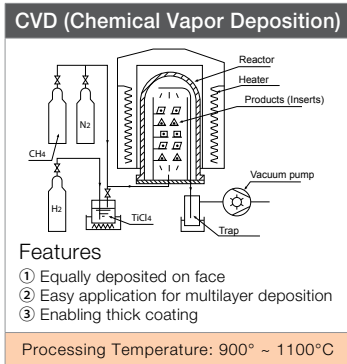


# INSERT GRADES

## CVD COATED CARBIDE

A GRADES



### CVD COATED CARBIDE

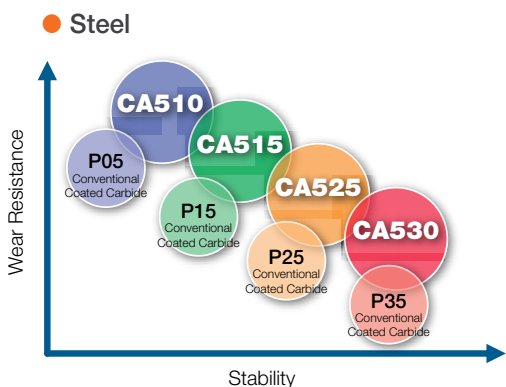
KYOCERA's CVD coated carbide grades are based on ceramic thin film technology and provide stable, efficient cutting at high speeds or heavily interrupted applications.

- 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	<b>CA510</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Special substrate with thermal deformation resistance along with a thick and tough film coating for wear resistance · Application: High speed and high efficiency steel machining
	<b>CA515</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Special substrate and tough coating film provides thermal deformation and high wear resistance · Application: Continuous to light interrupted steel machining (general use)
	<b>CA525</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Special substrate and tough coating film provides high wear and fracture resistance · Application: 1st choice for steel machining
	<b>CA530</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Special tough substrate and tough coating film provides high stability and wear resistance · Application: General to heavy interrupted machining (stability oriented)
	<b>CA5505</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Improved wear resistance due to hard carbide substrate and micro columnar structure of coating composition · Application: High speed continuous cutting of steel, continuous to light interrupted cutting of cast iron
	<b>CA5515</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Improved wear resistance and longer tool life due to micro columnar structure of coating composition · Application: High speed cutting of steel, continuous to light interruption
	<b>CA5525</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Improved toughness and wear resistance due to tougher carbide substrate and micro columnar structure of coating composition · Application: First choice for general cutting of steel, roughing to interruption
	<b>CA5535</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Improved toughness due to tougher carbide substrate · Application: Roughing to heavy interrupted cutting of steel
	<b>CR9025</b>	Gold	Columnar TiCN+TiN	· Improved toughness and stability due to specialized carbide substrate with plastic deformation resistance · Application: Cut-off, grooving and multi-function cutting of steel
<b>M</b> Stainless Steel	<b>CA6515</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Specialized carbide substrate for stainless steel cutting, excellent wear resistance · Application: Continuous to light interrupted cutting of stainless steel
	<b>CA6525</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Specialized carbide substrate for stainless steel cutting, excellent notching resistance and toughness · Application: First choice for general cutting of stainless steel, from finishing to roughing, continuous to interruption
<b>K</b> Cast Iron	<b>CA4010</b>	Gold	Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Excellent high temperature stability due to plastic deformation and oxidation wear resistance · Application: Continuous to light interrupted high speed cutting of cast iron
	<b>CA4115</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Improved wear resistance due to micro columnar structure of coating composition · Application: Nodular cast iron cutting, continuous to light interruption
	<b>CA4120</b>	Gold	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	· Improved toughness and wear resistance due to tougher carbide substrate and micro columnar structure of coating composition · Application: Roughing to heavy interrupted cutting of nodular cast iron
	<b>CA4505</b>	Blackish gray	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub>	· Stable, long tool life due to improved bonded force of coating layers and special treatment on the surface of top coated layer · Application: For gray cast iron and nodular cast iron at high speed in continuous to light interrupted cutting
	<b>CA4515</b>	Blackish gray	Micro Columnar TiCN+Al <sub>2</sub> O <sub>3</sub>	· Stable, long tool life due to improved bonded force of coating layers and special treatment on the surface of top coated layer · Application: First choice for gray cast iron and nodular cast iron in light to heavy interrupted cutting

### Application Map



### Stainless Steel

