

BGH PRESS ONE

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

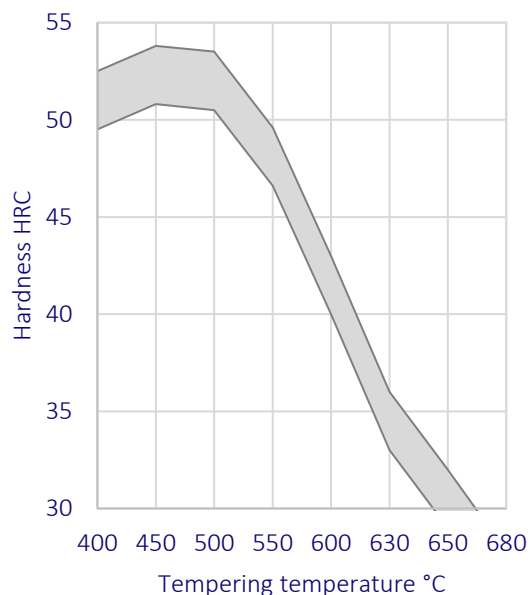
Hot working tools requiring high wear resistance in combination with good toughness. Especially suitable for die forging and press hardening..

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
- CO₂-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:

BGH Edelstahlwerke GmbH

Am Stahlwerk 1
01705 Freital
+49 351 646-0
www.bgh.de

