

MALLOY**MALLOY****COLD WORK TOOL STEEL****Nominal Chemical Analysis %**

C	.60
Si	1.10
Mn	.45
Cr	1.10
Mo	.25

Heat Treatment**Annealing**

810 / 830°C for 4 hours approx.

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

Stress Relieving

625 / 640°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

830/860°C Holding time at temperature:

1 min / mm effective section approx.

Quenching:-

(i) Quench in Oil

Temper immediately after quenching whilst tools are still hand warm.

Corresponding Specifications

Colour Code: Green

Delivery Condition

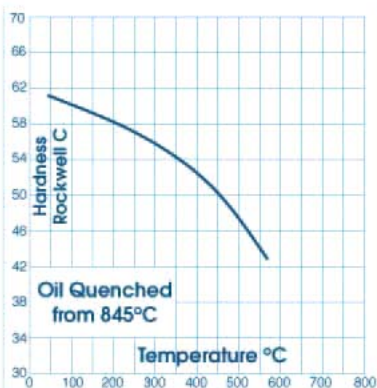
Annealed 230 BHN Max

Characteristics

Malloy is an extremely versatile oil hardening steel giving exceptional resistance to shock and a good degree of wear resistance.

Applications

Malloy is suitable for many tooling applications requiring shock resistance: cold punches and dies, shear blades, chisels, cropping tools, collets, planishing and flattening tools, press clutches, swaging tools.

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 guidance, temper at:

160 / 190°C for maximum hardness

325 / 375°C for hardness with toughness

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

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