

1.2316

X38CrMo16

MARTENSITIC STAINLESS STEEL

APPLICATION

Moulds for processing plastics with corrosive reactions. Dies for pressing chemically aggressive materials, some elements of molds for casting under pressure of light alloys of non-ferrous metals, machine building for the shipbuilding industry, parts of fittings and pumps, components of compressors and compressors, surgical instruments.

CHEMICAL COMPOSITION

Chemical composition (in weight %)

Element	C	Si	Mn	P	S	Cr	Mo	Ni
min	0.33	max	max	max	max	15.50	0.80	max
max	0.45	1.00	1.50	0.03	0.03	17.50	1.30	1.00

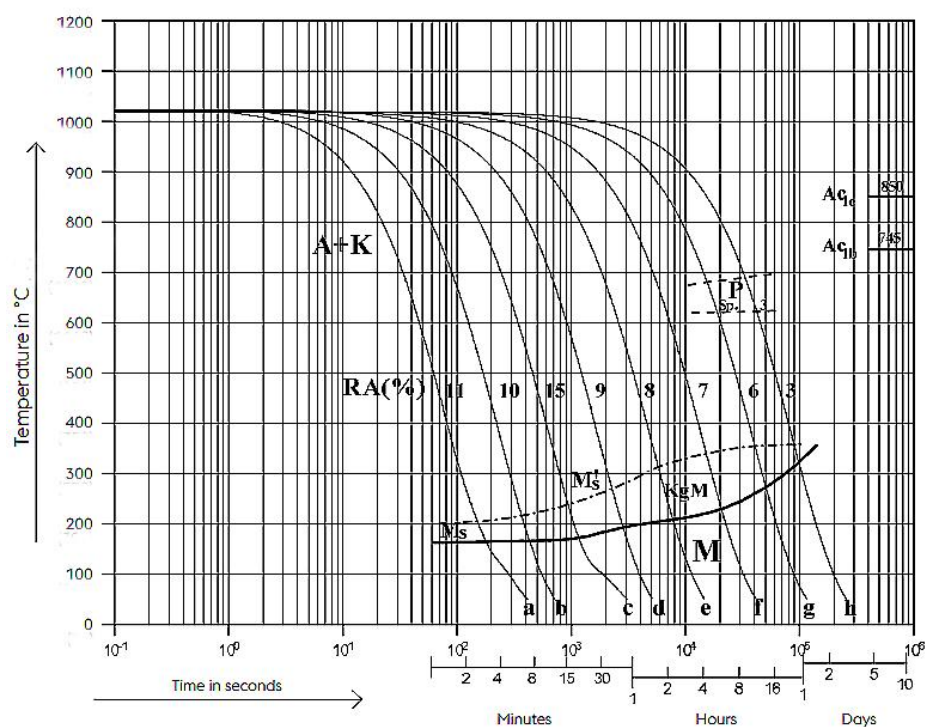
TREATMENT

Soft annealing	760 - 800°C / furnace					
Hardening	1020 - 1050°C / Oil or warm bath 500 - 550°C					
Tempering	see tempering diagram					
Temperature [°C]	100	200	300	400	500	600
Hardness [HRC]	49	47	46	46	47	31

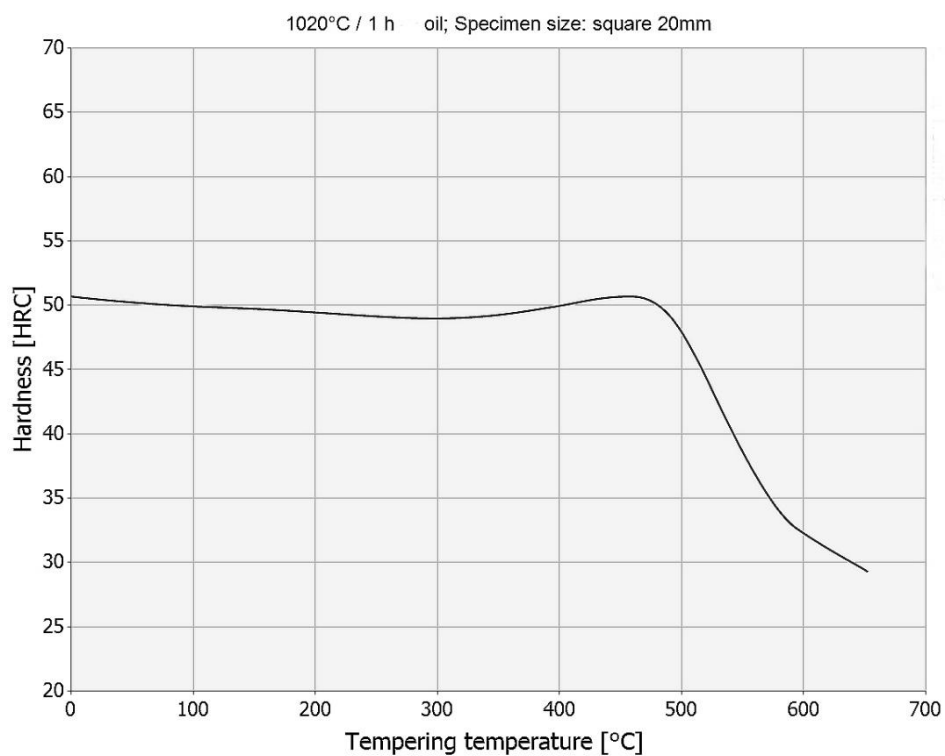
MECHANICAL PROPERTIES

Condition	Quenched and tempered (+QT)	Soft annealed (+A)
Hardness [HB]		max. 230
Hardness [HRC]	max. 49	-

CONTINUOUS COOLING TRANSFORMATION (CCT) DIAGRAM



TEMPERING DIAGRAM



NOTE: All technical information is for reference only