# **Summary of Insert Grades**

KYOCERA promotes research and development to help improve customers' productivity and profitability.

KYOCERA provides high-quality inserts in various grades including Cermet, Coated Carbide, Coated Super Micro-Grain Carbide, Carbide, Ceramic, PCD and CBN.

<b>P</b> (	CD 🔿 A8										
Workpie	ece Material	(Alumin		ls materials us metals / Non-	-metals)	Titanium / Titanium alloys					
Cutting Range		Finishing 🗲			➡ Roughing	Finishing <		➡ Roughing			
Clas	sification	N01	N10	N20	N30	S01	S10	S30			
Turning Milling	PCD	KPD001 KPD010 KPD230				KPD001 KPD010 KPD230					

#### CBN e A9

Workpie	ece Material	(Harde		aterials Chilled ca	ast iron)		Sintere	ed steel		Cast Iron (Gray cast iron / Nodular cast iron)				
Cuttir	ng Range	Finishing			Roughing	Finishing	, <		Roughing	Finishing - Roughing				
Clas	sification	H01	H10	H20	H30	01	10	20	30	K01	K10	K20	K30	
Turning	CBN	КВ	525 M				KBN65 KBN	iM 170M		KBN60 KB	DM N900			

## Ceramic 🔿 A10

Workpiece Material Hard materials (Hardened steel / Chilled cast iron)						Heat	t-resistant	alloys / Inc	conel	Cast Iron (Gray cast iron / Nodular cast iron)				
Cutt	ing Range	Finishing	$\leq$		Roughing	Finishing		$ \rightarrow$	Roughing	Finishing Coughing				
Clas	Classification		H10	H20	H30	S01	S10	S20	S30	K01	K10	K20	K30	
Turning	Ceramic	A	65 56N 500M			C	F1			KA30 A65 A66 PT600				

### Cell Fiber 💮 A11

Workpie	ece Material	(۲	Hard m ardened steel /	Heat-resistant alloys / Inconel						
Cutti	ng Range	Finishing <	1(		➡ Roughing	Finishing <			Roughing	
Clas	sification	H01	H01 H10		H30	S01	S10	S20	S30	
Turning	Cell Fiber	KBN35M				CI	F1			

## Cermet 💮 A12

Workpi	ece Material	Steel (Carbon steel / Alloy steel)						Stainless steel / Cast steel					Cast Iron (Gray cast iron / Nodular cast iron)			
Cutti	ng Range	Finishing	$\leq$			Roughing	Finishing				Finishing	Finishing				
Clas	Classification		P10	P20	P30	P40	M01	M10	M20	M30	M40	K01	K10	K20	K30	
Turning	TN Series		TN6010 TN60 TN9 TN1					TN6010 TN60 TN TN	90 90 00M				TN60			
Milling	TC Series	(	TC40	тс60					TC60				TC40			
	Super Micro-Grain Cermet		TN6020					TN6020								

## PVD Coated Cermet 🚗 A12

Workpiece Material Steel (Carbon steel / Alloy steel)							Stainless	s steel / C	Cast steel	Cast Iron (Gray cast iron / Nodular cast iron)					
Cutting Range Finishing  Roughing						Finishing - Roughing					Finishing	inishing \prec 📂 Roughing			
Clas	sification	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	K01	K10	K20	K30
Turning	PV Series		PV7010 PV7020 PV60 PV					PV7010 PV7020 PV60 PV9					PV7005		