# **BGH DieCast One**

similar to 1.2367 acc. to DIN EN ISO 4957

### Typical Composition Mass-%

С	Si	Mn	Р	S	Cr	Мо	V	
0,37	0,35	0,30	≤ 0,015	≤ 0,003	5,10	2,25	0,55	

# Properties

BGH DieCast One is a Cr-Mo-V-alloyed hot working steel with optimized chemistry compared to DIN-grade 1.2367. By using ESR (electro slag remelting) excellent homogeneity and cleanliness are achieved.

BGH DieCast One is the perfect choice for aluminium die casting tools. It meets the highest demands on strength and wear resistance at high temperatures and provides outstanding dimensional and shape stability and good resistance against tempering.

# **Delivery Condition**

- 🗱 annealed (+A) max. 229 HBW
- EFS-annealed (extra fine structure)

#### Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium	
Annealing (+A)	720 - 880	Air (furnace)	
Quenching and tempering (+QT)	1010 - 1050 (Hardening) Tempering: see below	Oil, polymer, air, saltbath Air	
Stress relieving (+SR)	Approx. 40 °C below tempering temperature	Air (furnace)	
5 Hardness HRC 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		D 700	

Tempering temperature °C

Tempering graph, hardening: 1020 °C/30 min/oil

#### Recommendations for tempering:

- 1<sup>st</sup> tempering to target hardness acc. tempering diagram
- 2<sup>nd</sup> tempering appr. 30 °C below 1<sup>st</sup> tempering temperature
- 3<sup>rd</sup> tempering appr. 30 °C below 2<sup>nd</sup> tempering temperature

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Tools and dies for light metal casting. Complex tool geometries and environments with high demands on resistance against wear and temperature changes.

#### **Typical Applications**

- X Moulds for aluminium die casting
- Forging dies
- 🗱 Press dies



# 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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