### **BGH Cut One**

# **BGH** Excellence in Specialty Steel

#### Typical Composition Mass-%



#### Properties

BGH Cut One is a high performance cold working steel, optimized for wear resistance and cutting edge stability.

By specifically choosing the alloying concept and utilizing V-Mo-W-carbide structures the wear resistance of 1.2379 is exceeded by far without reducing the impact toughness (Fig. 1).

BGH Cut One is an economical and highperformance alternative to PM-steels.

Heat treatment parameters basically correspond to those of 1.2379.

#### **Delivery Condition**

🗱 annealed (+A), max. 250 HBW

#### **Application Area**

For highly stressed tools demanding long service life under abrasive wear.

#### **Typical Applications**

- X Moulds and forming tools
- Shear blades, recycling- and industrial knifes
- Thread rolling tools
- Blanking or fineblanking tools

#### Heat Treatment Guideline Values

Annealing (+A)	Temperature [°C] 900	Cooling medium Furnace to 540 °C, air
Stress relieving (+SR)	600 - 700	Furnace to 540 °C, air
Quenching and tempering (+QT)	1010 - 1090 (Hardening) 510 - 540 (Tempering)	Air, nitrogen (min 5 bar), polymer Air, triple tempering recommended

#### Material characteristics





Fig. 1: Properties of BGH Cut One and comparable tool steels

#### 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:

#### BGH Edelstahlwerke GmbH

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

