



WILHELM JUNGERMANN GMBH

STAHLVERTRIEB & PARTNER FÜR DIE WERKZEUGINDUSTRIE

Material-information sheet

Material-number: 1.3243

Material: HS6-5-2-5;

Steel-group: Alloyed tool steels, high-speed-steels with Co

Usage: High-speed-steel:

Ductile and wear resistant, based on Wolfram-Molybdenum. Based of extra cobalt part good durability for quenching and tempering and warm hardness. High-performed spiral drill, profile tools, high powered cutter, turning tools, roughing-tools with an excellent toughness.

Chemical-Composition:

	C	Si	Mn	P	S	Co	Cr	Mo	V	W
Minimum	0,87	0,00	0,00	0,00	0,00	4,50	3,80	4,70	1,70	5,90
Maximum	0,95	0,45	0,40	0,030	0,030	5,00	4,50	5,20	2,10	6,70

Heat-treatment:

	Soft-annealing (+A)	Hardening in oil	Tempering
Hot forming			
820 - 850 °C	650 °C	1200 - 1240 °C	550 - 570 °C

Mechanical-characteristics:

Hardness after glowing	$R_m \leq 900 \text{ MPa}$
Hardness after quenching	~ 64 HRC
Quenching and tempering values:	
tempered at ~ 50 °C	~ 64 HRC
tempered at ~ 300 °C	~ 62 HRC
tempered at ~ 350 °C	~ 62 HRC
tempered at ~ 400 °C	~ 62 HRC
tempered at ~ 450 °C	~ 62,5 HRC
tempered at ~ 500 °C	~ 64 HRC
tempered at ~ 600 °C	~ 56 HRC