

1.3343 HS 6-5-2 C

AISI M2

High-speed steel (HSS) with excellent toughness, high heat resistance, and superior wear resistance for the production of cutting tools, cutting and fine blanking dies, cold forging punches, and dies, well-suited for coating with PVD and CVD processes, is available from us as 1.3343 in both VarioPlan and PräziPlan custom dimensions.

Color coding:
Black/Purple (1.3343)



1.3343 HS 6-5-2 C
Steel glossary

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WebShop:
www.stahlnetz.de



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1.3343 HS 6-5-2 C

chemical composition [%]

	C	Si	Mn	P	S	Cr	Mo	V	W
max.	0.94	0.45	0.4	0.03	0.03	4.5	5.2	2.1	6.7
min.	0.86					3.8	4.7	1.7	5.9

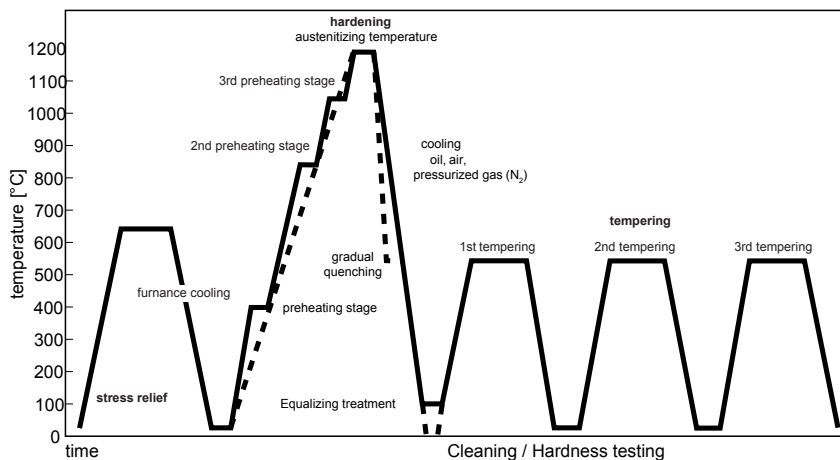
Heat treatment:

Annealing: 790–820°C, furnace cooling, maximum hardness after annealing approximately 269 HB.

Stress relief annealing: 600–650°C, furnace cooling.

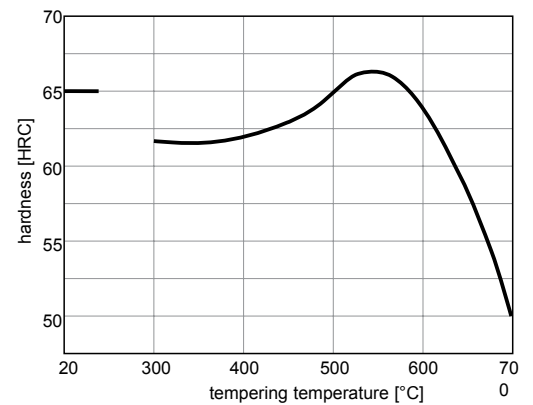
Hardening: 1,180–1,230°C, quenching in oil, pressurized gas, air, or a warm bath at 500–550°C

Heat treatment schedule



Tempering diagram

hardening temperature: 1.210° C



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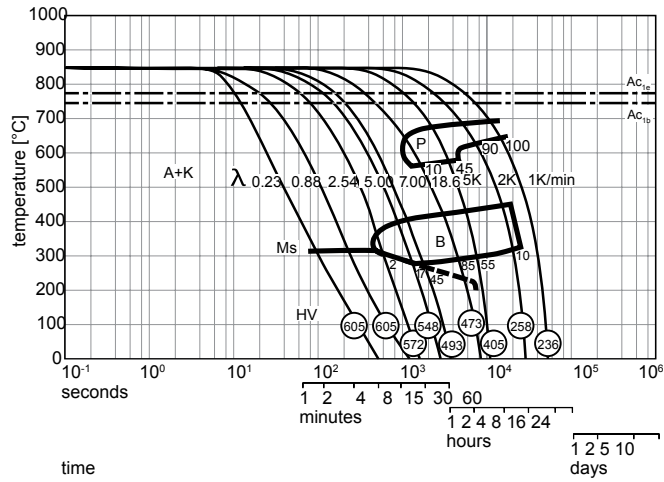


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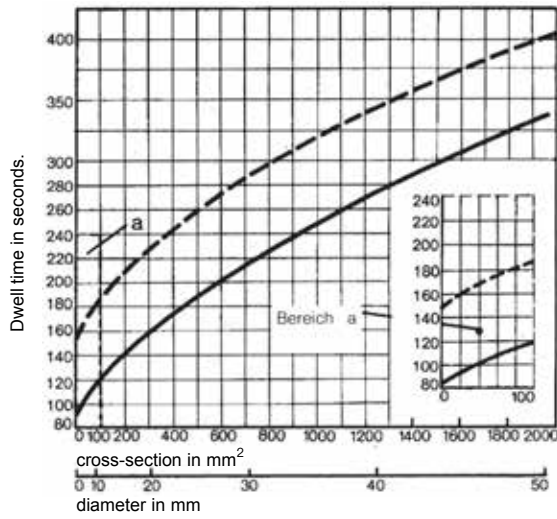
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Continuous cooling transformation (CCT) diagram
 austenitization temperature: 840°C, soaking time: 15 minutes



- hardness in HV
- 2 . . . 100 microstructure phases in %
- 0,23 . . . 18,6 ... cooling parameter,
i.e. the coolingtime from 800–500°C in s x 10-2
- 5 . . . 1 K/min .. cooling rateim Bereich von 800–500°C
- B Bainit

Dwell-time diagram



- Austenitizing duration.:
 — 80 seconds
 - - - 150 seconds
 preheating at 550°C, 850°C and 1.050°C