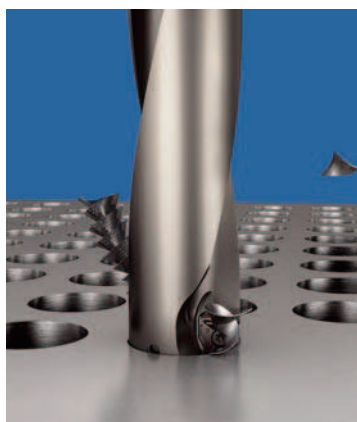




## PVD Coated Carbide for Milling and Drilling



### PVD Coated Carbide

KYOCERA's PVD coated carbide for milling and drilling is coated on a very tough carbide substrate. The low processing temperature, compared with CVD, leads to improved bending strength, less deterioration of the coating and superior long tool life as well as 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"> <li>TiN base PVD coated carbide</li> <li>Application: General propose for milling, grooving and threading of steel</li> </ul>
	PR730	Gold	TiAlN+TiN	<ul style="list-style-type: none"> <li>Superior oxidation resistance with well balanced wear resistance and toughness</li> <li>Application: Stable and long tool life at high speed cutting of steel</li> </ul>
	PR830	Gold	TiAlN+TiN	<ul style="list-style-type: none"> <li>Improved high temperature stability and wear resistance by TiAlN base PVD coating</li> <li>Application: Stable and long tool life for milling of steel</li> </ul>
	PR1230	Blackish red	MEGACOAT	<ul style="list-style-type: none"> <li>Superior wear and oxidation resistant MEGACOAT on special tough carbide substrate</li> <li>Application: Stable and high feed drilling of steel</li> </ul>
 Stainless Steel	PR660	Gold	TiN	<ul style="list-style-type: none"> <li>Superior adhesion-resistant TiN base PVD coated carbide on special tough carbide substrate</li> <li>Application: For steel, stainless steel, cast steel and heat-resistant alloys, low speed cutting</li> </ul>
	PR1025	Reddish gray	TiCN	<ul style="list-style-type: none"> <li>TiCN base PVD coated on micro-grain carbide</li> <li>Application: Stable and long tool life milling of stainless steel</li> </ul>
	PR1225	Blackish red	MEGACOAT	<ul style="list-style-type: none"> <li>Superior wear and oxidation-resistant MEGACOAT on micro-grain carbide substrate</li> <li>Application: General and high feed drilling of steel and stainless steel</li> </ul>
 Cast Iron	PR905	Bluish violet	TiAlN	<ul style="list-style-type: none"> <li>TiAlN base PVD coated on special tough carbide substrate for cast iron</li> <li>Application: Highly efficient stable milling and drilling of gray and nodular cast iron</li> </ul>
	PR1210	Blackish red	MEGACOAT	<ul style="list-style-type: none"> <li>Superior wear and oxidation resistant MEGACOAT on special carbide substrate for cast iron</li> <li>Application: Highly efficient stable drilling of gray and nodular cast iron</li> </ul>

## Carbide



### Carbide

Due to its superior mechanical properties 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 cutting.

### Features

- Tough and hard
- Good thermal conductivity
- Suitable for cutting non-ferrous metals and non-metals
- Stable cutting 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"> <li>ISO identification symbol P carbide (K10 relevant)</li> <li>Application: Milling of steel, stable wear resistance and toughness</li> </ul>
 Non-ferrous materials	KW10	Gray	WC+Co	<ul style="list-style-type: none"> <li>ISO identification symbol K carbide (K10 relevant)</li> <li>Application: Stable cutting of cast iron, non-ferrous materials and non-metals</li> </ul>
	GW15	Gray	WC+Co	<ul style="list-style-type: none"> <li>ISO identification symbol K carbide (equivalent to K10), tough micro-grain carbide</li> <li>Application: High wear resistance and toughness for cast iron, non-ferrous materials and non-metals</li> </ul>
	GW25	Gray	WC+Co	<ul style="list-style-type: none"> <li>ISO identification symbol K carbide (K30 relevant)</li> <li>Application: Stable wear resistance and anti-chipping performance for milling operations of aluminum</li> </ul>
 Heat-Resistant Alloys	SW05	Gray	WC+Co	<ul style="list-style-type: none"> <li>ISO identification symbol K carbide (K05 relevant)</li> <li>Application: Continuous cutting and finishing of titanium alloys maintaining superior wear resistance</li> </ul>
	SW10 (Made to order)	Gray	WC+Co	<ul style="list-style-type: none"> <li>ISO identification symbol K carbide (K10 relevant)</li> <li>Application: Continuous and light interrupted cutting of titanium alloys maintaining superior wear resistance and stable result</li> </ul>
	SW25 (Made to order)	Gray	WC+Co	<ul style="list-style-type: none"> <li>ISO identification symbol K carbide (K25 relevant)</li> <li>Application: Interrupted and light interrupted cutting of titanium alloys maintaining stable result</li> </ul>