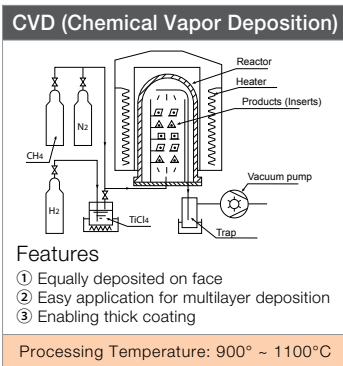


# CVD COATED CARBIDE



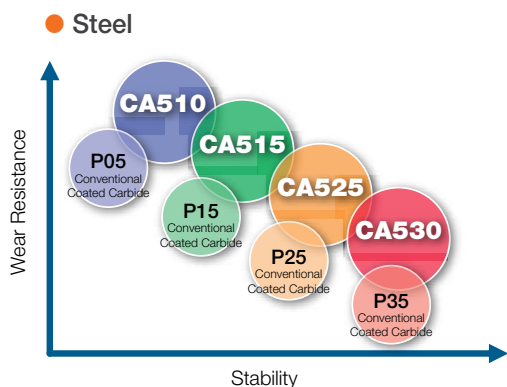
## CVD COATED CARBIDE

KYOCERA's CVD coated carbide grades are based on ceramic thin film technology and provide stable, efficient cutting at high speeds or heavily interrupted applications.

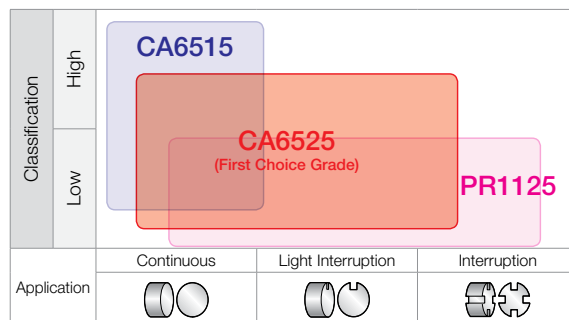
- Applicable from low to high speed cutting and from finishing to roughing
- Stable cutting is achieved due to the superior toughness and crack resistance
- Cutting times are reduced due to good chip control from effective chipbreakers

FEATURES OF CVD COATED CARBIDE				
Material	Description	Color	Main Component (Coating Composition)	Advantages
<b>P</b> Steel	CA510	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Special substrate with thermal deformation resistance along with a thick and tough film coating for wear resistance</li> <li>Application: High speed and high efficiency steel machining</li> </ul>
	CA515	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Special substrate and tough coating film provides thermal deformation and high wear resistance</li> <li>Application: Continuous to light interrupted steel machining (general use)</li> </ul>
	CA525	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Special substrate and tough coating film provides high wear and fracture resistance</li> <li>Application: 1st choice for steel machining</li> </ul>
	CA530	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Special tough substrate and tough coating film provides high stability and wear resistance</li> <li>Application: General to heavy interrupted machining (stability oriented)</li> </ul>
	CA5505	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Improved wear resistance due to hard carbide substrate and micro columnar structure of coating composition</li> <li>Application: High speed continuous cutting of steel, continuous to light interrupted cutting of cast iron</li> </ul>
	CA5515	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Improved wear resistance and longer tool life due to micro columnar structure of coating composition</li> <li>Application: High speed cutting of steel, continuous to light interruption</li> </ul>
	CA5525	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Improved toughness and wear resistance due to tougher carbide substrate and micro columnar structure of coating composition</li> <li>Application: First choice for general cutting of steel, roughing to interruption</li> </ul>
	CA5535	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Improved toughness due to tougher carbide substrate</li> <li>Application: Roughing to heavy interrupted cutting of steel</li> </ul>
	CR9025	Gold	Columnar TiCN+TiN	<ul style="list-style-type: none"> <li>Improved toughness and stability due to specialized carbide substrate with plastic deformation resistance</li> <li>Application: Cut-off, grooving and multi-function cutting of steel</li> </ul>
<b>M</b> Stainless Steel	CA6515	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Specialized carbide substrate for stainless steel cutting, excellent wear resistance</li> <li>Application: Continuous to light interrupted cutting of stainless steel</li> </ul>
	CA6525	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Specialized carbide substrate for stainless steel cutting, excellent notching resistance and toughness</li> <li>Application: First choice for general cutting of stainless steel, from finishing to roughing, continuous to interruption</li> </ul>
<b>K</b> Cast Iron	CA4010	Gold	Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Excellent high temperature stability due to plastic deformation and oxidation wear resistance</li> <li>Application: Continuous to light interrupted high speed cutting of cast iron</li> </ul>
	CA4115	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Improved wear resistance due to micro columnar structure of coating composition</li> <li>Application: Nodular cast iron cutting, continuous to light interruption</li> </ul>
	CA4120	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	<ul style="list-style-type: none"> <li>Improved toughness and wear resistance due to tougher carbide substrate and micro columnar structure of coating composition</li> <li>Application: Roughing to heavy interrupted cutting of nodular cast iron</li> </ul>
	CA4505	Blackish gray	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub>	<ul style="list-style-type: none"> <li>Stable, long tool life due to improved bonded force of coating layers and special treatment on the surface of top coated layer</li> <li>Application: For gray cast iron and nodular cast iron at high speed in continuous to light interrupted cutting</li> </ul>
	CA4515	Blackish gray	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub>	<ul style="list-style-type: none"> <li>Stable, long tool life due to improved bonded force of coating layers and special treatment on the surface of top coated layer</li> <li>Application: First choice for gray cast iron and nodular cast iron in light to heavy interrupted cutting</li> </ul>

## Application Map



## Stainless Steel



GRADES  
A  
LINEUP / INSERTS  
B  
45° / 70° LEAD  
C  
75° LEAD  
D  
90° LEAD  
E  
HIGH FEED  
F  
MULTI-FUNCTION  
G  
SLOT MILLS  
H  
RADIUS / BALL-NOSE  
J  
OTHER APPLICATIONS  
K  
TOOL HOLDING  
O  
SPARE PARTS  
P  
TECHNICAL  
R  
INDEX  
T