

Insert Grades

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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 machining, grooving, threading and cut-off. Very tough carbide substrate and innovative coating technology promote excellent wear resistance and strong coating adhesion for long tool life and stable machining.

Features

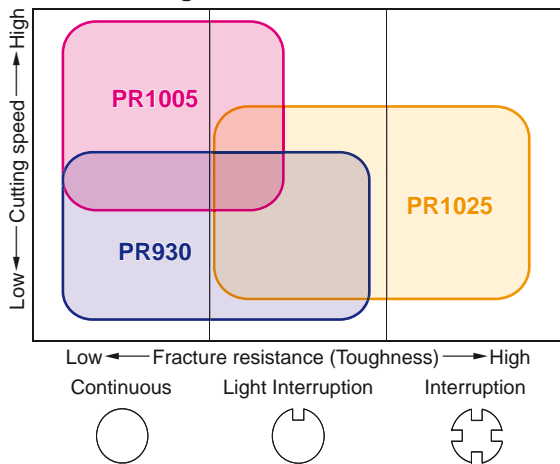
- Good for low to high speeds and finishing to heavy roughing machining
- Stable machining with excellent toughness
- Smooth fine surface of PVD coated carbide provides good surface finish and high precision machining

Features of PVD Coated Carbide

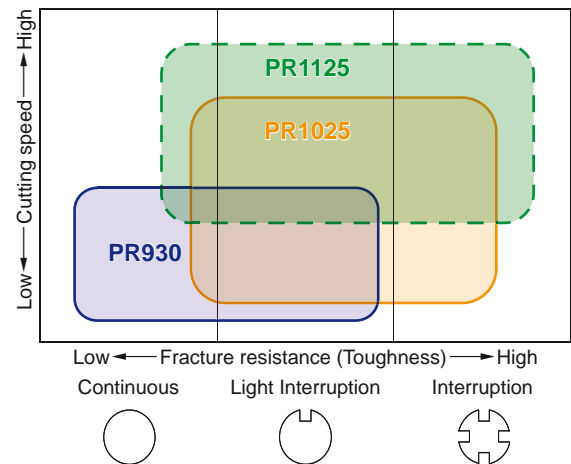
Workpiece Material	Symbol	Color	Main Component	Advantages
<div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; border-radius: 5px;"> P Steel </div>	PR915 (Super Micro-Grain)	Bluish violet	TiAlN	<ul style="list-style-type: none"> • TiAlN base PVD coated on super micro-grain carbide, superior wear and oxidation resistance • Application: Stable and reliable high precision machining of steel
	PR930 (Super Micro-Grain)	Reddish gray	TiCN	<ul style="list-style-type: none"> • Hard TiCN base PVD coated on super micro-grain carbide • Application: Low cutting speed, precise machining with sharp cutting edge
	PR1005	Reddish gray	TiCN	<ul style="list-style-type: none"> • TiCN base PVD coated on 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 on micro-grain carbide • Application: General purpose machining 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 on 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; border-radius: 5px;"> M Stainless Steel </div>	PR1125	Purple red	TiAlN	<ul style="list-style-type: none"> • Hard TiAlN base PVD coated on super micro-grain carbide, superior toughness and heat resistance • Application: Finishing to interrupted machining of stainless steel
<div style="background-color: #FF0000; color: white; padding: 5px; text-align: center; border-radius: 5px;"> K Cast Iron </div>	PR905	Bluish violet	TiAlN	<ul style="list-style-type: none"> • Smooth fine surface PVD coated on hard carbide with plastic deformation resistance • Application: Suitable for milling of gray and nodular cast iron and turning of high temperature alloys

Application Maps

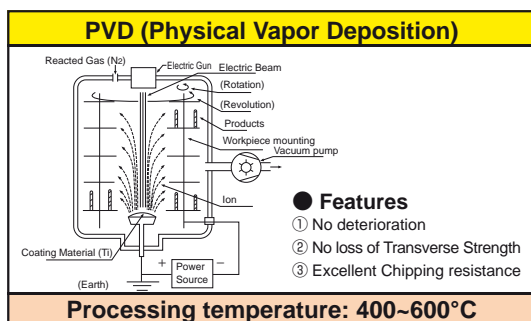
Steel machining



Stainless Steel / Hard-to-machine Materials machining



Features of PVD



Properties of PVD Coating

