HONING

NEW HONING TYPES

For CBN **BC8020**, **MBC010** and **MBC020** coated grades, **MB4020** for sintered alloys, **MB710** and **MB730** for cast irons, a wide range of edge honing types are offered to cover a large range of applications and to represent Mitsubishi Materials' unique cutting tool technology.

General cutting

GA honing is the first recommendation.
GS honing if the depth of cut is 0.1mm or less.
GN honing if the crater wear is large.

Continuous cutting, stable cutting

FS honing is the first recommendation.
FA honing to improve the initial machining performance.
FN honing if the crater wear is large.

Medium and heavy interrupted cutting, unstable cutting

TA honing is the first recommendation.
TS honing if the depth of cut is 0.1mm or less.
TN honing if the crater wear is large.

HONING

NP-CNGA120404 F A W2

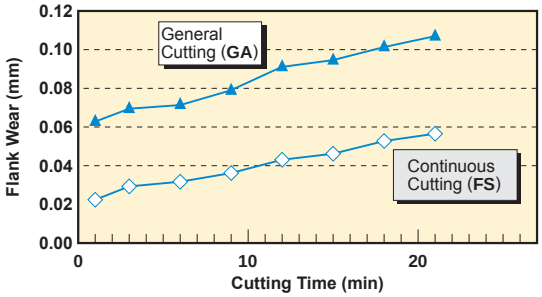
F — Main Application
A — Edge Honing Type

EDGE HONING TYPE / MAIN APPLICATION	**A** For General Purpose Machining (First recommendation)	**S** For Very Small Depths of Cut (Sharp anti-burr type)	**N** For High Load Machining (Crater wear resistant)
F For Continuous Machining	FA Honing: 0.1, 15°, R0	FS Honing: 0.1, 15°, R0.015	FN Honing: 0.05, 15°, R0.015
G For Continuous – Light Interrupted Machining	GA Honing: 0.13, 25°, R0.03	GS Honing: 0.13, 25°, R0.015	GN Honing: 0.05, 25°, R0.015
T For Interrupted Machining	TA Honing: 0.13, 35°, R0.03	TS Honing: 0.13, 35°, R0.015	TN Honing: 0.05, 35°, R0.015

(Note) First, select the insert edge type from the main application area (F,G,T) then choose a honing type (A,S,N) that compliments the machining requirement.

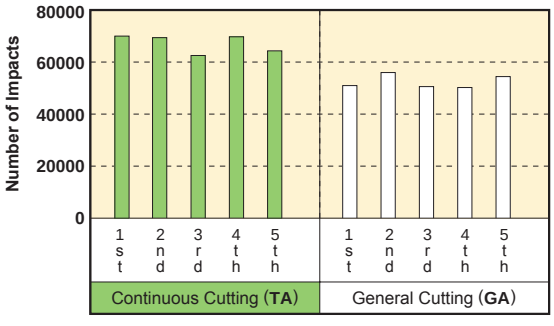
CUTTING PERFORMANCE

For Continuous Cutting *FS* HONING



<Cutting Condition>
Workpiece : Alloy steel (60HRC)
Insert : NP-CNGA120408FS2/GA2 (MBC010)
Cutting Speed : 150m/min
Feed : 0.1mm/rev
Depth of Cut : 0.1mm
Dry Cutting

For Interrupted Cutting *TA* HONING



<Cutting Condition>
Workpiece : Alloy steel (60HRC)
External Interrupted Cutting. 8 Grooves
Insert : NP-TNGA160408TA3/GA3 (MB8025)
Cutting Speed : 100m/min
Feed : 0.1mm/rev
Depth of Cut : 0.1mm
Wet Cutting