

Cutting Tool Material Application Tables

1. Coated Carbide

WALTER grade-designation	Standard designation	Material group						Application range						Coating methods	Structure of the layers	
		P Steel	M Stainless Steel	K Cast iron	N NF metals	S Materials diffc. to machine	H Hard materials	01 05	10 15	20 25	30 35	40 45				
WKP 25	HC – P 25	●●													CVD	TiCN + Al ₂ O ₃ (+TiN)
	HC – K 25			●●												
WKP 35	HC – P 35	●●													CVD	TiCN + Al ₂ O ₃ (+TiN)
	HC – K 35			●●												
WTP 35	HC – P 35	●●													CVD	TiCN
	HC – M 35		●													
	HC – S 35					●										
WXP 45	HC – P 45	●●													PVD	Multilayer TiAlN/TiN
	HC – S 35					●										
WXM 35	HC – M 35		●●												PVD	Multilayer TiAlN/TiN +ZrCN
	HC – P 35	●														
	HC – S 25					●										
WAK 15	HC – K 15			●●											CVD	TiCN + Al ₂ O ₃ (+TiN)
WXN 15	HC – N 15				●●										PVD	TiCN ^{plus}
WSM 35	HC – S 35					●●									PVD	TiAlN + Al ₂ O ₃ (ZrCN)
	HC – M 35		●●													
WSP 45	HC – S 45					●●									PVD	TiAlN + Al ₂ O ₃ (ZrCN)
	HC – P 45	●●														
	HC – M 45		●●													
WXH 15	HC – H 15						●●								PVD	TiAlN
	HC – P 15	●														
	HC – K 15			●												
WXM 15	HC – P 15	●●													PVD	Multilayer TiAlN/TiN
	HC – M 15		●													
	HC – K 15			●												

HC = Coated carbide

- Main application
- Other application



2. Uncoated Carbide Grades, Ceramics, CBN and PCD

WALTER grade-designation	Standard designation	Material group						Application range											
		P Steel	M Stainless Steel	K Cast iron	N NF metals	S Materials diff. to machine	H Hard materials	01	05	10	15	20	25	30			35	40	45
WPM	HW – P 25	●●																	
WKM	HW – K 20			●●															
	HW – N 20				●														
WSN 10	CN – K 20			●●															
WCB 80	BH – K 05			●●															
	BH – H 15																		
WK 10	HW – N 10				●●														
WCB 50	BH – H 10																		
	BH – K 10			●															
WMG 40	HF – N 35				●●														
WCD 10	DP – N 10				●●														

BH = CBN, high content of CBN

CN = Silicon nitride Si_3N_4

DP = Polycrystalline diamond

HF = Fine-grained carbide, uncoated

HW = Uncoated carbide

●● Main application

● Other application