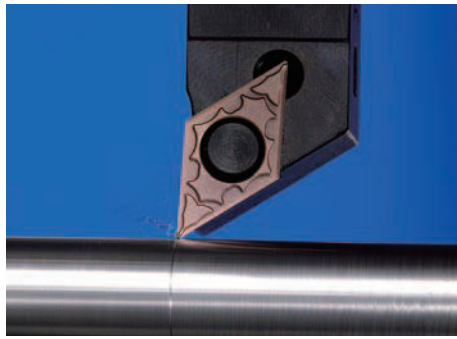


Insert Grades

A

PVD Coated Carbide (for Turning)



PVD Coated Carbide

KYOCERA's PVD coated carbide grades are based on ceramic thin film coating and precise edging technologies and are good for precision turning, grooving, threading and cut-off. Very tough carbide substrate and innovative coating technology promotes excellent wear resistance and strong coating adhesion for long tool life and stable cutting.

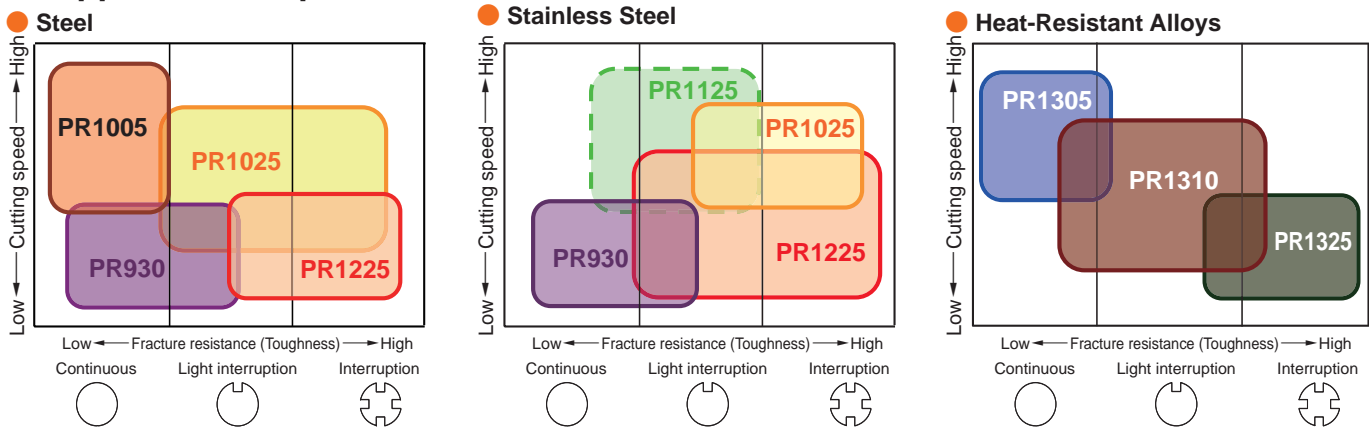
Features

- Good for low to high speeds and finishing to heavy roughing cutting
- Stable cutting with excellent toughness
- Smooth fine surface of PVD coated carbide provides good surface finish and high precision cutting

Features of PVD Coated Carbide

Workpiece Material	Symbol	Color	Main Component	Advantages
<div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; font-weight: bold;">P</div> Steel	PR915 (Super Micro-Grain)	Bluish violet	TiAlN	<ul style="list-style-type: none"> • TiAlN base PVD coated super micro-grain carbide, superior wear and oxidation resistance • Application: Stable and reliable high precision cutting of steel
	PR930 (Super Micro-Grain)	Reddish gray	TiCN	<ul style="list-style-type: none"> • Hard TiCN base PVD coated super micro-grain carbide • Application: Low cutting speed, precise cutting with sharp edge
	PR1005	Reddish gray	TiCN	<ul style="list-style-type: none"> • TiCN base PVD coated hard micro-grain carbide • Application: Turning of free-cutting steel, long tool life achieved through anti-adhesion performance
	PR1025	Reddish gray	TiCN	<ul style="list-style-type: none"> • TiCN base PVD coated micro-grain carbide • Application: General purpose cutting of steel and stainless steel, stable and long tool life
	PR1115	Purple red	TiAlN	<ul style="list-style-type: none"> • Hard TiAlN base PVD coated super micro-grain carbide • Application: Superior anti-oxidation performance with well balanced wear resistance and toughness
<div style="background-color: #FFD700; color: black; padding: 5px; text-align: center; font-weight: bold;">M</div> Stainless Steel	PR1125	Purple red	TiAlN	<ul style="list-style-type: none"> • Hard TiAlN base PVD coated super micro-grain carbide, superior toughness and heat resistance • Application: Finishing and light interrupted cutting of stainless steel
	PR1225	Blackish red	MEGACOAT	<ul style="list-style-type: none"> • Superior wear and oxidation resistant MEGACOAT on micro grain carbide substrate • Application: Light interrupted to interrupted cutting of stainless steel
<div style="background-color: #C00000; color: white; padding: 5px; text-align: center; font-weight: bold;">K</div> Cast Iron	PR905	Bluish violet	TiAlN	<ul style="list-style-type: none"> • Smooth fine surface PVD coated hard carbide with plastic deformation resistance • Application: Suitable for milling of gray and nodular cast iron and turning of heat-resistant alloys
<div style="background-color: #8B4513; color: white; padding: 5px; text-align: center; font-weight: bold;">S</div> Heat-Resistant Alloys	PR1305	Blackish red	MEGACOAT	<ul style="list-style-type: none"> • MEGACOAT on hard and superior heat resistant carbide, superior wear resistance • Application: Finishing of heat resistant alloys
	PR1310	Blackish red	MEGACOAT	<ul style="list-style-type: none"> • MEGACOAT on hard and superior heat resistant carbide, superior wear and oxidation resistance • Application: First choice for continuous and light interrupted cutting and finishing of heat-resistant alloys
	PR1325	Blackish red	MEGACOAT	<ul style="list-style-type: none"> • MEGACOAT on tough carbide • Application: Light interrupted cutting and roughing of heat-resistant alloys

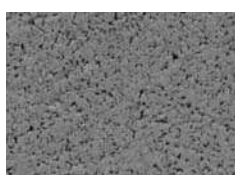
Application Map



Advantages of PR13 Series

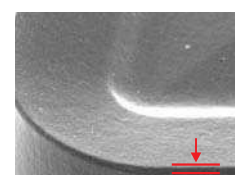
- 1) Superior wear and fracture resistance attained with uniform grain size and MEGACOAT on superior thermal shock resistant carbide
- 2) New edge preparation technology (FET: Fine Edge Treatment) controls and minimizes R honing and realizes large tip rake angle, and thus prevents burrs and notching. It provides good finished surface.

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)