

W 1.2714+S

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 machinability. **Not suitable for polishing or texturing**

For which applications

Large dies with a lot of machining inside, Plate support for Dies, Tools, Plate support for hot applications. Support plates in Die casting mould bases.

Plastic injection or compression mould components (Sliding supports, back plates...) Thermoplastics (PE, PS, PP), LFT, thermosetting plastics, ABS, transparent melts.

Properties

According to Standard

- > Afnor 55 NCDV7+S
- > DIN EN 4957 55 NiCrMoV7+S
- > Werkstoff W1.2714+S

Chemical analysis

In accordance with international standards

Analysis in %		C	Si	Mn	Ni	Cr	V	Mo	S	P
2714+S	Min	0.50	0.10	0.60	1.50	0.80	0.05	0.35	0.050	-
	Typical	0.57	0.30	0.85	1.70	1.10	0.10	0.48	0.070	0.018
	Max	0.60	0.40	0.90	1.80	1.20	0.15	0.55	0.080	<0.030

Mechanical properties

2714+S 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

2714+S grade is also available in annealed condition. For more details please consult.

Physical properties

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

Typical values.

Properties

Metallurgical properties

Internal soundness

All plates are ultrasonically tested according to EN 10160 S2 E3 or 100% of the surface.

Delivery conditions

Dimensional program

Thickness	
8 - 150 mm	Ingot casting hot rolled
151 - 200 mm	Ingot casting forged
For higher thickness please consult	-

Your Contact

Perrine Lavalley
Tel. +33 3 85 80 52 56
perrine.lavalley@arcelormittal.com

<https://industeel.arcelormittal.com>

Industeel France
Le Creusot Plant
56 rue Clemenceau
F - 71201 Le Creusot Cedex

Technical data and information are to the best of our knowledge at the time of printing. However, they may be subject to some slight variations due to our ongoing research programme on steels. Therefore, we suggest that information be verified at time of enquiry or order. Furthermore, in service, real conditions are specific for each application. The data presented here are only for the purpose of description, and considered as guarantees when written formal approval has been delivered by our company. Further information may be obtained from the address opposite.