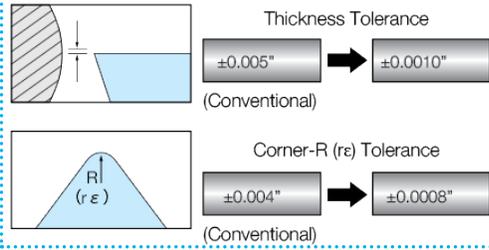


INSERT FEATURES

Features of Insert

with tolerance symbol "E" Class

- Same edge position and height after changing inserts



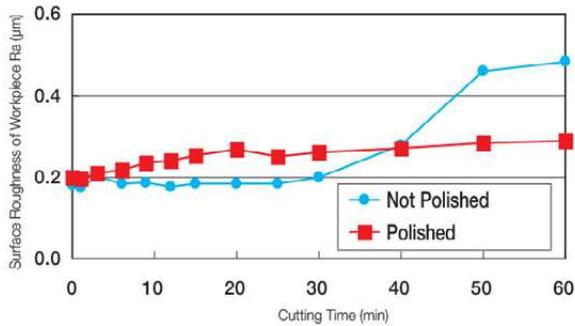
Polish (Insert Rake Face) Effects

1) Improved Smoothness

- Better adhesion resistance due to smooth chip flow.
- Polished inserts achieve high performance especially in stainless steel and aluminum cutting.

2) Polished inserts improve surface smoothness

Surface Finish Comparison of Workpiece



Cutting Condition
 Workpiece Material: 304 Steel (Ø6 Bar material)
 $V_c=175\text{sfm}$, $D.O.C.=0.012$, $f=0.0012\text{ipr}$, Wet

- DCGT32505MF-GF (Non-Polished)
- DCGT32505MFP-GF (Polished)

3) Chip Shape Comparison of Polished Vs. Non-Polished

	Non-Polished	Polished
Surface Roughness of Rake Face	$0.269\mu\text{mRa}$	$0.015\mu\text{mRa}$
Chip Control	Unstable Chip Control Chips jam on the uneven insert edge surface. Chips are not curled well and might become entangled.	Smooth insert edge face, stable chip control Smaller chips are curled well
Chip Images		

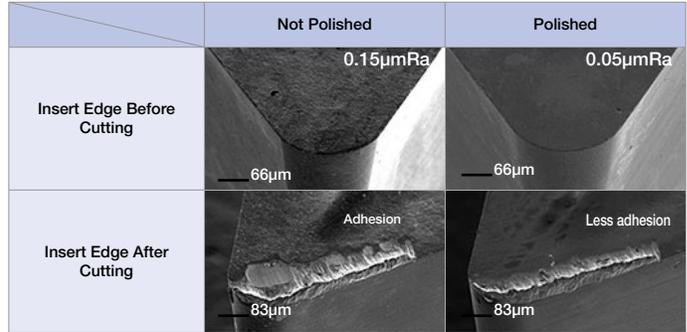
Advantages of "Super Fine"

High Quality Ground + "E" Class High Precision (Insert descriptions ending with "SF")

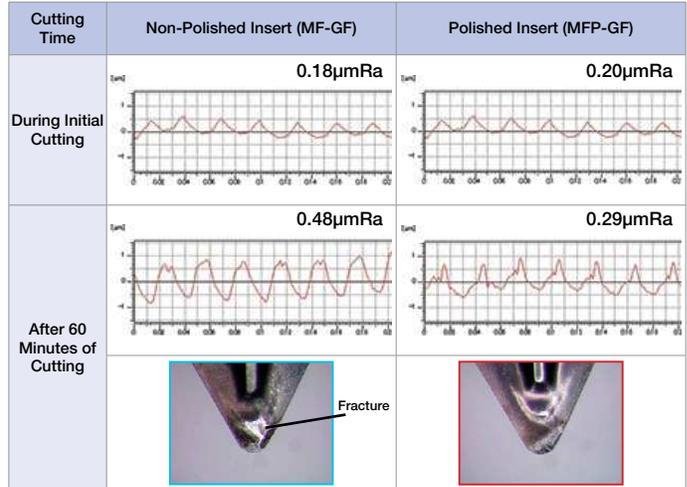
- Reduced micro chipping during edge grinding
- Less adhesion
- Long tool life



Surface Finish of Workpiece



Surface Finish of Workpiece



GRADES A
 INSERTS B
 CBN & POD C
 TURNING E
 BORING F
 GROOVING G
 CUT-OFF H
 THREADING J
 SOLID END MILLS L
 MILLING M
 SPARE PARTS P
 TECHNICAL R
 INDEX T