

W 1.2714

A HRC 40 Prehardened Tool Steel

Material Properties

40 HRC pre-hardened standard grade suitable for hot work tools and for the plastic mold industry. High resistance to wear, high toughness, good polishing properties.

For which applications

Forging dies, hot shear knives, hot punching tools, die holders.

Plastic injection or compression mould cores and cavities, large-size moulds with high quality finish, compression dies under high mechanical and thermal stresses.

Thermoplastics (PE, PS, PP), LFT, thermosetting plastics, ABS, transparent melts.

PROPERTIES

ACCORDING TO STANDARD

> Afnor	55 NCDV7
> DIN EN 4957	55 NiCrMo V7
> Werkstoff	W 1.2714
> AISI	L6

CHEMICAL ANALYSIS - WEIGHT%

C	S	P	Si	Mn	Ni	Cr	Mo	V
0.55	0.002	0.015	0.3	0.9	1.7	1.1	0.5	0.1

MECHANICAL PROPERTIES

2714 grade is delivered **quenched and tempered to 360 - 400 HB (37 - 41 HRC)**.

Hardness	Rp 0.2 Yield Strength		Rm Tensile strength		Elongation	K C V 20°C	Elastic Modulus	
HB	MPa	ksi	MPa	ksi	%	J	GPa	ksi
376	1045	151	1270	184	10	40	205	29733

PHYSICAL PROPERTIES

Thermal conductivity W.m-1.K-1	Thermal expansion Coefficient (10-6.K-1)				
20°C	20-100°C	20-200°C	20-300°C	20-400°C	Specific heat J/Kg. °C
29	11.9	12	12.7	13.4	460

Typical values