

Material No.: Code: **1.2709 X3NiCoMoTi18-9-5**

DE - Brand: **X55**

Chemical composition:
(Typical analysis in %)

C	Mo	Ni	Co	Ti			
≤0,03	5,00	18,00	10,00	1,00			

Steel properties:

Maraging tool steel, dimensionally stable, excellent toughness, high yield and tensile strength.

Applications:

Gear cutting stamps, die casting moulds for light metals, pressure dies and plastic moulds, casting for cold extrusion tools.

Condition of delivery:

Solution annealed, max. 340 HB

Physical properties:

Thermal expansion coefficient	$\left[\frac{10^{-6} \cdot \text{m}}{\text{m} \cdot \text{K}} \right]$	20-100°C	20-200°C	20-300°C	20-400°C
		10,4	11,1	11,2	11,5
Thermal conductivity	$\left[\frac{\text{W}}{\text{m} \cdot \text{K}} \right]$	20°C	350°C	700°C	
		14,3	18,6	22,6	

Heat treatment:

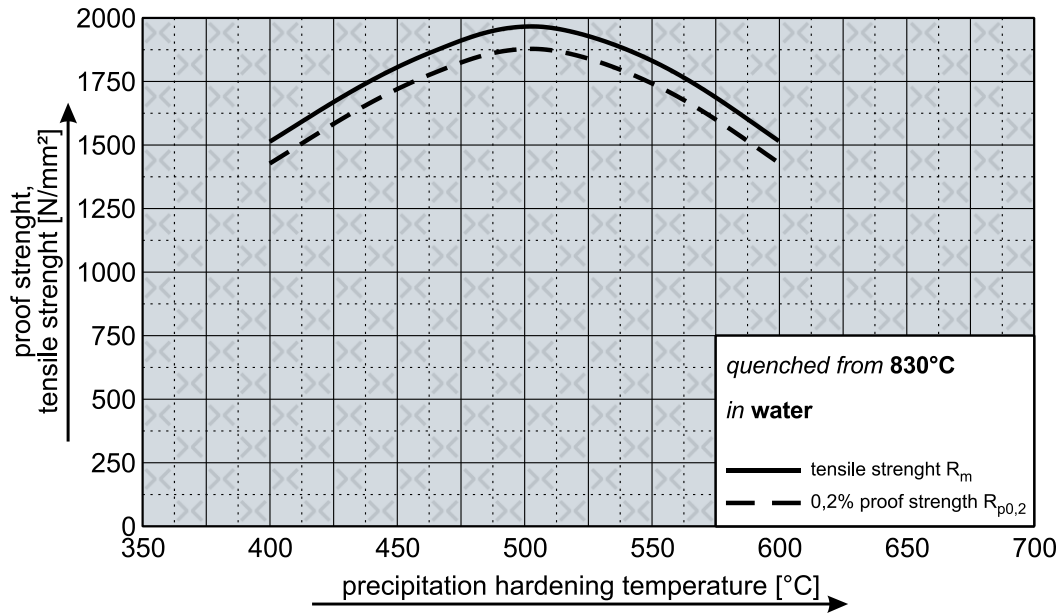
Solution annealing

Temperature	Cooling	Hardness
820 - 850°C	water	max. 340 HB

Precipitation hardening

see precipitation hardening diagram,
usually 490°C, 6h, air

(1.2709) Precipitation hardening diagram



Remarks: All technical information is for reference only.