

New Victory™ WS40PM

WS40PM

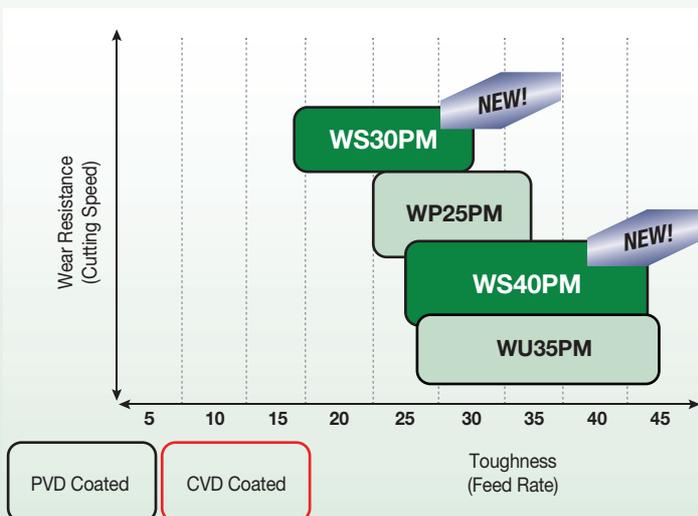


New substrate plus proven PVD coating technology increases performance in rough milling titanium and stainless steels. Excellent toughness and better wear resistance leads to higher efficiency in these demanding applications.

- Proven PVD coating for titanium and stainless to minimise microchipping and provide improved wear resistance.
- New advanced alloyed substrate achieves excellent cutting edge strength and avoids catastrophic insert breakage in severe cutting conditions.
- Resists thermal cracking:
 - Extremely important in machining titanium as coolant is used.
 - A common failure mode that leads to chipping.

Grade Positioning

- WS40PM completes the WIDIA™ indexable milling grade portfolio for titanium and stainless steel machining.
- WIDIA can now offer a grade as tough as WU35PM, with more wear resistance.



New WS40PM

- Expanded wear resistance range.
- Overlaps toughness range of WU35PM.
- New advanced substrate.

Application Recommendations

- The go-to grade for rough milling titanium and stainless steel.
- Up to 20% greater tool life at the same cutting conditions.
- Engineered to resist thermal cracking — a huge benefit in titanium milling (wet application).
 - The ideal speed range for the best tool life in titanium is 46–53 m/min.

Recommended Speeds

			WS40PM	Speed Vc (m/min)		
Material Group	ISO	Material	Description	max	(starting)	min
P5	P	Stainless Steel	Ferritic, Martensitic, and PH SS	135	100	70
P6			High-Strength Ferritic Austenitic and PH SS	115	80	50
M1	M	Stainless Steel	Austenitic SS	260	185	115
M2			High-Strength Austenitic S and Cast SS	230	170	105
M3			Duplex SS	190	135	85
S1	S	High-Temp Alloys	Iron Based	62	45	27
S2			Cobalt Based	55	40	26
S3			Nickel Based	64	46	29
S4			Titanium Based	90	66	42

WS40PM is available in these leading indexable milling platforms

- Face Milling: M1200, M1200 Mini, M640, M690
- Shoulder Milling: VSM11™, VSM17™
- Copy Milling: VSM490™

