ES 370 G

Name:
55 NiCrMoV 7

Material No.:
1.2714

Typical analysis in %:

C	Cr	Mo	Ni	V
0.55	1.1	0.5	1.7	0.1

As-supplied condition:
Soft-annealed to max. 248 HB (830 N/mm²)

Characteristics:
Oil and air hardening die steel with good through hardenability, good toughness and high temperature strength

General fields of application:
For drop forging up to the largest sizes, forging saddles, hot shearing knives, extrusion tools, die holders, support tools

Special note:
ES 370 G is also available in quenched and tempered form.

Heat treatment data:

	Temperature	*Duration*	*Cooling*
Soft annealing	680 - 720 °C	2 - 5 h	furnace
Stress-relief annealing	600 - 650 °C	min. 4 h	furnace
Hardening	830 - 870 °C	Group II	oil,
	860 - 900 °C		air
Tempering	300 - 600 °C	min. 2 h	still air
	see tempering curve	depending on cross section	

Physical characteristics:

Coefficient of thermal expansion: between 20 °C and:

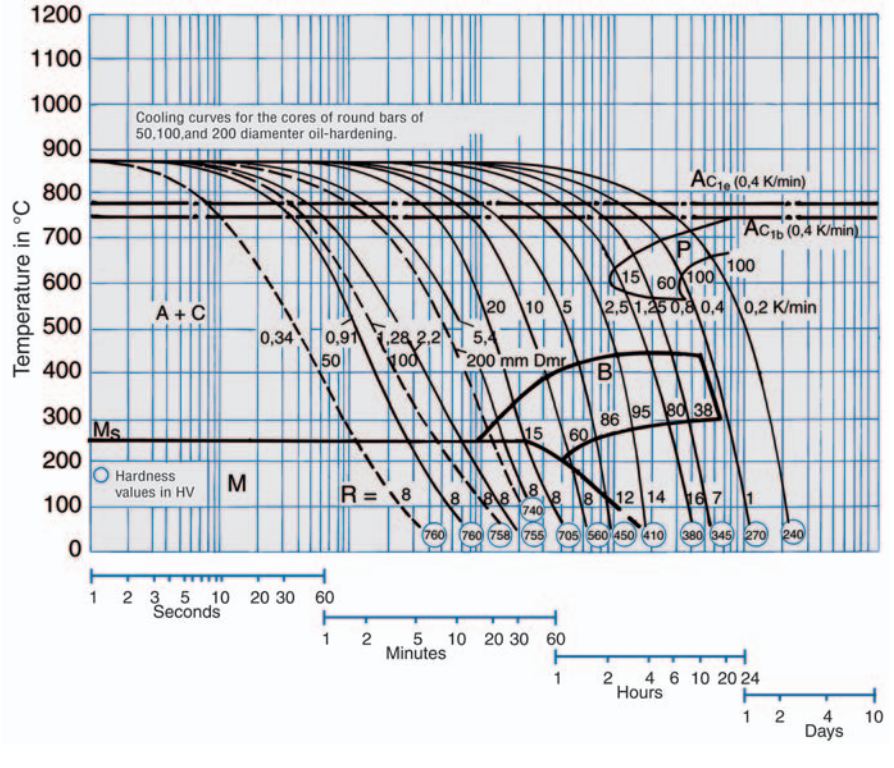
10^{-6} x m	100	200	300	400	500	600 °C
m x K	12.2	13.0	13.3	13.7	14.2	14.4

Thermal conductivity:

W	20	350	700 °C
m x K	36.0	38.0	35.0

Normal working hardness: 36 - 52 HRC (1200 - 1800 N/mm²)

Continuous time-temperature-transformation diagram



Tempering curve