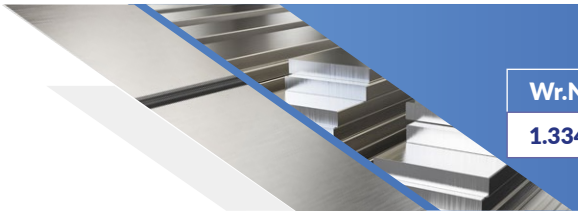
MULTISTAL
Lohmann



HIGH SPEED STEEL

Wr.Nr.	PN	EN	GOST	AISI
1.3343	SW7M	HS6-5-2C	R6M5	M2

CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Mo	W	V
min	0.86	max.	max.	max.	max.	3.80	4.70	5.90	1.70
max	0.94	0.45	0.40	0.03	0.03	4.50	5.20	6.70	2.10

APPLICATION

Machining tools for roughing and finishing, cold extrusion punches, cutting and fine blanking tools. Broaches, milling cutters, plungers, thread cutting knives, disc blade segments, gear processing tools, dies, cutting tools, plastic molds.

TREATMENT

Hardening	1210°C ± 10°C
Quenching	For the reference hardening either oil or salt bath; but in the event of a dispute only oil. Commonly used quenching media are air, gas or salt bath
Tempering	560°C ± 10°C (see tempering diagram)
Hardness [HRC]	min. 64

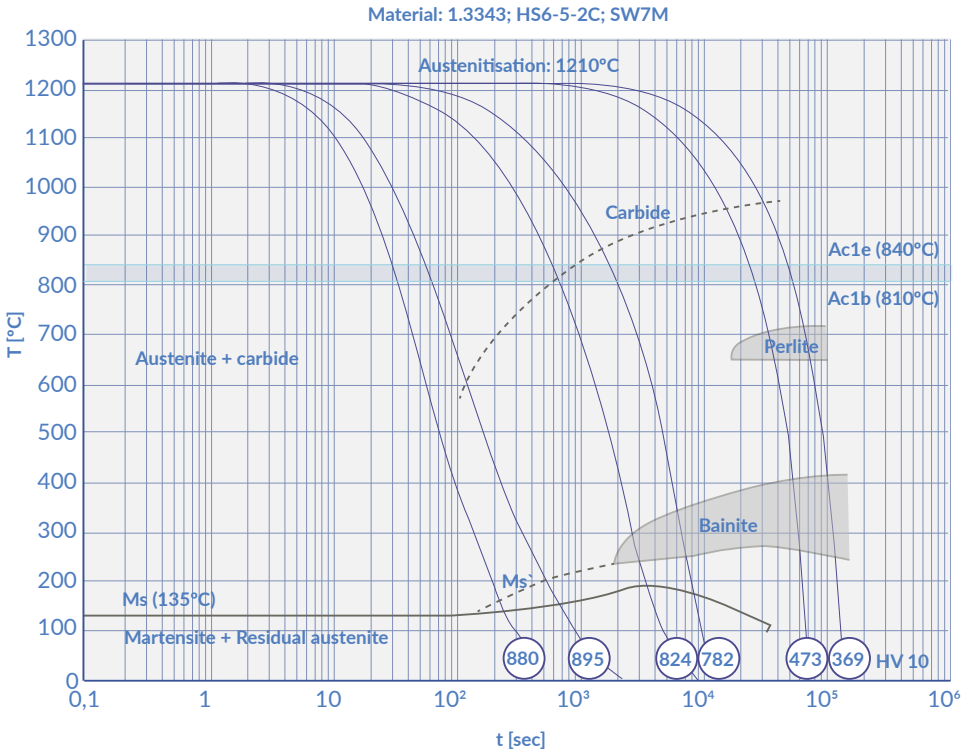
ADDITIONAL HEAT TREATMENT

Soft annealing	820 - 860°C/ furnace
Stress relieving	650 - 680°C (only for soft delivery conditions)
Additional quenching media	Hot bath 500°C, fluidised bed
Tempering	560°C ± 10°C, min. 2x

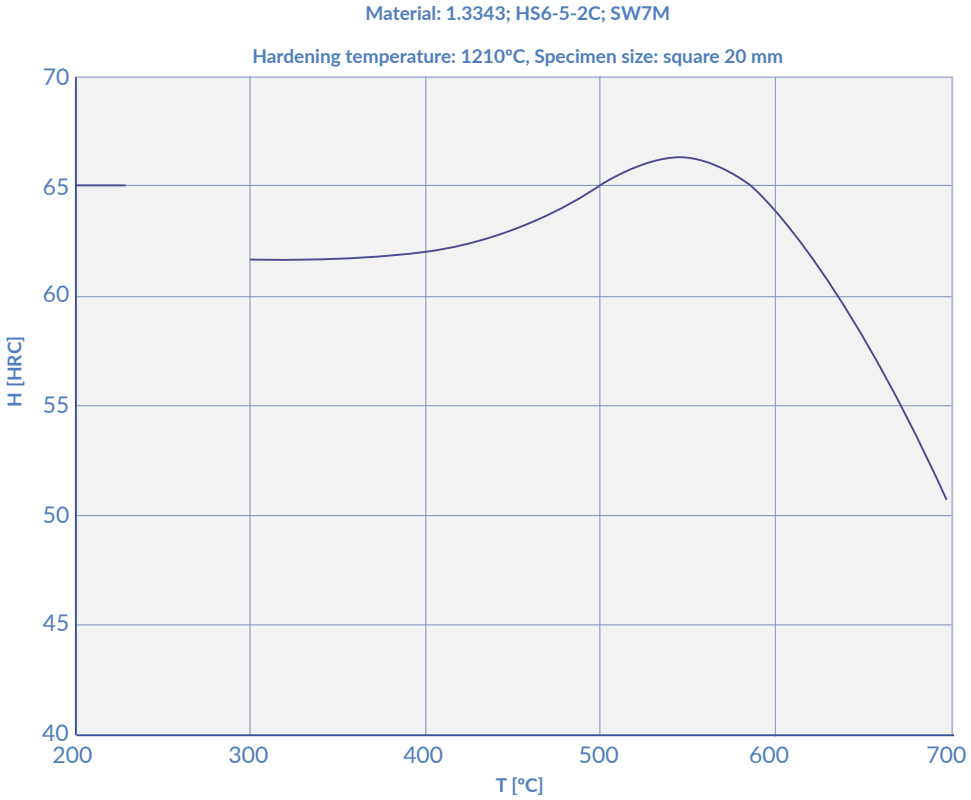
MECHANICAL PROPERTIES

Condition	Soft annealed (+A)	Annealed and cold drawn (+A+C)
Hardness [HB]	max. 248	max. 319

CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



TEMPERING DIAGRAM



NOTE: All technical information is for reference only.