

# 1.2343 / 1.2343 ESR (X37CrMoV5-1)

## Material Designation

1.2343 DIN  
H11 AISI

## Standards

DIN EN ISO 4957

## Typical Composition Mass-%

C	Si	Mn	Cr	Mo	V
0,37	1,00	0,40	4,90	1,30	0,40

## Properties

1.2343 is a Cr-Mo-V-alloyed hot working steel with good resistance against temperature changes and wear.

Best toughness properties, that match requirements of modern and filigree tools are achieved by electro slag remelting (ESR).

## Delivery Condition

- ✘ annealed (+A) max. 229 HBW
- ✘ quenched and tempered (+QT) upon request
- ✘ EFS-annealed (extra fine structure)

## Application Area

Highly stressed tools in environments with demands on resistance against wear and temperature changes in combination with good toughness values.

## Typical Applications

- ✘ Extrusion presses
- ✘ Forging dies
- ✘ Pressure die-casting
- ✘ Plastic moulds
- ✘ Press dies
- ✘ Hot shear blades

## Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium
Annealing (+A)	820 - 880	Air (furnace)
Quenching and tempering (+QT)	1010 - 1050 (Hardening)	Nitrogen (min. 5 bar), oil, polymer, saltbath
	Tempering: see graph below	Air
Stress relieving (+SR)	Approx. 40 °C below tempering temperature	Air (furnace)

## 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<sub>2</sub>-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:

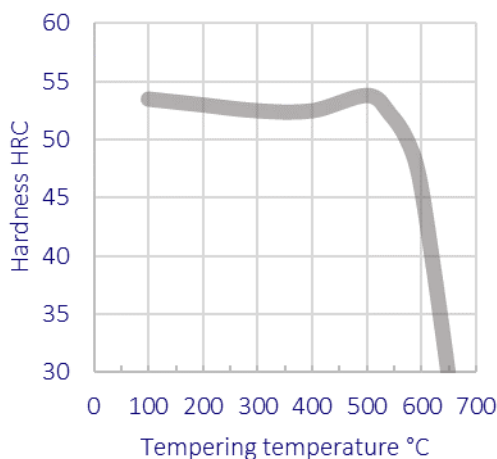
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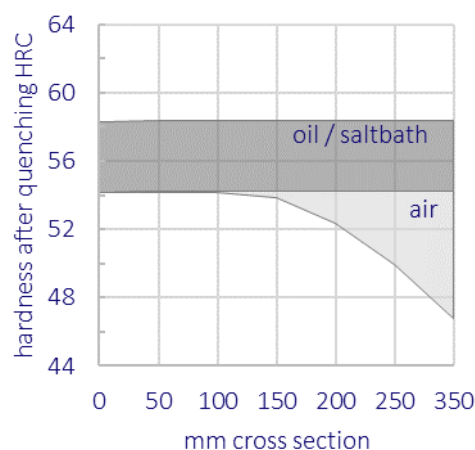
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Tempering graph, hardening temperature 1020 °C



Hardenability