

PVD Coated Carbide for Drilling



PVD Coated Carbide




KYOCERA's PVD coated carbide for drilling is coated on a very tough carbide substrate. Because of the low process temperature compared with CVD, it features no erosion of bending strength, less deterioration of coating and realizes superior tool life and stable cutting.



Insert Grades

Drilling

Features of PVD Coated Carbide for Drilling

Workpiece Material	Symbol	Color	Main Component	Advantages
 Steel	PR630	Gold	TiN	<ul style="list-style-type: none"> TiN base PVD coated carbide Application: General purpose drilling of steel
	PR730	Gold	TiAlN+TiN	<ul style="list-style-type: none"> Superior oxidation resistance with well balanced wear resistance and toughness Application: Stable and long tool life at high speed cutting of steel
	PR830	Gold	TiAlN+TiN	<ul style="list-style-type: none"> Improved high temperature stability and wear resistance by TiAlN base PVD coating Application: Stable and long tool life for drilling of steel
	PR1230	Blackish red	MEGACOAT	<ul style="list-style-type: none"> Superior wear and oxidation resistant MEGACOAT coating on special tough carbide substrate Application: Stable and high feed drilling of steel
 Stainless Steel	PR660	Gold	TiN	<ul style="list-style-type: none"> Superior adhesion-resistant TiN base PVD coated carbide on special tough carbide substrate Application: For steel, stainless steel, cast steel and heat-resistant alloys, low speed cutting
	PR1025	Reddish gray	TiCN	<ul style="list-style-type: none"> TiCN base PVD coating on micro-grain carbide Application: Stable and long tool life drilling of stainless steel
	PR1225	Blackish red	MEGACOAT	<ul style="list-style-type: none"> Superior wear and oxidation-resistant MEGACOAT coating on micro-grain carbide substrate Application: General and high feed drilling of steel, stainless steel, and heat-resistant alloys
 Cast Iron	PR905	Bluish violet	TiAlN	<ul style="list-style-type: none"> TiAlN base PVD coating on special tough carbide substrate for cast iron Application: Highly efficient stable drilling of gray and nodular cast iron
	PR1210	Blackish red	MEGACOAT	<ul style="list-style-type: none"> Superior wear and oxidation resistant MEGACOAT coating on special carbide substrate for cast iron Application: Highly efficient stable drilling of gray and nodular cast iron

Carbide




Carbide

Due to its superior mechanical features carbide is used in a variety of applications. KYOCERA produces a variety of carbides, including KW10 and GW15 for non-ferrous materials and micro-grain carbides for precision cutting.

Features

- Tough and hard
- Good thermal conductivity
- Suitable for cutting non-ferrous metals and non-metals
- Stable cutting at low cutting speeds, including drilling operations

Features of Carbide

Workpiece Material	Symbol	Color	Main Component	Advantages
 Non-ferrous materials	KW10	Gray	WC+Co	<ul style="list-style-type: none"> ISO identification symbol K carbide (K10 relevant) Application: Stable cutting of cast iron, non-ferrous materials and non-metals
	GW15	Gray	WC+Co	<ul style="list-style-type: none"> ISO identification symbol K carbide (equivalent to K10), tough micro-grain carbide Application: High wear resistance and toughness for cast iron, non-ferrous materials and non-metals