

# HEAT TREATABLE STEELS AND PRECIPITATION HARDENING STEELS

## Available Product Variants

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Plates

## Product Description

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Cr–Mo alloyed steel grade for applications requiring high tensile – and toughness values, particular in medium and large cross sections in quenched and tempered heat treatment condition.

## Process Melting

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ESR

## Properties

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Molybdenum addition prevents this steel grade from temper brittleness. Surface hardenable. Manufacturing of parts in vehicles for gear boxes and engines.

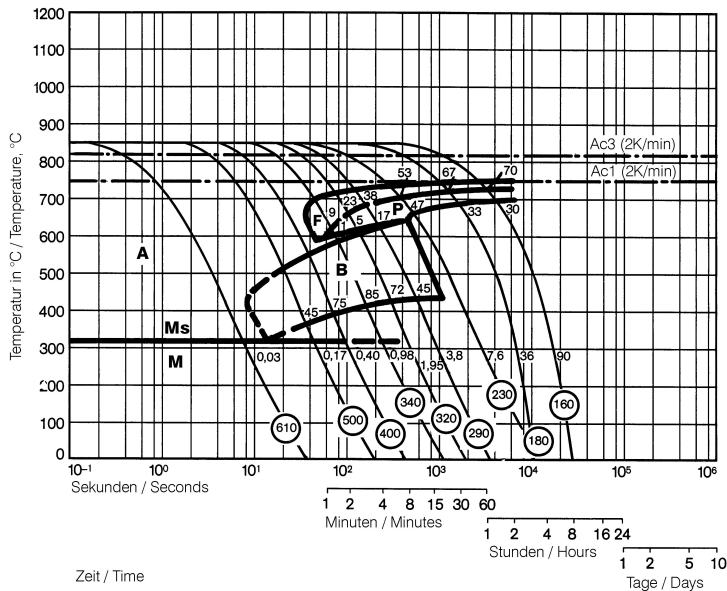
## Applications

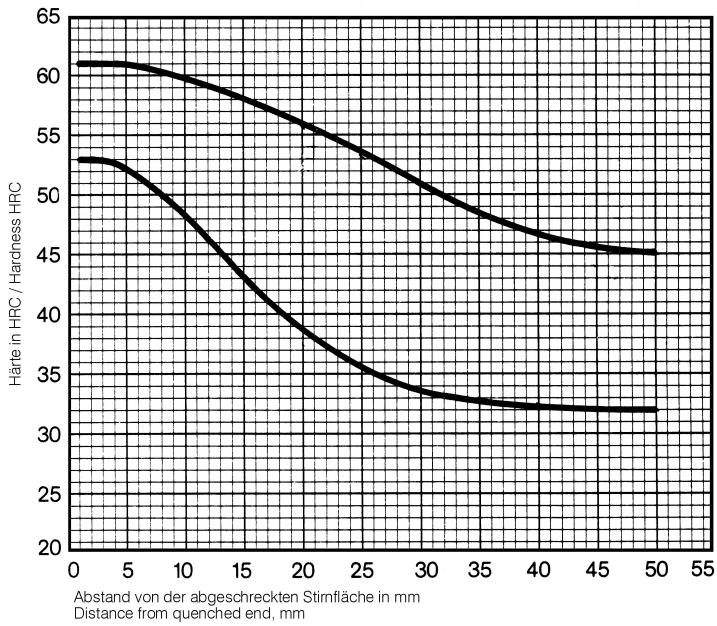
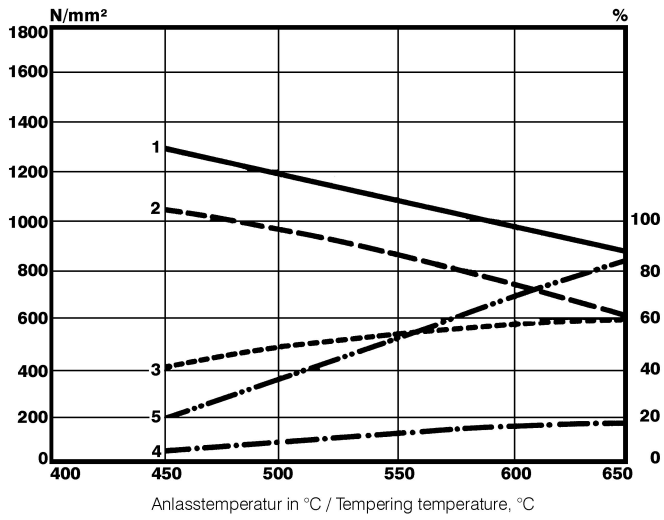
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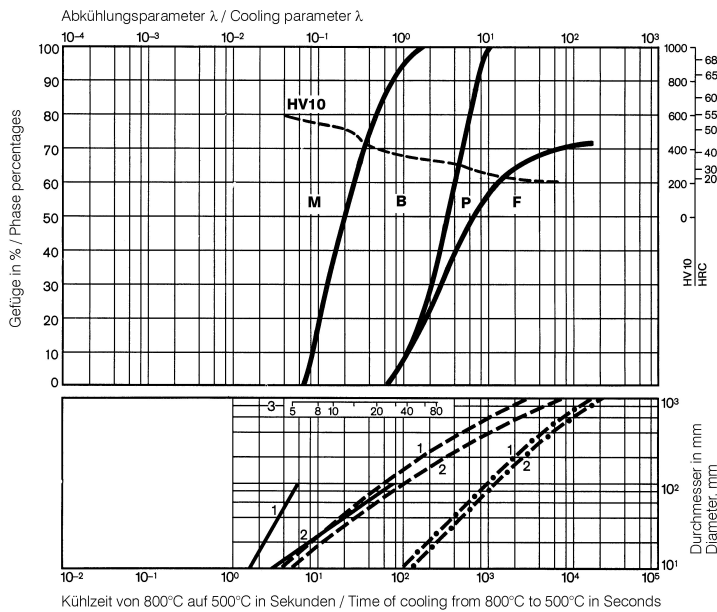
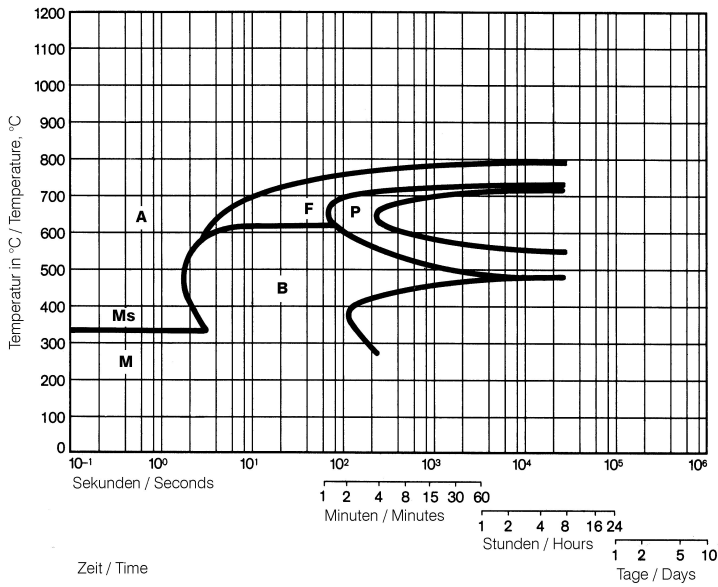
> Press Plates

Technical data

Material designation		Standards	
1.7225	SEL	10083-3	EN ISO
G41400	UNS	10132-3	
G41420		10250-3	
G41450		10263-4	
H41400		10269	
H41420		10297-1	
H41450		10305-1	
K14248		10343	
42CrMo4	EN	6349D	AMS
SCM 440 M	JIS	6382N	
SCM 440 TK		6381H	
SCM 440 HRCH		6395G	
SCM 440 RCH		6452D	
SCM 440 H		6529C	
SCM 440		JIS	
SNB 7 Class 2			G3441
	G3509-1		
	G3509-1		
	G4053		
	G4052		
	G4107		







### Physical Properties

Density	7.85   0.28	[kg/dm <sup>3</sup>   lb/in <sup>3</sup> ]
Thermal conductivity	42   24.27	[W/(m.K)   BTU/ft h °F]
Specific heat	460   109.8691	[kJ/kg K   BTU/lb °F]
Spec. electrical resistance	0.19   0.9	[Ohm.mm <sup>2</sup> /m   10 <sup>-4</sup> Ohm.inch <sup>2</sup> /ft]

**Thermal Expansions between 20°C | 68°F and ...**

Temperature (°C   °F)	100   212	200   392	300   572	400   752	500   932	600   1,112
Thermal expansion ( $10^{-6}$ m/(m.K)   $10^{-6}$ inch/inch. °F)	11.1   6.2	12.1   6.7	12.9   7.2	13.5   7.5	13.9   7.7	14.1   7.8

The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.