



钢铁之家

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全球钢号百科!

Global Steel Grade Encyclopedia



涵盖的行业或国家与地区类别



国际材料与试验协会

GJB

国家军用标准



动力机械工程师协会

EU

前欧洲标准化

AISI

美国钢铁学会



德国工业标准

AMS

航空航天材料规范



国际标准

JASO

日本汽车标准组织

EN

欧洲标准

JB

中国机械行业标准

UNS

统一编号系统

UNI

意大利标准



美国机械工程师协会

SS

瑞典标准



国家标准



日本工业标准

Thermodur 2714

55NiCrMoV7

C 0.56 Cr 1.10 Mo 0.50 Ni 1.70 V 0.10

Steel properties

Tough die steel with high tempering resistance and good through-hardening properties. This grade is usually supplied in annealed condition or quenched and tempered to a working hardness of 370 to 410 HB (round) or 355 to 400 HB (square, flat).

Standards

AISI ~L6 AFNOR 55NCDV7

Physical properties

Coefficient of thermal expansion at °C
 $10^{-6} \text{ m}/(\text{m} \cdot \text{K})$

20 – 100	20 – 200	20 – 300	20 – 400	20 – 500	20 – 600
12.2	13.0	13.3	13.7	14.2	14.4

Thermal conductivity at °C
 $\text{W}/(\text{m} \cdot \text{K})$

20	350	700
36.0	38.0	35.0

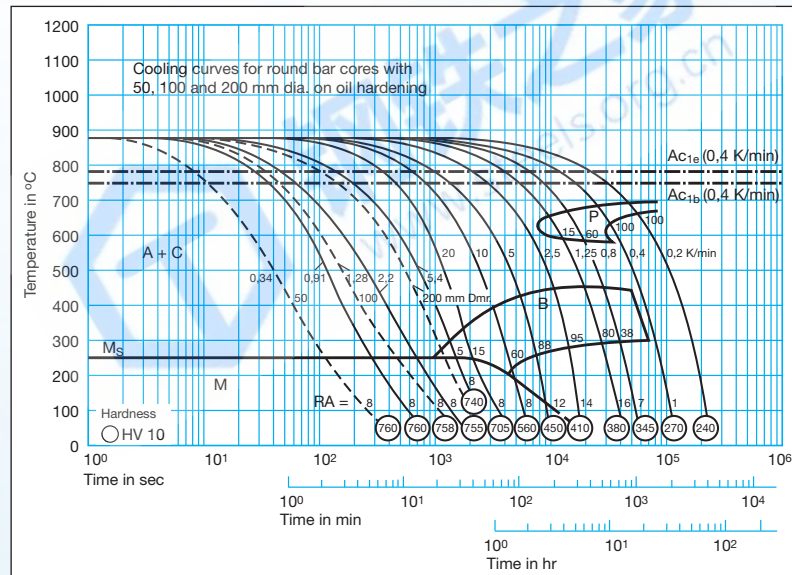
Applications

Standard steel for forging dies of all types, press dies, extrusion dies, retainer plates, armoured trim dies, hot-shear blades and tool holders.

Heat treatment

Soft annealing °C	Cooling	Hardness HB
650 – 700	Furnace	max. 250
Hardening °C	Quenching	Hardness after quenching HRC
830 – 870	Oil	58
860 – 900	Air	56
Tempering °C after quenching		
in Oil – HRC	100 200 300 400 450 500 550 600 650	
in Air – HRC	57 54 52 49 47 46 43 38 34	
	55 52 50 47 45 43 40 36 32	

Time-temperature-transformation diagram



Tempering diagram

