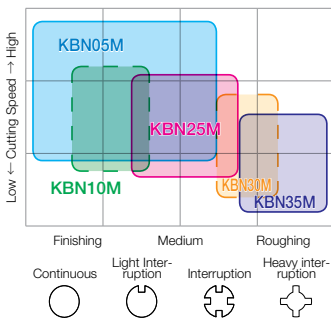


Application Maps

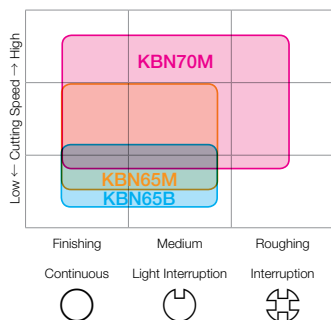
Hardened Materials



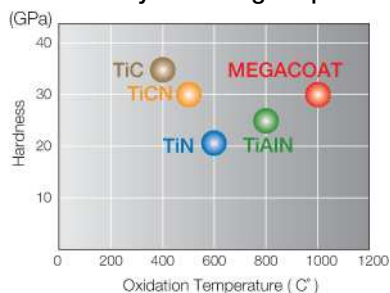
KBN05M

1st recommended grade for a wide range of applications from continuous (high speed finishing) to interrupted cutting.

Powdered Steel



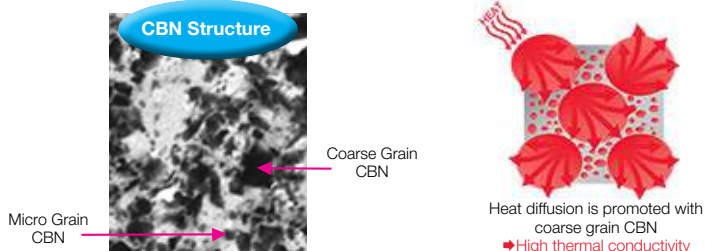
PVD Layer Coating Properties



Hybrid Grain Structure (KBN05M)

Mixed structure of micro grain CBN and coarse grain CBN

→ CBN possesses high hardness, toughness, and thermal resistance characteristics

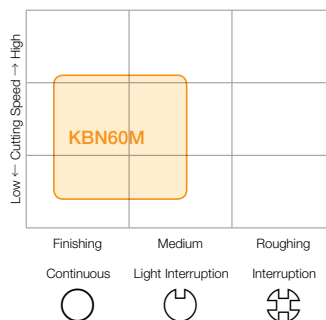


KBN25M: High stability for general cutting

KBN30M: High stability during interrupted cutting

KBN35M: Honeycomb structure CBN Superior fracture resistance in heavy interrupted cutting

Cast Iron



Advantages of MEGACOAT

- Long tool life and stable cutting due to superior heat-resistance and hardness
- Improved crater wear resistance
- High thermal stability and surface smoothness provide excellent surface finish



Improved Stability

Extended Tool Life

High Speed Cutting

Recommended Cutting Conditions

Workpiece Material	Hardness	Applications		Recommended Insert Grade	Cutting Conditions		
					Vc (sfm)	D.O.C. (in)	f (ipr)
Hardened Steel	Over 55HRC	General Finishing	Continuous ~ Interruption	KBN05M	325~500~650	0.002~0.012~0.020	0.002~0.003~0.004
		High Efficient Stable Cutting	Light Interruption ~ Interruption	KBN25M	250~400~525	0.002~0.012~0.020	0.002~0.003~0.004
		Interruption (Small ap)	Interruption ~ Heavy Interruption	KBN35M	200~325~500	0.002~0.008~0.016	0.002~0.003~0.004
	Under 55HRC	Heavy Machining	Continuous ~ Interruption	KBN900	230~300~360	0.020~0.039~0.079	0.002~0.004~0.008
Gray Cast Iron	Under 250HB	Finishing	Continuous ~ Light Interruption	KBN475	175~500~650	0.002~0.008~0.012	0.002~0.004~0.008
		Finishing	Continuous ~ Light Interruption	KBN60M	325~650~825	0.002~0.008~0.012	0.002~0.004~0.008
		High Efficiency Finishing	Continuous ~ Light Interruption	KBN900	1640~2950~3940	0.004~0.020~0.039	0.002~0.004~0.008
		Heavy Machining	Continuous ~ Interruption	KBN900	1640~2300~2950	0.020~0.059~0.118	0.004~0.012~0.020
Powdered Steel (Iron based)	-	Finishing	Continuous ~ Light Interruption	KBN570	175~500~650	0.002~0.008~0.012	0.002~0.004~0.008
	-	Finishing	Continuous ~ Interruption	KBN70M	325~650~825	0.002~0.008~0.012	0.002~0.004~0.008

※PT600M is a titanium carbide ceramic + MEGACOAT. ($Al_2O_3 + TiC$)