



CNMG.M 643 Z12

APPLICATION

- Suitable for fine to heavy machining of steels
- Continuous cutting conditions



GRADE Z12

This grade is a MT-CVD coated functionally graded WC-Co carbide within ISO range P05-P25, for fine to heavy machining of steels

	STEEL	STAINLESS	CAST IRON	NON FERROUS	S.ALLOYS	HEAT TREATED
GROUP	P15		K10			H10
Sfm ft/min	476 - 1033		443 - 968			82 - 197
Fn Inch/rev	.006 - .030		.006 - .030			.004 - .015
ap Inch	.047 - .315		.047 - .315			.024 - .059

LEGEND

Sfm (Vc)	Surface Feet per Minute
Fn (ipr)	Feed per revolution
Fz (ipt)	Feed per tooth
ap	Depth of cut

FORMULA

S (RPM)	$S = Sfm * 12 / \pi / D = \text{rev per minute}$
F (IPR, inch per revolution)	$F = S * Fn = \text{feed per minute}$
F (IPM, inch per minute)	$F = S * Fz * n.\text{flutes} = \text{feed per minute}$
Sfm	$Sfm = S * D * \pi / 12$

TURNING CARBIDE INSERT