

AISI L6 DB6 DIN 2714
55NiCrMoV7
C 0.56 Cr 1.10 Mo 0.50 Ni 1.70 V 0.10
Steel properties

The special Hot Work Pre hardened Steel with good toughness and high wear resistance. Die Steel is normally supply in hard, quenched & tempered and also in annealed condition in special case. Usually its working hardness is 360-430 BHN. This steel grade is the upgrade version of DIN 2713 for better performance.

Standards
AISI ~L6
AFNOR 55NCDW7
Physical properties
Coefficient of thermal expansion

at °C	20 – 100	20 – 200	20 – 300	20 – 400	20 – 500	20 – 600
$10^{-6} \text{ m/(m} \cdot \text{K)}$	12.1	13.1	13.2	13.5	14.1	14.3

Thermal conductivity

at °C	20	350	700
$\text{W/(m} \cdot \text{K)}$	35.0	39.0	36.0

Applications

Dies for Specially Drop and Close Die Forgings for Hammers & Mechanical Presses, Die Molds, Shoe Blocks, Die Holder, Cassettes, Piston Rods, Cranks, Boaster, Shearing Blades. Tools. plastic molds Etc.

Heat treatment
Soft annealing °C

650 – 710

Cooling

Furnace

Hardness HB

max. 240

Hardening °C

840 – 880

Quenching

Oil

Hardness after quenching HRC

57

870 – 910

Air

55

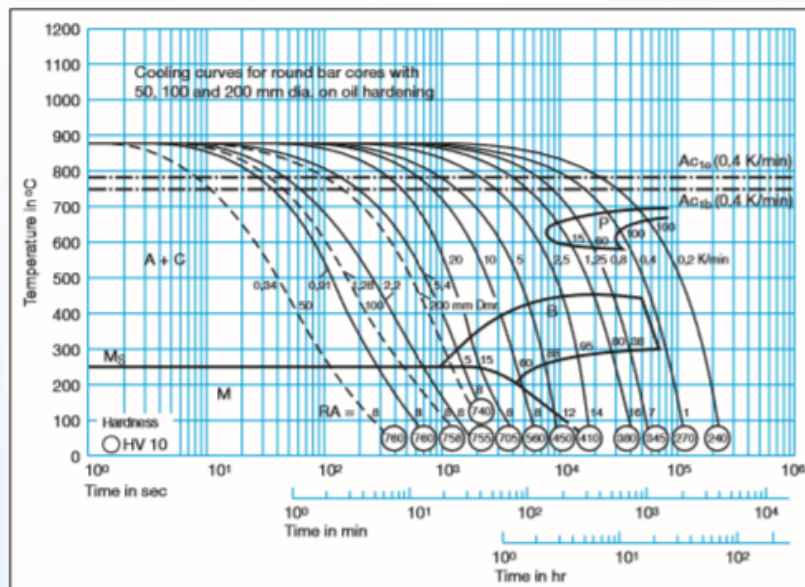
Tempering °C

after quenching

in Oil – HRC

in Air – HRC

	100	200	300	400	450	500	550	600	650
Oil – HRC	56	54	52	49	47	46	43	38	34
Air – HRC	54	52	50	47	45	43	40	36	32

 Time-temperature
transformation
diagram


Tempering diagram

