

## Typical Composition Mass-%

C	Si	Mn	Cr	Mo	V
0,42	0,55	0,45	6,20	1,30	0,75

## Properties

BGH Press One is a 6%-Cr hot working steel that combines good hardenability with high wear resistance. It offers good toughness even at comparatively low operating temperatures. Also available as remelted (ESR) grade.

## Delivery Condition

- ✂ annealed (+A), max. 235 HBW
- ✂ quenched & tempered (+QT)

## Application Area

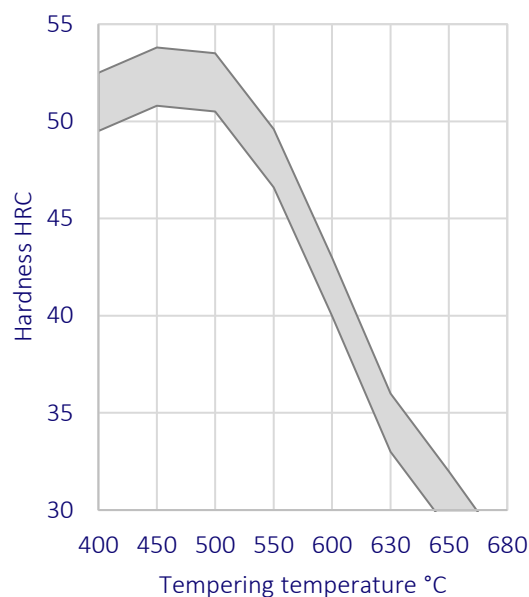
Hot working tools requiring high wear resistance in combination with good toughness. Especially suitable for die forging, press hardening and cutting operations.

## Typical Applications

- ✂ press hardening tools
- ✂ die forging tools
- ✂ crankshaft dies
- ✂ precision forging

## Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium
Annealing (+A)	830 - 880	Air (furnace)
Quenching and tempering (+QT)	1020 - 1040 (Hardening) 400 - 700 (Tempering), acc. tempering graph below	Oil, polymer, warmbath, air Air
Stress relieving (+SR)	Approx. 40 °C below tempering temperature	Air (furnace)



Tempering graph, hardening temperature 1020 °C, oil, sample size 20 mm

## Recommendations for tempering:

Two times tempering is mandatory, three times tempering is recommended to increase the toughness level.

Pre-heat the tool to 150-250°C to increase toughness and reduce thermal shocks.

## 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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