PLASTIC MOULD STEEL

1.2311 (40CrMnMo7)

Excellence in Specialty Steel

Typical Composition Mass-%

C	Si	Mn	Cr	Mo
0,37	0,30	1,50	1,90	0,16

Properties

1.2311 is a Cr-Mn mould steel with good machinability and hardenability. The steel combines good toughness with high wear resistance and gives an excellent polished finish.

Delivery Condition

- annealed (+A) max. 235 HBW
- quenched and tempered (+QT)
- quench., tempered, stress relieved (+QT+SR)

Application Area

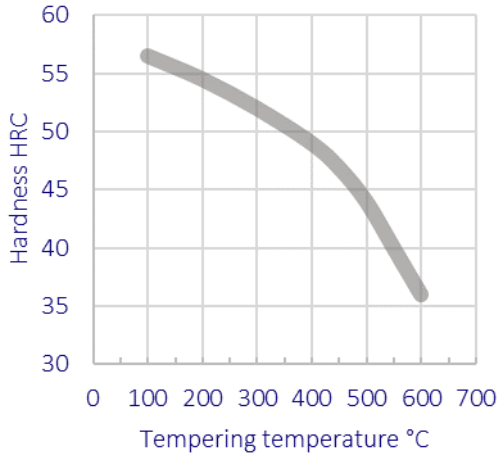
Plastic moulding tools and die casting dies operating in high temperature, requiring excellent surface quality.

Typical Applications

- Plastic moulds
- Injection moulds
- Frames for plastic and die casting moulds
- Hydroforming tools
- Zinc die casting dies

Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium
Annealing (+A)	720 -780	Air (furnace)
Quenching and tempering (+QT)	850 - 880 (Hardening) Tempering: see below	Oil, polymer Air
Stress relieving (+SR)	Approx. 40 °C below tempering temperature	Air (furnace)



Tempering graph, hardening temperature 860 °C

Quality

- ISO 9001
- ISO 14001
- ISO 50001
- Approvals acc. to standards like ABS, BV, DNV ...
- Customer specific approval certificates

Innovation

- Fully automated ultrasonic testing up to dia. 1000 mm
- CO_2-reduction by innovative heat treatment solutions

Flexibility

- Product range from fine wire to forging
- Directly from stock close at hand

Individuality

- Dimensions
- Tolerances
- Surface qualities
- Delivery conditions

Your personal contact:

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