

2714

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HOT WORK TOOL STEEL

Nominal Chemical
Analysis %

C	.55
Si	.25
Mn	.80
Cr	1.10
Mo	.50
V	.10
Ni	1.70

Heat Treatment**Annealing**

650 / 700°C for 4 hours approx.

Cool slowly in the furnace at 20°C maximum per hour.

Stress Relieving

600 / 650°C for 2 hours approx.

Cool in still air. Always stress relieve before hardening.

Hardening**Pre-Heating**

(i) 400°C Holding time at temperature:

1 min / mm effective section approx.

(ii) 650°C Holding time at temperature:

30 sec / mm effective section approx.

Austenitizing

830 / 870°C (Oil) or; 860 / 900°C (Air). Holding time at temperature: 30 sec / mm effective section approx.

Quenching:-

(i) Quench in Oil or;

(ii) Quench in Air.

Temper immediately after quenching whilst tools are still hand warm.

Corresponding Specifications

AISI

L6

BS EN ISO 4957:2000

55NiCrMoV7

Supersedes BS4659 BH 224/5

WKSTOFF

1.2714

Colour Code: Brown/Pink

Delivery Condition

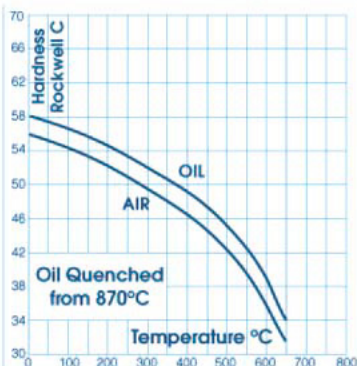
Annealed 248 BHN Max

Characteristics

2714 is a tough hot work tool steel with high compressive strength, good toughness and resistance to thermal shock. It has good through hardening properties and gives low distortion in hardening.

Applications

2714 is a standard die-block steel suitable for many hot forging applications. It is also suitable for forming and bending tools, die backers in extrusion tooling, shear blades, mandrel holders and plastic mould tools. For hot forging die applications this grade is supplied in the hardened and tempered condition.

Tempering

Consult the tempering diagram and temper according to requirements.

Temper for 1 hour / 25mm effective section for a minimum of 2 hours, then cool in still air.

Double tempering is recommended, cooling to room temperature between tempers.

NB. Lower hardness values will tend to result when hardening larger sections.