



Sales Office:

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1.2083

Conventional melting (EF+LF+VD)

GENERAL:

- good corrosion resistance
- good machinability
- good stability in hardening
- low-distortion through-hardness
- high wear resistance
- good polishability

APPLICATIONS:

- Moulds for :
- medical applications
 - compact discs and memory discs
 - lens
 - corrosive materials

CHEMICAL ANALYSIS: %

C	Si	Mn	P	S	Cr
0,36 - 0,42	≤ 1,0	≤ 1,0	≤ 0,025	≤ 0,005	12,5 – 14,5

PHYSICAL PROPERTIES:

	20-100 °C	20-200 °C	20-300 °C	
Coefficient of thermal expansion [10 ⁻⁶ m/(m x K)]	10.9	11.2	11.5	
Thermal conductivity [W/(m x K)]	20 °C	200 °C	300 °C	
	22.0	24.0	26.0	

ULTRASONIC:

ASTM A388 - FBH max. 5 mm (1/5 inch) or
SEP 1921 – test group 3 – class D, d or acc. to your request

CLEANLINESS:

ASTM E45- Method A with type A ≤ 1,5; B, C and D each ≤ 2 or
DIN 50602– K4 ≤ 20 or
acc. to your request

DELIVERY CONDITION:

Soft annealed with a hardness of a maximum of 241HB
or hardened and tempered acc. to your request

SERVICE HARDNESS:

50 - 55 HRC



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STRUCTURE:

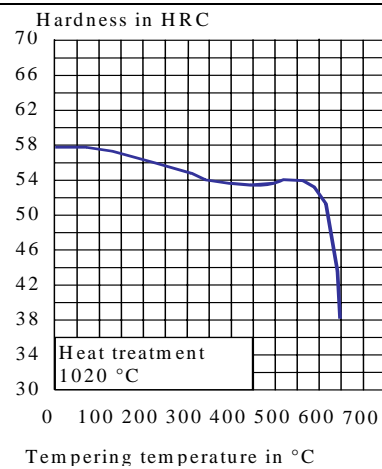
fine annealed structure

HEAT TREATMENT:

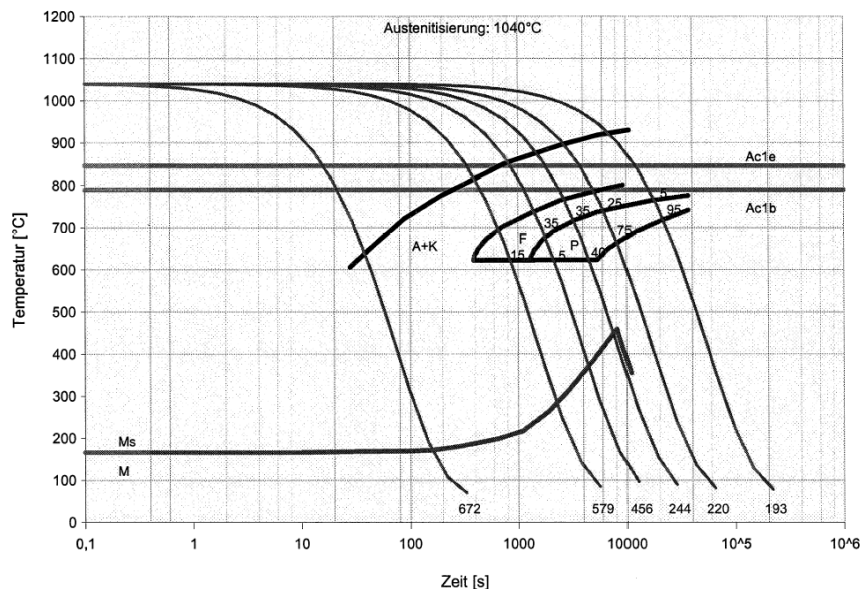
<i>Hot forming</i>	<i>Soft annealing</i>	<i>Hardening</i>	<i>Tempering</i>
1050 – 850 °C	760 – 800 °C	1000 – 1030 °C	250 – 570 °C #

TEMPERING DIAGRAM:

values in HRC
tested on samples
dia. 25 x 50 mm long
hardened at 1020 °C in oil



CCT GRAPH:



DELIVERY SIZES:

Rounds – up to 650 mm

Blocks – 450 mm thickness

or

acc. to your request