

High speed steels

Only high quality materials are used to produce Guhring HSS tools. Systematic selection of alloying elements ensure the tool possesses the optimal characteristics for the individual application.

Tungsten, Molybdenum: increase tempering- and wear-resistance

Vanadium: increases wear-resistance of finishing tools

Cobalt: enables increased hardening temperatures and improves heat-resistance.

Guhring description	German steel descript.	Material no. (steel code)	Range of application	comparable steels			
				USA	France	Italy	Great Britain
HSS	HS 6-5-2 (DMo5)	1.3343	standard tool material for most common applications	M 2	Z 90 WDCV 06-05-04-02	HS 6-5-2	BM 2
HSCO HSS-E	HS 6-5-2-5 (EMo5Co5)	1.3243	high heat-resistance, especially suited for roughing or when coolant insufficient	M 35	Z 90 WDKCV 06-05-05-04-02	HS 6-5-2-5	BM 35
HSS-E	S 6-5-3 (EMo5V3)	1.3344	high friction resistance and cutting edge stability, especially important for reaming operations	M 3	Z 120 WDCV 06-05-04-03	HS 6-5-3	-
M42	HS 2-9-1-8	1.3247	increased heat resistance and hardness, suitable for difficult-to-machine materials	M 42	Z 110 DKCWV 09-08-04-02-01	HS 2-9-1-8	BM 42
HSS-E							
HSS-E-PM	10-2-5-8 PM52	1.3253	high hardness, heat-resistance and cutting edge stability, very dense structure	-			
	HS 6-5-3-8 PM30	1.3294					