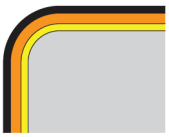
Technical Information - Turning

Grades for Turning

Coated Grades			05	10	15	20	25	30	35	40	45	50
HCK10 PVD -TiAlN-Al_2O_3 on micro-grain carbide Light and medium machining For aluminum alloys	 HC-N10	P M K N S H										
TN5105 MT-CVD / CVD-TiCN-Al_2O_3 Coated carbide High wear resistance Good toughness properties High cutting edge strength Use with or without coolant For gray cast irons	 HC-K15	P M K N S H										
TN5120 MT-CVD / CVD-TiCN-Al_2O_3 Coated carbide High wear resistance Good toughness properties High cutting edge strength Use with or without coolant For ductile cast irons	 HC-K20	P M K N S H										
TN6010 Coated carbide PVD - TiAlN Multilayer Light machining For difficult-to-machine alloys	 HC-S10	P M K N S H										
TN6025 Coated carbide PVD - TiAlN Multilayer Light and medium machining For difficult-to-machine alloys	 HC-S25	P M K N S H										
TN7005 Coated carbide MT-CVD / CVD-TiN-TiCN-Al_2O_3-ZrCN Extremely wear resistant Light machining For steels and nodular cast iron in non-interrupted cuts	 HC-P05	P M K N S H										
TN7010 Coated carbide MT-CVD / CVD-TiN-TiCN-Al_2O_3-ZrCN Very wear resistant Light and medium machining For steels and nodular cast iron	 HC-P10	P M K N S H										

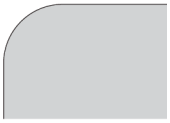
Technical Information - Turning

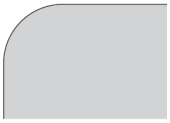
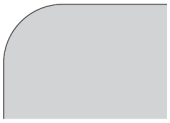
Grades for Turning

Coated Grades			05	10	15	20	25	30	35	40	45	50
TN7015 Coated carbide MT-CVD / CVD - TiN-TiCN-Al_2O_3-ZrCN Good balance of wear resistance and toughness properties Light and medium machining For steels and nodular cast iron		P										
		M										
		K										
		N										
		S										
	HC-N10	H										
TN7025 Coated carbide MT-CVD / CVD-TiN-TiCN-Al_2O_3-ZrCN Good toughness properties Medium and heavy machining For steels and nodular cast iron		P										
		M										
		K										
		N										
		S										
	HC-K15	H										
TN7035 Coated carbide MT-CVD / CVD-TiN-TiCN-Al_2O_3-ZrCN Extremely tough grade Heavy machining For steels and nodular cast iron		P										
		M										
		K										
		N										
		S										
	HC-P35	H										
TN7110 MT-TiCN-Al_2O_3-TIN Preferred grade for all finishing operations in Carbon, Alloy, & 400 series stainless steels Can be applied with or without coolant For non-interrupted applications		P										
		M										
		K										
		N										
		S										
	HC-P10	H										
TN7115 MT-TiCN-Al_2O_3-TIN First choice for light to medium rough turning of Steel & 400 series stainless steel Outstanding balance of wear resistance & toughness Can be applied with or without coolant For light and non-interrupted applications		P										
		M										
		K										
		N										
		S										
	HC-P15	H										
TN7125 MT-TiCN-Al_2O_3-TIN Preferred grade for general roughing operations in Steel & cast steel Can be applied with or without coolant For interrupted & non-interrupted applications		P										
		M										
		K										
		N										
		S										
	HC-P25	H										
TN7135 MT-TiCN-Al_2O_3-TIN For roughing and heavy roughing applications Very tough grade Can be applied with or without coolant First choice for severely interrupted cuts		P										
		M										
		K										
		N										
		S										
	HC-P35	H										

Technical Information - Turning

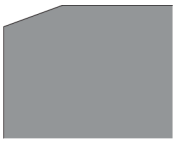
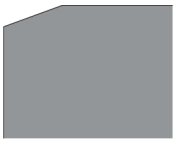
Grades for Turning

Coated Grades			05	10	15	20	25	30	35	40	45	50
TN8025 Coated carbide MT-CVD / CVD - TiN-TiCN-Al_2O_3-ZrCN Good balance of wear resistance and toughness properties Light and medium machining For austenitic stainless steel AISI 300 series		P										
		M										
		K										
		N										
		S										
	HC-M25	H										

Uncoated Grades			05	10	15	20	25	30	35	40	45	50
HWK10 Uncoated carbide Micro-grain carbide with high cutting edge stability Light machining For non-ferrous metals and non-metals		P										
		M										
		K										
		N										
		S										
	HF-N10	H										
HWK15 Uncoated carbide Micro-grain carbide with high cutting edge stability Light and medium machining For non-ferrous metals and non-metals		P										
		M										
		K										
		N										
		S										
	HF-N15	H										
THM Uncoated carbide Extraordinary good balance of hardness, wear resistance, edge stability, and toughness Light and medium machining For cast iron, and all non-ferrous metals and non-metals; also useful in unfavorable conditions		P										
		M										
		K										
		N										
		S										
	HW-K15	H										
TTM Uncoated carbide Medium machining For steels and nodular cast iron		P										
		M										
		K										
		N										
		S										
	HW-P25	H										
TTR Uncoated carbide Light and medium machining For steels and nodular cast iron To be used at low cutting speeds; also effective in unfavorable conditions		P										
		M										
		K										
		N										
		S										
	HW-P35	H										
TTX Uncoated carbide Very wear resistant grade Light machining To be used in favorable conditions		P										
		M										
		K										
		N										
		S										
	HW-P10	H										

Technical Information - Turning

Grades for Turning

Cermet Grades			05	10	15	20	25	30	35	40	45	50
TTI15 Cermet Light machining Extremly good wear resistance at elevated temperatures = cutting speeds For steels and nodular cast iron Recommended for high cutting speeds under favorable conditions		P										
		M										
		K										
		N										
		S										
	HT-P15	H										
Ceramic Grades			05	10	15	20	25	30	35	40	45	50
CW2015 Mixed (black) ceramic Matrix Al_2O_3 and TiCN Good toughness properties combined with good wear resistance Semi finishing and finishing For hardened iron base materials and gray cast iron (finishing)		P										
		M										
		K										
		N										
		S										
	CM-H10	H										
CW5025 Silicon nitride ceramic Extraordinary toughness properties Roughing, also in heavily interrupted cuts Capable of high-performance turning Can be applied with or without coolant For gray cast iron		P										
		M										
		K										
		N										
		S										
	CN-K15	H										