# Turning - Insert grades



### CVD coated grades

The state of the s	TP100	The most wear-resistant of the Seco universal grades. Used for finishing and medium-roughing of cast iron, steels and alloyed steels. TP100 shows high wear resistance and is the appropriate choice when productivity is high up on the list of production demands.
		Ti (C, N) + Al <sub>2</sub> O <sub>3</sub> + TiN
	TP200	Universal grade. First choice for general turning operations on steels. TP200 is also a good choice for machining stainless steels and cast iron. TP200 combines good wear resistance with high toughness. Due to its versatility. TP200 is the grade that can handle most types of machining operations.  Ti (C, N) + Al <sub>2</sub> O <sub>3</sub> + TiN
	TP300	The toughest of the universal grades. The principal application is for machining operations that place strict demands on edge and fracture toughness. TP300 is very well suited for turning stainless steels. The grade is also used for intermittent machining operations, and for steels with gascut surface or with rolling defects. TP300 is the appropriate choice when reliability is high up on the list of production demands.  Ti (C, N) + Al <sub>2</sub> O <sub>3</sub> + TiN
	TP15	Grade with high wear resistance, and particularly suited for low feed rates. For finishing to medium-roughing of general engineering steels and cast iron, and for finishing of stainless steels.  Ti $(C. N) + TiC + Al_2O_3 + TiN$
	TP20	Proven grade for turning in the P20 range. A good combination of wear resistance and toughness results in a good useful life at high cutting speeds on all types of steels.  Ti (C, N) + Al <sub>2</sub> O <sub>3</sub> + TiN
	TP30	Mainly intended for turning in the P30 range. TP30 is best suited for high feed rates and intermittent cutting operations on steels and austenitic stainless steels.  TiC + Ti (C, N) + TiN
	TP40	TP40 largely supplements the universal grades and represents our basic grade for turning in the P40 range. Very tough grade for demanding operations on steel castings and forging, and on all types of stainless steels.  TiC/Ti (C, N) + TiN
	TX100	Supplements the universal grades. TX100 is an extremely wear-resistant grade intended for machining of cast iron. TX100 also shows good performance in applications on steels and hardened steels.  Ti (C, N) + Al <sub>2</sub> O <sub>3</sub> + TiN
	TX150	Supplements the universal grades. TX150 is mainly intended for machining nodular cast iron. A tougher supplement to the TP100 grade for both hardened and alloyed high-strength steels.  Ti (C, N) + Al <sub>2</sub> O <sub>3</sub> + TiN

# Turning - Insert grades



## **PVD** coated grades

100 mm 10	CP200	Hard micrograin principally intended for finishing operations on hot-strength superalloys based on Ni, Co, Fe and Ti, and for machining unalloyed titanium. Also performs well in finishing operations on stainless steels.  Ti (C, N) + (Ti, Al) N + TiN
	CP25	Tougher alternative to CP200. CP25 is principally intended for roughing operations on hot- strength superalloys.
	CP50	A very tough micrograin intended for finishing and medium roughing of stainless steels. Can handle intermittent cutting operations very well. CP50 is also an alternative for aluminium alloys.  TIN

## **Uncoated** grades

890	Micrograin with very high hardness and good toughness. Just like CP200, 890 is intended for superalloys based on Ni, Co and Fe. Also suitable for hardened steels, cast iron and non ferrous alloys like Al, Cu.
883	Tougher alternative to 890, Principally intended for roughing of hot-strength superalloys.
нх	Principally intended for machining cast iron and hardened steels. Also suitable for aluminium and other non-ferrous materials.
S25M	Basic grade for milling operations on steels. In turning, it is used principally for medium-roughing and intermittent cutting operations in the P20 range.

#### Cermet

CM	Cermet with very high wear resistance. Intended for finishing operations on steels, in which strict demands are made on surface finish.

#### PCBN + PCD

See pages 53 and 59.	