

STANDARD CUTTING CONDITIONS

ISO	Grade	Work condition	Cutting speed Vc(m/min)	Depth of cut ap (mm)	Feed f (mm/rev)
H	BXM10	Continuous	120 - 350	0.05 - 0.20	0.05 - 0.20
	BXA20	Continuous	70 - 180	0.05 - 0.20	0.05 - 0.20
		Light imterrupted	70 - 180	0.05 - 0.20	0.05 - 0.20

PRACTICAL EXAMPLES

Workpiece type		Bevel gear	Gear Wheel		
Insert		2QP-CNGM120408-HP	2QP-CNGM120408WL-HP		
Grade		BXA20	BXA20		
Workpiece material		JIS SCM420 (HRC58)	JIS SCM420 (HRC58)		
		30mm WWW.09	120mm		
g Cutting speed: V	/c (m/min)	160	150		
Feed : f	(mm/rev)	0.10	0.12		
Cutting speed: Vc (m/min) Feed : f (mm/rev) Depth of cut : ap (mm)		0.15	0.18		
Coolant	Coolant Wet		Dry		
Results		Tool life 1.8 times Competitor's inserts had a short tool life because of chip re-cutting. The -HP chipbreaker insert solved chip	Tool life 120 120 120 120 120 1-2 times Competitor The -HP chipbreaker insert with wiper provided good chip flow and machined surface.		