

MATERIAL NO.:

1.2714

DESIGNATION:
DIN: 55 NiCrMoV 7
AFNOR: 55 NCDV 7
UNI: -
AISI: L6

INDICATORY ANALYSIS:
 C 0.56
 Cr 1.10
 Mo 0.50
 Ni 1.70
 V 0.10

STRENGTH:
 max. 250 HB
 (≈ max. 850 N/mm²)

THERMAL CONDUCTIVITY AT 100°C: 36 $\frac{W}{m K}$

COEFFICIENT OF THERMAL EXPANSION
 [10⁻⁶/K]

100°C	200°C	300°C	400°C	500°C	600°C	700°C
12.2	13.2	13.6	14.0	14.2	14.4	

CHARACTER: » **Steel for through hardening** with high temperature resistance, through hardenability and toughness

APPLICATION: » Extrusion dies, hot-forging tools, dies for processing tin, lead and zinc alloys

TREATMENT BY:
 » Polishing:
 technical polishing possible
 » Etching, EDM, nitriding, Hard chrome plating:
 possible

HEAT TREATMENT:
 » Soft annealing:
 650 to 700°C for about 4 to 5 hours
 slow controlled cooling inside the furnace: 10 to 20°C per hour to about 600°C;
 further cooling in air, **max. 248 HB**
 » Hardening:
 830 to 900°C
 keep curing temperature for 15 to 30 minutes
 quenching in oil/water/compressed gas
 obtainable hardness: **56 HRC**
 » Tempering:
 slow heating to tempering temperature immediately after hardening;
 minimum time in furnace: 1 hour per 20 mm part thickness

TEMPERING CHART:

