

Cryodur 2709

(X3NiCoMoTi18-9-5)

C < 0.02 Mo 5.00 Ni 18.00 Co 10.00 Ti 1.00

Steel properties

Precipitation-hardenable grade with high yield point and tensile strength combined with good toughness.

Standards

AISI 18MAR300

Physical properties

Coefficient of thermal expansion

at °C	20 – 100	20 – 200	20 – 300	20 – 400	20 – 500	20 – 600
$10^{-6} \text{ m}/(\text{m} \cdot \text{K})$	10.3	11.0	11.2	11.5	11.8	11.6

Thermal conductivity

at °C	20	350	700
$\text{W}/(\text{m} \cdot \text{K})$	14.2	18.5	22.5

Applications

Casings for cold extrusion tools, cutting and punching tools.

Heat treatment

Soft annealing °C

820 – 850

Cooling

Water

Hardness HB

max. 340

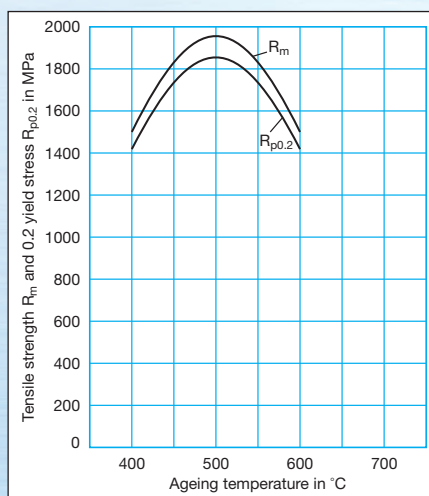
Precipitation temperature °C

490 / 6 h / (Air)

Attainable hardness HRC

approx. 55

Precipitation diagram



Reference numbers in brackets are not standardized in EN ISO 4957.