

BENUM PLUS

2767

PLASTIC MOULD STEEL

Nominal Chemical Analysis %

C	.45
Cr	1.30
Mo	.25
Ni	4.00

Heat Treatment

Annealing

610 / 650°C for 6 / 8 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

840 / 870°C Holding time at temperature:

60 secs / mm effective section approx.

2767 is suitable for Vacuum Hardening.

Quenching:-

(i) Quench in Oil or,

(ii) Quench in Air or,

(iii) Quench into Neutral Salts (Martempering) at 220 / 250°C

then cool slowly in still air.

Temper immediately after quenching whilst tools are still hand warm.

Corresponding Specifications

BS EN ISO 4957:2000

45NiCrMo16

WKSTOFF

1.2767

Colour Code: Green/Blue

Delivery Condition

Annealed 285 BHN Max

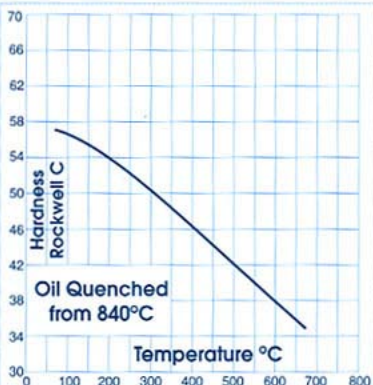
Characteristics

2767 is a higher carbon Ni Cr Mo type mould steel capable of higher hardness than Benum whilst retaining characteristics of excellent toughness and strength. It is capable of high polishability and is suitable for texturing.

Applications

2767 is suitable for injection and compression mould tools, die casting tools, embossing and coining tools, heavy duty shear blades, pressed tools, reinforcing rings and cutlery dies.

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.

For optimum results, temper at: 150 / 200°C

Tempering between 250 / 450°C is NOT recommended as this can lead to temper embrittlement.

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

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