

GRADES

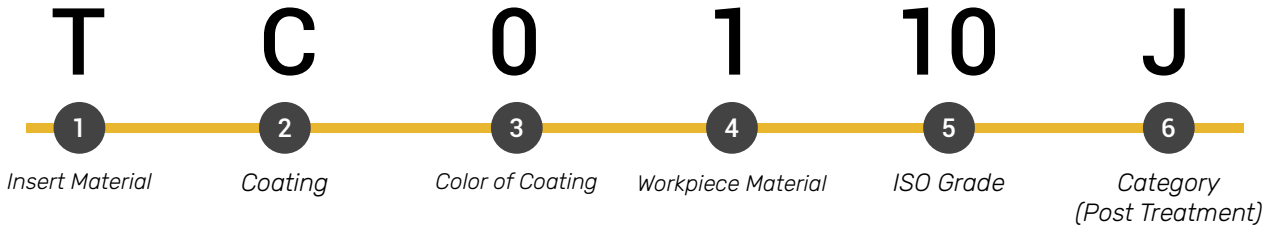
2026 | CATALOG

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 **EUROLOY**
CARBIDE TOOLS

GRADE CODING SYSTEM

Grades



1 Insert Material
T C O 1 10 J

T: Tungsten based cemented carbide
 C: Cermet
 S: Ceramic
 D: PCD
 B: CBN

2 Coating
T C O 1 10 J

P: PVD
 C: CVD
 N: Uncoated
 S: Solid

3 Color of Coating
T C O 1 10 J

0: Yellow-Black
 1: Yellow
 2: Black
 3: Purple
 4: Bronze
 5: Gray-Black
 6: Naco Blue
 7: Uncoated

4 Workpiece Material
T C O 1 10 J

P 1 Steel	K 2 Cast Iron	M 3 Stainless Steel	S 4 Heat Resistant Alloy and Super Hard Material
N 5 Aluminium & Non Ferrous Metals		P/K/M 6 General Machining	

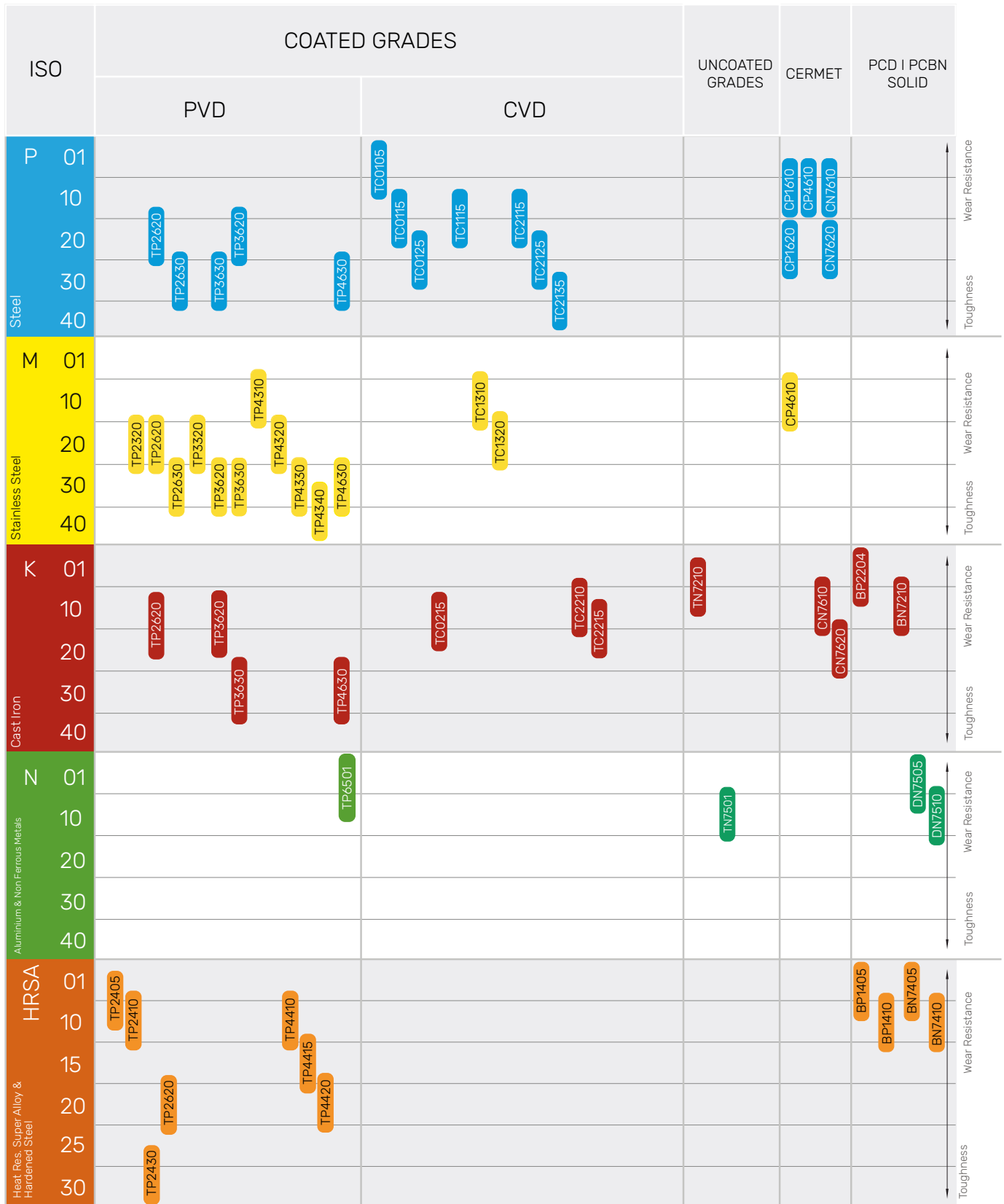
5 ISO Grade
T C O 1 10 J

01-40

6 Category
T C O 1 10 J

A/G/J/N/V
 Category

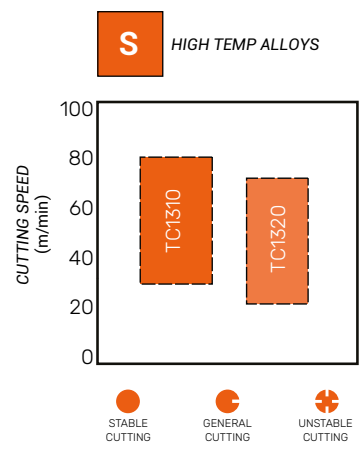
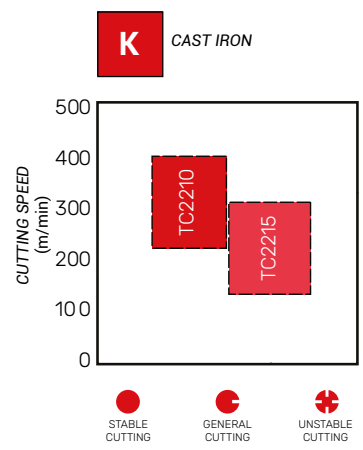
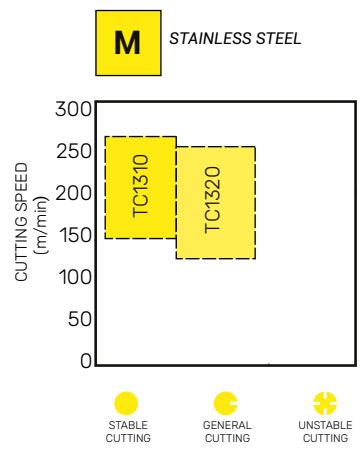
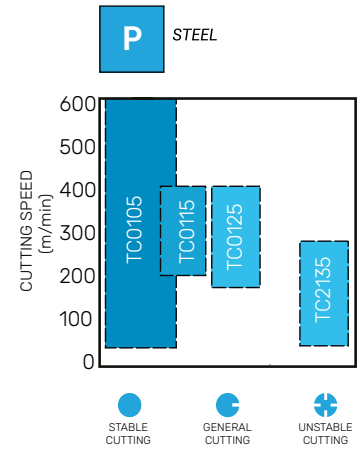
GRADE SELECTION CHART



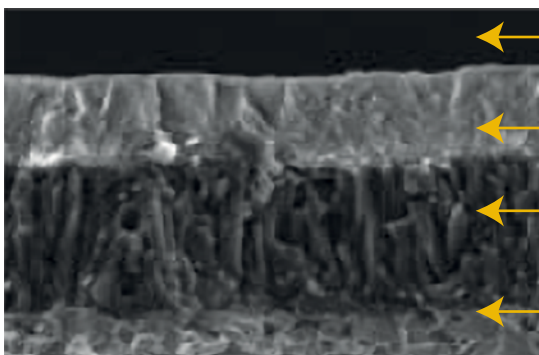
CVD COATED GRADES

Grades

ISO	Grade	Coating	Application
P01-P15	TC0105	MT-TiCN + Al2O3 + TiN	For finishing of steel and alloyed steel under stable conditions. High wear resistance substrate. Can sustain edge reliability both in dry and wet machining with high temperature.
P05-P25	TC0115 TC1115 TC2115	MT-TiCN + Al2O3 + TiN	For general machining of steel and alloyed steel in continuous or lightly interrupted conditions. Nano CVD coating and post-treatment for higher wear and impact resistance.
P15-P35	TC0125 TC2125	MT-TiCN + Al2O3 + TiN	For semi-finishing to medium roughing of steel and alloy steel in general cutting conditions. Superfine Al2O3+MT-TiCN coating over a tough graded carbide substrate. First choice for steel turning.
P25-P35	TC2135	MT-TiCN + Al2O3 + TiN	For roughing of steel and alloyed steel in interrupted cutting conditions. Superfine Al2O3+MT-TiCN coating over a high toughness graded carbide substrate. Good option for interrupted cutting with high metal removal rate.
M05-M20 S05-S20	TC1310	MT-TiCN + Al2O3 + TiN	Recommended for finish machining and light roughing of stainless steel. Suitable for machining at medium to high cutting speed due to heat resistant feature of the new CVD coating. Secondary choice for heat resistant alloy high speed turning.
M15-M30 S15-S35	TC1320	MT-TiCN + Al2O3 + TiN	First choice for stainless steel turning. CVD coating combined with the new carbide substrate shows stable performance, heat resistance and plastic deformation resistance.
K10-K15	TC0210 TC2210	MT-TiCN + Al2O3	For finishing and semi finishing of gray and nodular cast iron in continuous to lightly interrupted cutting conditions. Post-processed CVD coating for higher wear and impact resistance. Recommended for nodular cast iron high speed turning.
K10-K30	TC2215 TC0215	MT-TiCN + Al2O3	First choice for cast iron turning. Thick CVD coating over a tough micro grain carbide substrate. Can work under interrupted cutting conditions.



CVD Coating Section

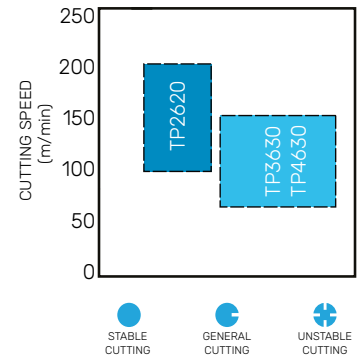


- ← Top coat with improved welding resistance
- ← Alumina coating layer for high speed cutting.
- ← Titanium coating layer with stronger resistance to chipping.
- ← Tough substrate optimized for continuous cutting and both light & heavy interruption.

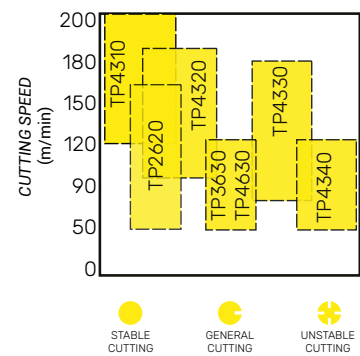
PVD COATED GRADES

ISO	Grade	Coating	Application
<ul style="list-style-type: none"> P10-P35 M05-M30 K05-K25 S05-S25 	TP2620 TP3620 TP4625	AlTiN	PVD coated carbide grade for general machining of steel, cast iron and stainless steel in stable conditions. TiAlN coating on fine grain carbide substrate. Applicable for heat resistant alloy milling.
<ul style="list-style-type: none"> P15-P40 M15-M40 K15-K35 S05-S25 	TP2630 TP3630 TP4630	AlTiN	PVD-coated grade for general machining of steel, cast iron and stainless steels at medium and low cutting speeds. Suitable for finishing and semifinishing of HRSA.
<ul style="list-style-type: none"> M15-M25 	TP1320 TP2320 TP4320	TiAlN	Used for high speed and continuous turning of stainless steel, high carbon content steels and mold steel. Achieves superior wear resistance with nano composite powder. Special PVD coating layer ensures high lubrication in order to prevent built-up edge.
<ul style="list-style-type: none"> M25-M35 	TP2330 TP4330	TiAlN	Medium to roughing of stainless steel.
<ul style="list-style-type: none"> S05-S15 M05-M15 	TP2405	AlTiN	High speed and continuous medium cutting of difficult to cut materials.
<ul style="list-style-type: none"> S05-S20 M05-M20 	TP2410 TP4410	AlTiN	First choice for heat resistant alloy turning. Used for continuous and high speed machining of Ti Alloy, inconel and stainless steel. Provides excellent wear resistance and toughness in high temperature with NANO composite powder.
<ul style="list-style-type: none"> S15-S30 M20-M40 	TP2430	AlTiN	Medium to low speed and medium to rough cutting of difficult to cut materials.

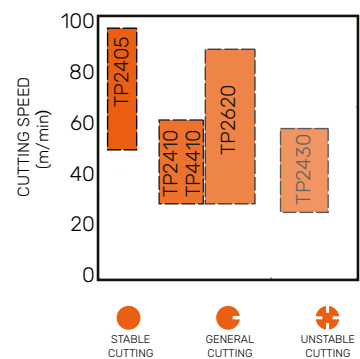
P STEEL



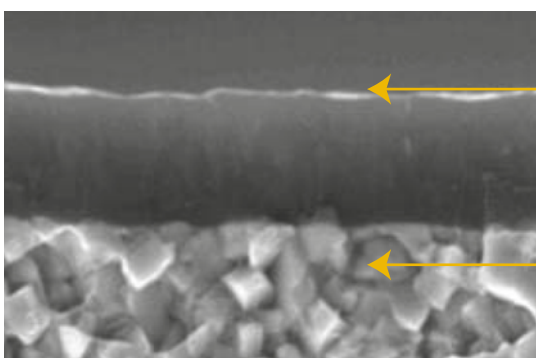
M STAINLESS STEEL



S HIGH TEMP ALLOYS



PVD Coating Section



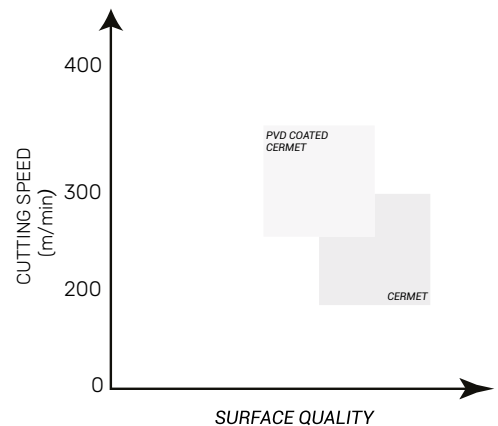
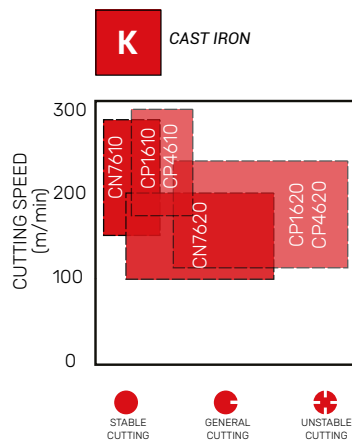
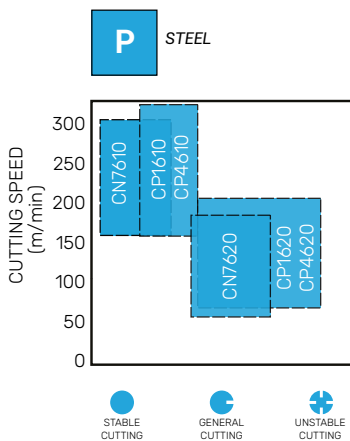
It prevents wear at a high temperature to apply excellent surface roughness and coating with oxidation resistance and high hardness.

It improves wear resistance to equalize submicron matrix, secure stability between corners and improve chipping and wear resistance.

CERMET & COATED CERMET

Grades

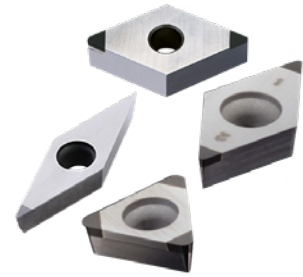
ISO	Grade	Coating	Application
P01-P10 K01-K10	CN7610	Uncoated	Cermet grade for steel and cast iron machining. Sustains long tool life in high speed and continuous cutting. First choice for precision boring.
P01-P20 M01-M10 K05-K10	CN7620	Uncoated	General grade for machining steel, stainless steel and cast iron. Offers superior fracture and wear resistance.
P01-P10 K01-K10	CP1610 CP4610	PVD	PVD coated cermet for light cutting of steel and cast iron in high speed machining. Superior wear and adhesion resistance.
P01-P20 M01-M10 K05-K10	CP1620 CP4620		Light cutting for steel, stainless steel and cast iron in medium or high speed machining. Applicable both for dry and wet cutting.



CBN GRADES

Advantages

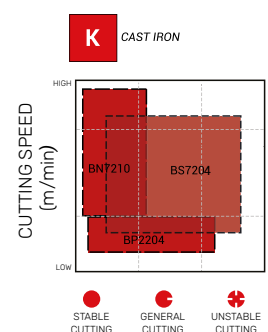
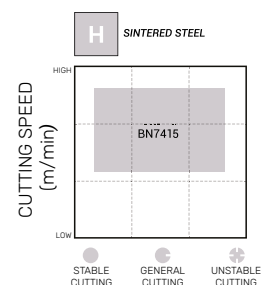
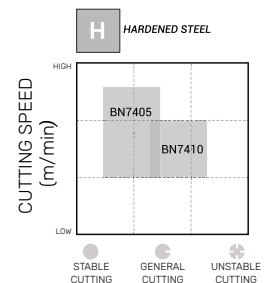
- Excellent wear resistance and crack resistance, non-coated CBN.
- TiNCo coating on micro-grain CBN with heat-resistant binder phase.
- High CBN content ratio due.
- Excellent wear resistance due to high CBN content and special binder.
- Heat-resistant solid CBN rich substrate with hard binder phase.



Grades

	Material	Grade	Coating Color	Grain Size (µm)	Hardness of Substrate (GPA)	Transverse Strength (MPa)
H	Hardened Steel	BN7405	Uncoated	2	28	1000
		BN7410		1 / <	25	1250
		BP1405	Yellow	2	28	1000
		BP1410		1 / <	25	1250
	Sintered Steel	BN7415	Uncoated	2-4	34	1350
K	Cast Iron	BN7210	Uncoated	2	39	1400
		BS7208		9	31	630
				BP2204	Black	0.5-6

Grade	Application
BN7405	Finishing and continuous machining of hardened die steel.
BN7410	General purpose for hardened steel.
BP1405	High speed finishing of hardened die steel.
BP1410	Stable machining of hardened steel at high cutting speeds.
BN7415	Machining of sintered steel (preventing burr formation.)
BN7210	High speed machining of gray cast iron.
BS7208	High speed machining of gray cast iron. (Solid CBN)
BP2204	Heavy duty, interrupted machining and finishing of hardened steel, hardened roll steel and cast iron, coated solid CBN grade.



PCD GRADES

Grades

Properties

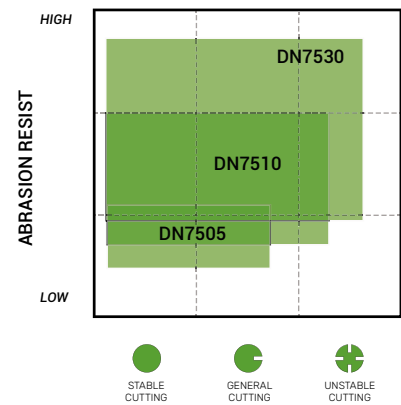
- It is applicable to machining non-ferrous metals and non-metals.
- No edge formation ensures high precision machining.
- Good surface quality is achieved.

Advantages

- Super micro-grain PCD features cutting edge strength, wear resistance, fracture resistance, good edge-sharpening performance and longer, stable tool life.



Workpiece Material	Non-Ferrous Materials			
Cutting Range	Finishing		Rough Cutting	
Classification	N01	N30	N20	N10
PCD				



Material	Grade	Average Grain Size	Advantages
N	DN7505	0.5	Application: High speed machining of aluminium alloys, brass, non-ferrous metals and non-metals including plastics and carbide.
	DN7510	10	Application: High speed machining of aluminium alloys, brass, non-ferrous metals and non-metals including plastics and carbide.
	DN7530	2-30	Application: High speed machining of aluminium alloys, brass, non-ferrous metals and non-metals including plastics and carbide.

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