




PVD Coated Carbide for Milling and Drilling



PVD Coated Carbide

KYOCERA's PVD coated carbide for milling and 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 long tool life and stable machining.

Features of PVD Coated Carbide for Milling and 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 propose for milling, grooving and threading 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 machining 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 milling of steel
	PR1230	Blackish red	MEGACOAT	<ul style="list-style-type: none"> Superior wear and oxidation resistant MEGACOAT 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 machining
	PR1025	Reddish gray	TiCN	<ul style="list-style-type: none"> TiCN base PVD coated on micro-grain carbide Application: Stable and long tool life milling 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: General and high feed drilling of steel and stainless steel
 Cast Iron	PR905	Bluish violet	TiAlN	<ul style="list-style-type: none"> TiAlN base PVD coated on special tough carbide substrate for cast iron Application: Highly efficient stable milling and drilling of gray and nodular cast iron
	PR1210	Blackish red	MEGACOAT	<ul style="list-style-type: none"> Superior wear and oxidation resistant MEGACOAT 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 for non-ferrous materials and micro-grain carbides for precision machining.

Features

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

Features of Carbide

Workpiece Material	Symbol	Color	Main Component	Advantages
 Steel	PW30	Gray	WC+Co+TiC+TaC	<ul style="list-style-type: none"> ISO identification symbol P carbide (K10 relevant) Application: Milling of steel, stable wear resistance and toughness
 Non-ferrous materials	KW10	Gray	WC+Co	<ul style="list-style-type: none"> ISO identification symbol K carbide (K10 relevant) Application: Stable machining 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
	GW25	Gray	WC+Co	<ul style="list-style-type: none"> ISO identification symbol K carbide (K30 relevant) Application: Stable wear resistance and anti-chipping performance for milling operations of aluminum