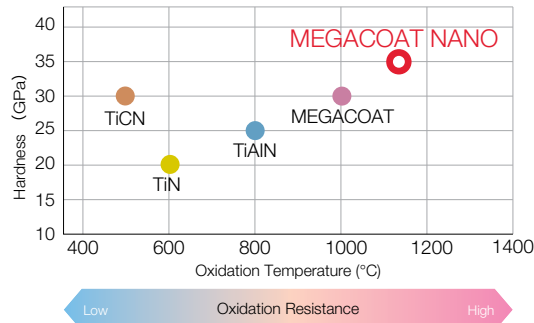
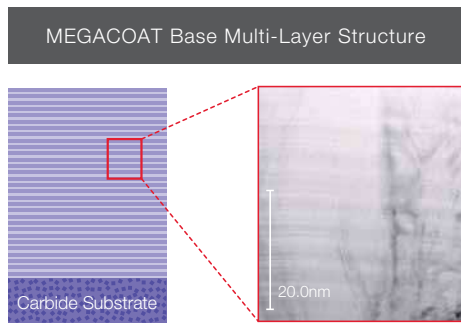


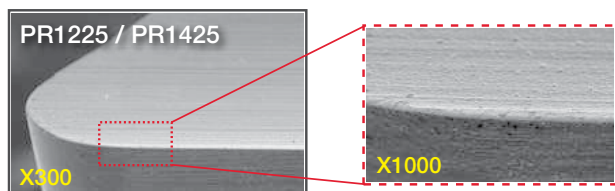
# INSERT GRADES

## MEGACOAT NANO Grade Properties

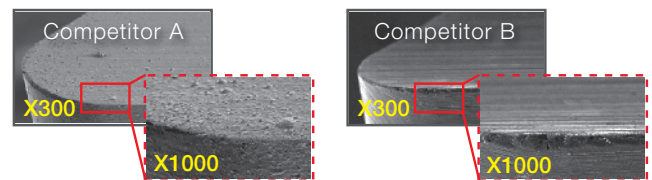


Prevents wear and fracture with high hardness (35GPa) and superior oxidation resistance (oxidation temperature: 1,150°C)

### Cutting Edge Quality (Sharp Edge Insert)



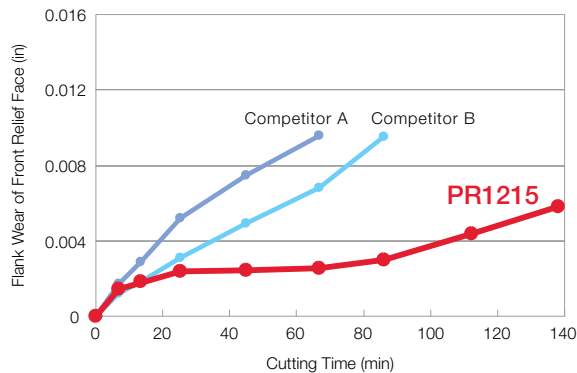
Superior edge-sharpening performance and smooth surface



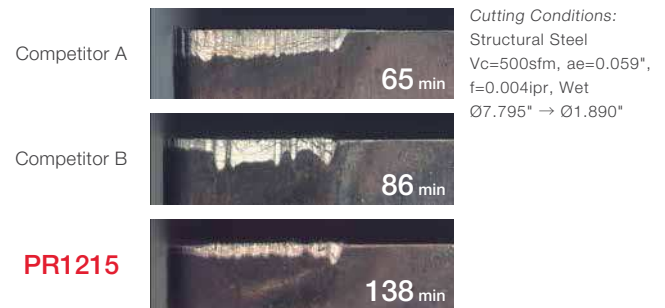
Delamination (coating peeling) and rough surface

**MEGACOAT Series (PR1225/PR1425) - high edge sharpening performance and adhesion resistance.**

### PR1215 Wear Resistance Comparison (Off-Centered Grooving)



### Flank Wear of Front Relief Face

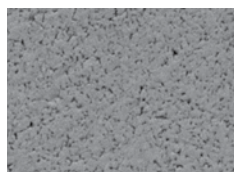


### PR13-Series Advantages

Superior wear and fracture resistance attained with uniform grain size and MEGACOAT on superior thermal shock resistant carbide

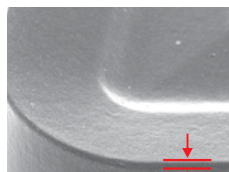
New edge preparation technology (FET: Fine Edge Treatment) controls and minimizes R honing and realizes large tip rake angle, and thus prevents burrs and notching. It provides good surface finishes.

#### Special Carbide Substrate



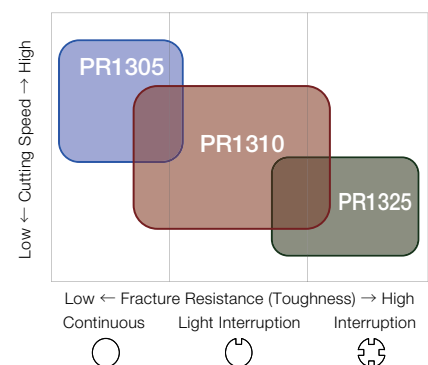
Uniform grain size enables superior thermal shock resistance and constant hardness

#### New Edge Preparation Technology



Edge control of FET technology (FET: Fine Edge Treatment)

### Heat-Resistant Alloys (Ni-based)



GRADES	A
LINEUP / INSERTS	B
45° / 70° LEAD	C
75° LEAD	D
90° LEAD	E
HIGH FEED	F
MULTI-FUNCTION	G
SLOT MILLS	H
RADIUS / BALL-NOSE	J
OTHER APPLICATIONS	K
TOOL HOLDING	O
SPARE PARTS	P
TECHNICAL	R
INDEX	T