GROUPS OF MATERIALS for cutting tools



Group of material		Material no.	Etching
LWS Characteristics of material Fields of application	→ Alloyed tool steel Chrome alloyed tool steel of very good toughness and medium capacity wear resistance Sufficient for many normal cutting operations with good price/performance ratio	1.2235 1.2067 or similar	none
SBS	→ Specially treated steel	B 153 T	SBS or
	Similar to chrome alloyed tool steel but improved by special treatment	or similar	B 153 T
Fields of application	Demanding cutting operations, similar to high chrome (HWS) steel but with a better price/performance ratio		
HWS	→ High chrome steel with 12 % Cr	1.2201 1.2601 1.2379	12 % Cr
Fields of application	High alloy ledeburite chrome steel with good capacity of wear resistance and good toughness For very demanding cutting operations	1.2080 1.2436 or similar	
HSS Characteristics of material	→ High speed steel High speed steel with high capacity of wear resistance due to its content of wolfram and molybdenum and with sufficient toughness	1.3333 1.3343 1.3355 1.3318 or similar	HSS
Fields of application	For extremely demanding cutting operations	ACD	HCD
	High speed steel made of powder metal with better toughness than High speed steel (HSS) by homogeneous structural constitution and, with a better capacity of wear resistance	ASP CPM or similar	HSP
Fields of application	Like high-speed steel (HSS) but only with special cutting operations demanded by the materials to be cut		
RFS	→ Stainless steel	1.4528	RFS
Characteristics of material Fields of application	Stainless and acid-proof steel with at least 17% Cr with acceptable wear properties and good toughness Cutting operations demanding rust and acid-resisting	1.4112 or similar	
НМ	→ Tungsten carbide tipped or solid carbide	K 10 G 30	НМ
Characteristics of material Fields of application	e.g. material redensified by HIP method with excellent capacity for wear resistance Cutting operations requiring very long service life; here, the extremely sensitive cutting edges require especially trained operating staff and suitable machines		



GROUPS OF MATERIALS

for knife holders, spacers and similar



Group of material		Material no.	Etching
VGS	→ Tempering steel	1.1191	none
		1.1750	
		1.0503	
		or similar	
LWS	→ Alloyed tool steel	1.2003	none
	•	1.2235	
		1.2067	
		1.2419	
		1.2241	
		or similar	
RWS	→ Stainless steel	1.4571	none
		or similar	
RFS	→ Stainless steel (heat treatable)	1.4112	none
		1.4034	
		1.4021	
		or similar	
FBS	→ Spring steel (hardened)	1.1274	none
		or similar	
FRS	→ Spring steel (hardened, stainless)		none

) Subject



