parts.

M610 is a stand-alone product for the finishing milling of bi-metal materials (aluminum and GCI). It requires no setup and no adjustment, resulting in high feed rates with no burring, scratching, or chipping on the parts.

Features and benefits

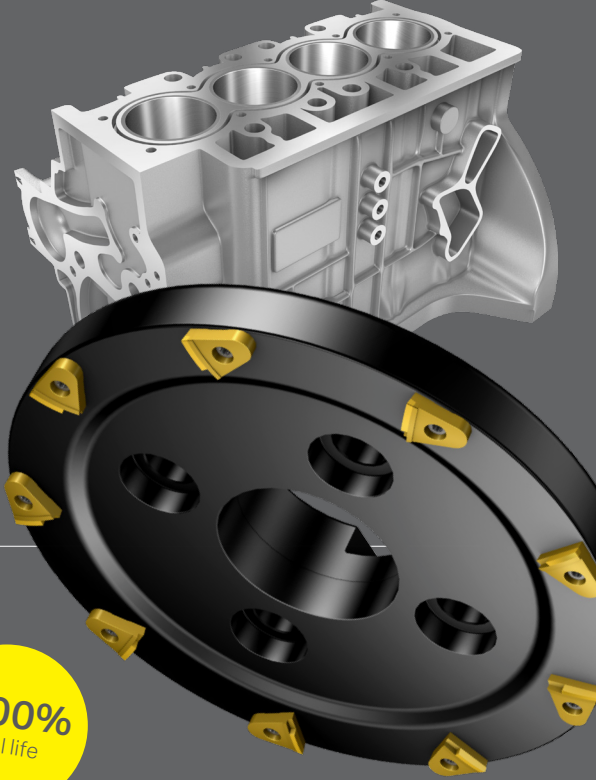
- M610 uses CBN inserts without the need for adjustment
- Machines bi-metal (Al + GCI) parts without burrs, scratches, or chipping
- No adjustment needed
- High feed rate
- Only one spare part (insert screw)

*M610 is a patent-pending solution



Application

- Bi-metal engine deck face in engine blocks with GCI liners
- Bed plates (insert in GCI)
- Other automotive bi-metal parts with inserts in GCI



Customer case

Component: Engine block

Material: GCI + Aluminum

Operation: Finishing combustion face

Machine: GROB CNC machine

Country: Slovakia

+10
times the
speed

+800%
Tool life

	Competitor	Sandvik Coromant
Tool	Adjustable cutter with cartridges	M610 cutter
Insert	PCD tips brazed on cartridges	610-1206H-ZS2-WM 7525
Z_n	30	15
n rpm (rev/min)	395	3,820
v_c m/min (ft/min)	310 (1,017)	3,000 (9,843)
v_f mm/min (inch/min)	948 (37.32)	5,720 (225.20)
f_z mm/z (inch/z)	0.08 (0.003)	0.15 (0.006)
a_p mm (inch)	0.5 (0.02) Al + 0.05 (0.002) GCI	0.5 (0.02) Al + 0.05 (0.002) GCI
Tool life	480 parts	More than 4,000 parts

For more information, contact your local Sandvik Coromant representative, or visit www.sandvik.coromant.com

Head office:
Sandvik Coromant
1702 Nevins Rd, Fair Lawn, NJ 07410, USA
E-mail: us.coromant@sandvik.com
www.sandvik.coromant.com

C-1040:237 en-US © AB Sandvik Coromant 2018

SANDVIK
Coromant