

Formadur 2711

54NiCrMoV6

C 0.55 Cr 1.10 Ni 1.70 Mo 0.50 V 0.10

Steel properties

Pre-hardened plastic mould steel, hardness in as-delivered condition 355 to 400 HB (square, flat) and 370 – 410 HB (round). Increased compressive strength in comparison to Formadur 2738, good polishability.

Standards

AISI ~L6

Physical properties

Coefficient of thermal expansion

at °C	20 – 100	20 – 150	20 – 200	20 – 250	20 – 300	20 – 350	20 – 400	20 – 450	20 – 500
$10^{-6} \text{ m}/(\text{m} \cdot \text{K})$	12.2	12.5	12.7	13.0	13.3	13.5	13.8	13.9	14.1

Quenched and tempered

Thermal conductivity

at °C	23	150	300	350	400	500
$\text{W}/(\text{m} \cdot \text{K})$	30.5	32.1	30.8	29.6	28.7	26.5

Quenched and tempered

Applications

Plastic moulds with increased demands on compression strength and wear resistance.

Heat treatment

Soft annealing °C
650 – 700

Cooling
Furnace

Hardness H
Max. 240

Hardening °C
830 – 870

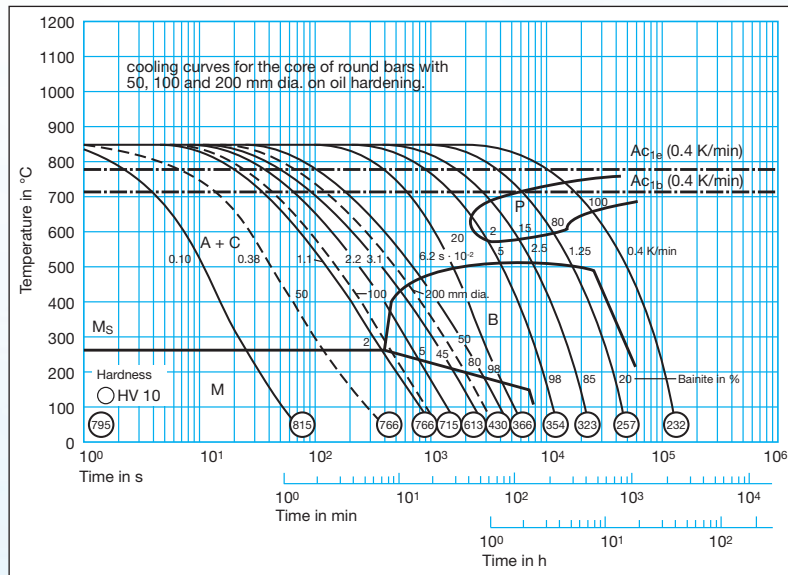
Quenching
Air or oil

Hardness after quenching HRC
57

Tempering °C
HRC

100	200	300	400	450	500	550	600	650
56	54	51	47	44	42	39	36	30

Time-temperature-transformation diagram



Tempering diagram

