

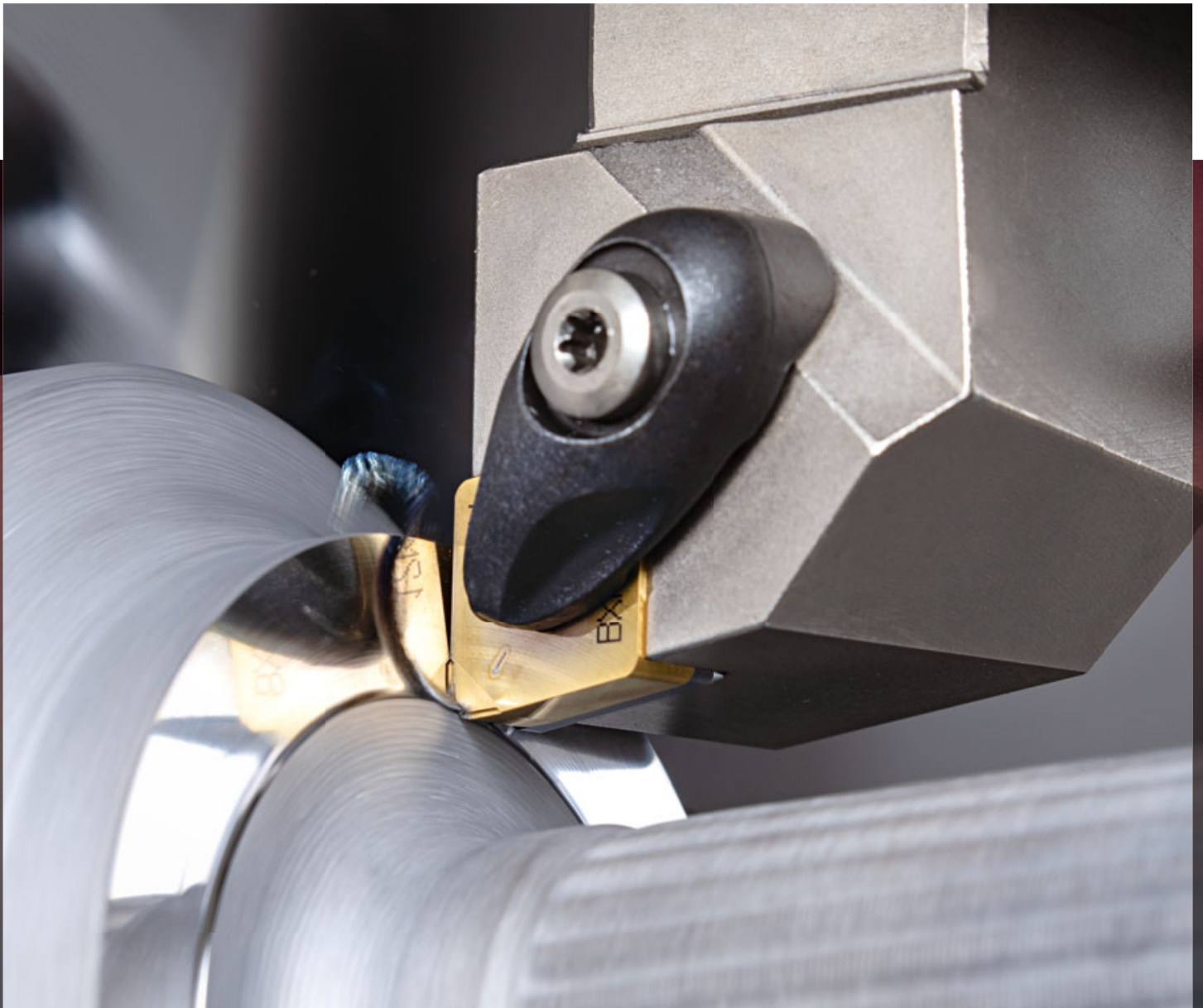


CBN insert

**BXA10/BXA20**

Tungaloy Report No. 551S1-G

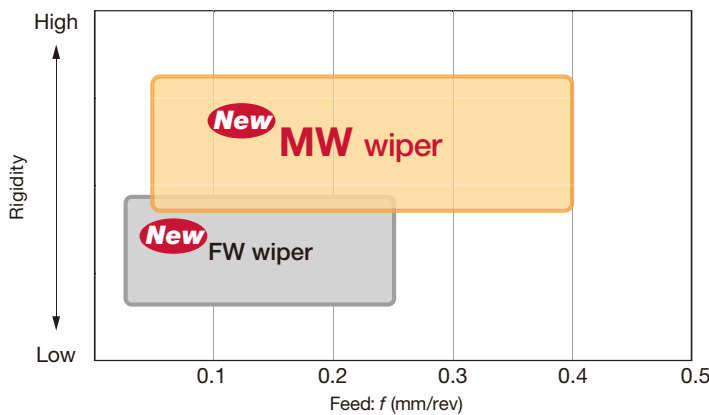
## New wiper series for hardened steel turning



## CBN wiper insert series for extended application coverage

### Cutting performance

#### Application areas



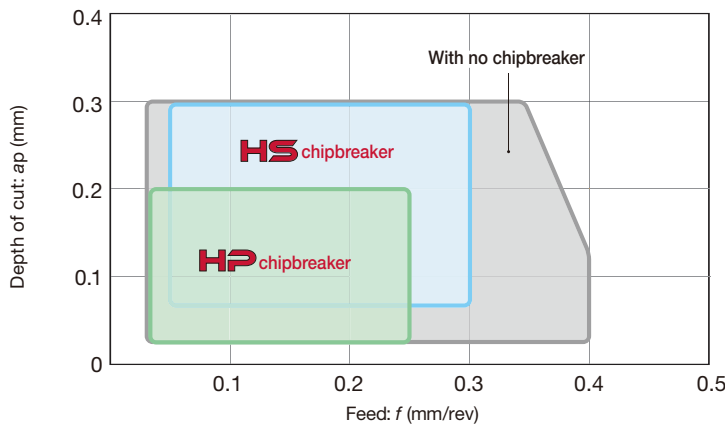
**FW wiper** eliminates chatter generation at slower feeds and offers good surface part quality.  
**MW wiper** provides improved surface finishing at an increased feed rate.



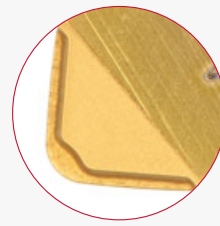
**New FW wiper**



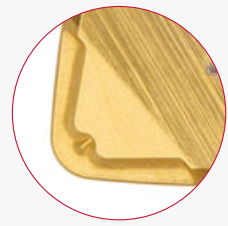
**New MW wiper**



Available with **HP chipbreaker** and **HS chipbreaker** for effective chip control. Inserts with no chipbreaker are also available.

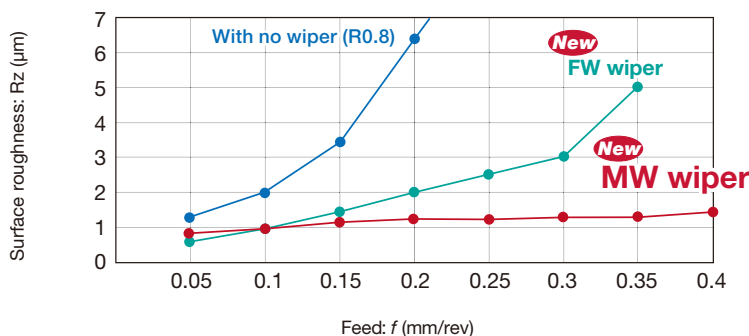


**HP**



**HS**

#### Surface roughness





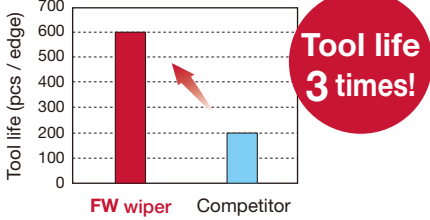
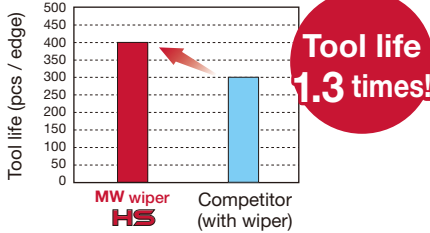
<b>H</b> Insert	: 4QS-CNGA120408*W BXA10
Holder	: ACLNL2525M12-A
Workpiece material	: SCM415 (58 - 60 HRC)
Cutting speed	: Vc = 150 m/min
Depth of cut	: ap = 0.15 mm
Machining	: External continuous cutting
Coolant	: Wet







## PRACTICAL EXAMPLES

Workpiece type		<b>New</b> Ring gear	<b>New</b> Counter-driven gear
Insert		A25R-ACLNR12-D320	A25R-ACLNR12-D320
Grade		4QS-CNGA120408FW	2QP-CNGM120408MW-HS
		BXA10	BXA10
		SCM420 / 18CrMo4 (55HRC)	SCr420 / 20Cr4 (60HRC)
Workpiece material		 <b>H</b>	 <b>H</b>
Cutting conditions	Cutting speed: $V_c$ (m/min)	100	120
	Feed : $f$ (mm/rev)	0.1	0.3
	Depth of cut : $a_p$ (mm)	0.2	0.15
	Coolant	Wet	Wet
Results		 <p><b>Tool life 3 times!</b></p> <p>The combination of wear-resistant <b>BXA10</b> grade and <b>FW wiper</b> provided 3 times tool life increase over the competitor.</p>	 <p><b>Tool life 1.3 times!</b></p> <p>Wear-resistant <b>BXA10</b> grade insert provided 1.3 times tool life increase. While <b>HS</b> chipbreaker promoted smooth chip control.</p>



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