

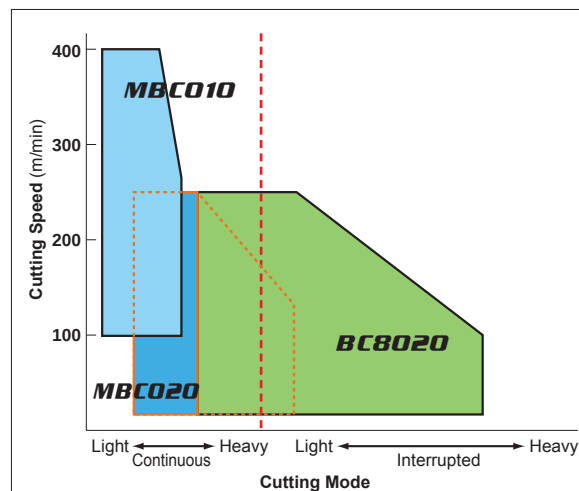
COATED CBN SERIES

BC8020 / *MBC010* / *MBC020*

FEATURES

With the expansion of BC8020, Mitsubishi can offer 3 coated CBN grades for machining of hardened steels. These 3 coated CBN grades cover a wide range of applications.

To achieve longer tool life, Mitsubishi uses a unique "Particle-activated Sintering Method", combined with increased cutting edge strength. With high crater wear resistance CBN grades and a wear resistant ceramic coatings, longer tool life and improved machine efficiency are obtained.

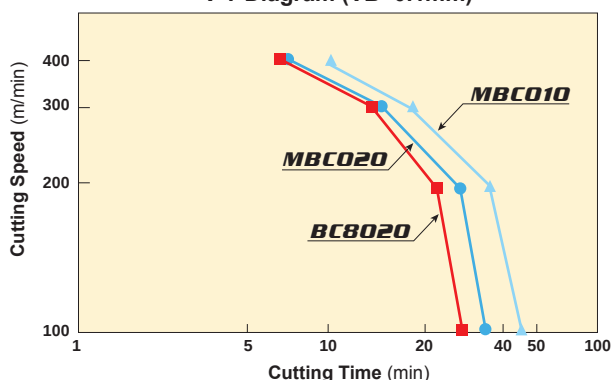


Grade	Grade Features and Application	Main Component	Coating Layer
<i>BC8020</i>	High efficiency coated CBN Increased cutting edge strength and high crater wear resistant CBN grade in combination with a highly wear resistant TiAlN coating, results in longer tool life and improved machining efficiency under heavy duty or interrupting cutting.	CBN (Medium Grain) TiN Al ₂ O ₃	TiAlN
<i>MBC010</i>	Coated CBN for High Speed Continuous Cutting MBC010 makes the best use of a special ceramic binder structure, actualizing high wear resistance. High wear resistance enables continuous machining at high speeds of over 300m/min.	CBN (Micro Grain) TiN Al ₂ O ₃	TiN
<i>MBC020</i>	Coated CBN for general cutting Uses a CBN substrate that has high cutting edge toughness. The TiAlN based coating delivers superb wear resistance. It covers a wide range of applications from continuous to light interrupted cutting.	CBN (Micro Grain) TiN Al ₂ O ₃	TiAlN

CUTTING PERFORMANCE

Continuous Cutting

V-T Diagram (VB=0.1mm)

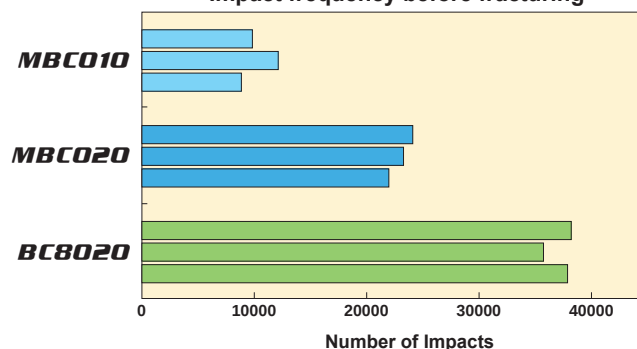


<Cutting Conditions>

Workpiece : Alloy steel (60HRC)
External Continuous Cutting
Insert : NP-CNGA120408GA
Feed : 0.1mm/rev
Depth of Cut : 0.1mm
Wet Cutting

Interrupted Cutting

Impact frequency before fracturing



<Cutting Conditions>

Workpiece : Alloy steel (60HRC)
External Interrupted Cutting 8 Groove
Insert : NP-CNGA120408GA
Cutting Speed : 150m/min
Feed : 0.2mm/rev
Depth of Cut : 0.2mm
Dry Cutting