# Bright steel that meets the highest standards

Tailor-made solutions – from steel to ready-to-assemble components.





# The best solution from one single source

Products and applications made of GMH Gruppe bright steel secure valuable competitive advantages for our customers. The combined expertise of our in-company specialists, short distances as well as efficient processes enable us to produce precise results to fulfil the highest requirements, along the entire value chain – from our materials through to ready-to-assemble components.

GMH Gruppe bright steel is used as the basis for high-tech components all around the world. Our specialists collaborate across sites to provide customers with results which fulfil their exact needs – from high-quality semi-finished products through to component manufacture. Dedicated employees and modern plants ensure maximum flexibility as well as consistently high quality: from heat treatment plants, high-performance bright steel production lines, a range of processing options as well as CNC units through to subsequent precise testing equipment.

#### Bright steel - making high-tech a reality

Decades of experience, optimised processes as well as a wide range of material qualities in numerous surface finishes and heat treatments enable us to ensure that individual needs and requirements are reliably met. Produced with maximum precision, GMH Gruppe products comply even with the extremely narrow tolerances demanded by the automotive sector. Our passion for steel also makes us the first port of call for customers looking for longterm support, reliable logistics concepts and custom-made products – from bright steel through to components.

# Custom requirements as standard

#### **Reliable services**

We deliver your steel when you need it. In order to deal with requests at short notice GeisslerWista, a GMH Gruppe company, keeps a broad range of materials with elevated and low temperature properties for connecting elements available in its extensive warehouse. We also offer commissioned work for peeling of steel bars as an additional service.

#### **Ready-to-install components**

As enablers, GMH Gruppe specialists develop and manufacture solutions for particularly demanding areas of application. These include induction hardened shafts manufactured with extremely narrow tolerances in accordance with ISO h6, piston rods for the hydraulic applications as well as mandrel bars for pipe production. Just let us know what we can do for you.



# **Combined expertise**



# Steel for high-end products

Stahl Judenburg is one of the world's specialists for bright steel, short pieces, piston rods and components. Our high-quality steel bars and bright steel are the foundation of high-tech applications for international industries and markets. Steel from Stahl Judenburg is used in the automotive industry, in mechanical engineering and plant construction as well as other specialised areas of application.

#### The benefits

- Hot rolled flat bars
- Special profiles
- Bright steel up to tolerance zone h6 (also induction hardened)
   Ø 10-120 mm
- Piston rods
- Ø 12-120mm
- Short pieces
- Manufacturing of components

## Stahl Judenburg GmbH

Gußstahlwerkstraße 21 8750 Judenburg Austria Mario Griesmaier T +43 (0)3572 701-351 Josef Siebenbäck T +43 (0)3572 701-297 www.stahl-judenburg.com





### Quality you can rely on

Over 100 years of experience and expertise at GeisslerWista flow into the production and trading of bright steel, mandrel bars, shaft bars and inductively hardened shafts. We supply our steel products to customers in a variety of sectors and industries, ranging from mechanical engineering via the automotive sector and the bolt and spring industry through to pipe production.

#### The benefits

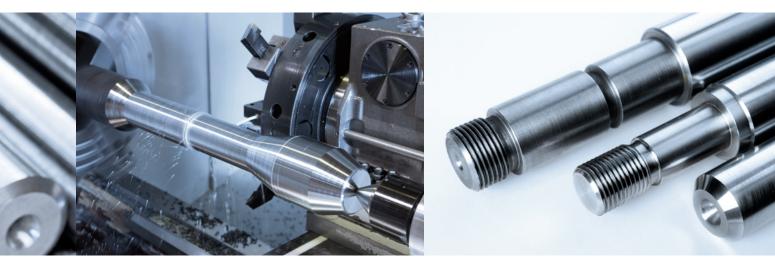
- Bright steel h9
  Ø 5 250 mm
- Bright steel h6
  Ø 20-160 mm
- Guide shafts (induction surface hardened)
  Ø 20 140 mm
- Mandrel bars
- Commissioned work
- (peeling, straightening, polishing, hardening)
- Warehouse stocks kept available principally for connecting elements

#### GeisslerWista GmbH

Bebbelsdorf 105 58454 Witten Germany Lars Kracke T +49 (0)2302 91080-80 www.geisslerwista.de



**BRIGHT STEEL** 





# Pioneering solutions for mobility

Within the alliance of GMH Gruppe, as one of Europe's leading manufacturers of steel bars Georgsmarienhütte provides high-quality raw material which forms the basis for a large variety of excellent products. Our range of over 2,000 different product types keeps sectors such as the automotive industry moving forward to the future, for example as crankshafts, conrods, pistons, steering racks and differentials. Together, as GMH Gruppe, we provide a range of products from steel through to ready-to-install components. All from one single source.

#### The benefits

- Quality and high-grade structural steels: Quenched and tempered steels, AFP steels, case-hardening steels, ball and roller bearing steels, cold extrusion steels, chain steels, spring steels, boron steels
- Supplied in accordance with all European, American and Japanese standards as well as special customer standards

### Where industrial excellence starts

GMH Blankstahl is one of Europe's leading producers of bright steel. High-quality raw material forms the basis for a large variety of excellent products. Our bright steel meets the highest standards in terms of dimensional accuracy, surface finish and quality. It is used in steering systems, linear technology, piston rods and in the construction of engines, plants and machinery.

#### The benefits

- Bright steel h9 and h8 ø 18-125 mm
- Short lengths round 50 - 3,000 mm
- Prefabricated components

#### Georgsmarienhütte GmbH

Neue Hüttenstraße 1 49124 Georgsmarienhütte Germany Marco Altenhöfer T +49 (0)5401 39-4442 www.gmh.de



#### **BRIGHT STEEL**



#### **Dimensions/Lengths**

- Peeled as well as straightened and polished in accordance with DIN EN 10277 and DIN EN 10278: 18-250 mm rd. Lengths from 3 m to max. 26 m
- Peeled, straightened and polished, up to tolerance zone h9: 18-250 mm rd.

Lengths from 3 m to max. 26 m

- Peeled, straightened and polished, grinded up to tolerance zone h6: 18-160 mm rd. Lengths from 3.5 m to 8 m
- Other lengths and short lengths to be agreed upon

#### **End finishes**

- Abrasive cut off
- Milled
- Bevelled
- Sawn and deburred
- Other executions to be agreed upon

#### Material inspection

- Identification testing
- Surface crack detection
- Ultrasonic testing (phased array technology)

#### Heat treatment methods

- Treated to hardness range -BF (+TH)
- Treated to ferrite-pearlite structure and hardness range -BG (+FP)
- Treated for cold shearing -C (+S)
- Soft annealed -G (+A)
- Normalised -N (+N)
- Spheroidised annealed -GKZ (+AC)
- Stress-relief annealing -SR

- Quenched and tempered (water or air hardening) -V (+QT)
- Treated for cold sawing (+SAW)

#### **Processing options**

- Sawing
- Chamfering
- Centering
- Turning
- Milling
- Deep drilling
- CNC-production

#### Incl. automatic inspection of

- Length
- Weight
- Roundness

#### Certifications

- IATE 16949
- DIN EN ISO 9001
- DIN EN ISO 14001
- DIN EN ISO 50001

#### **Approvals/Classification societies**

- Bureau Veritas (BV)
- Det Norske Veritas and Germanischer Lloyd (DNV, GL)
- Landesmaterialprüfamt Sachsen-Anhalt
- Llovd's Register of Shipping (LRS)
- Technischer Überwachungsverein (TÜV) with the additional approvals TRD 100 and AD-WO

#### **Certification categories**

- Certification in accordance with DIN EN 10204
- Test report 2.2 / 3.1 / 3.2

# Areas of application











CONSTRUCTION, AGRICULTURAL AND COMMERCIAL VEHICLES



SHIPBUILDING



MECHANICAL ENGINEERING AND PLANT CONSTRUCTION



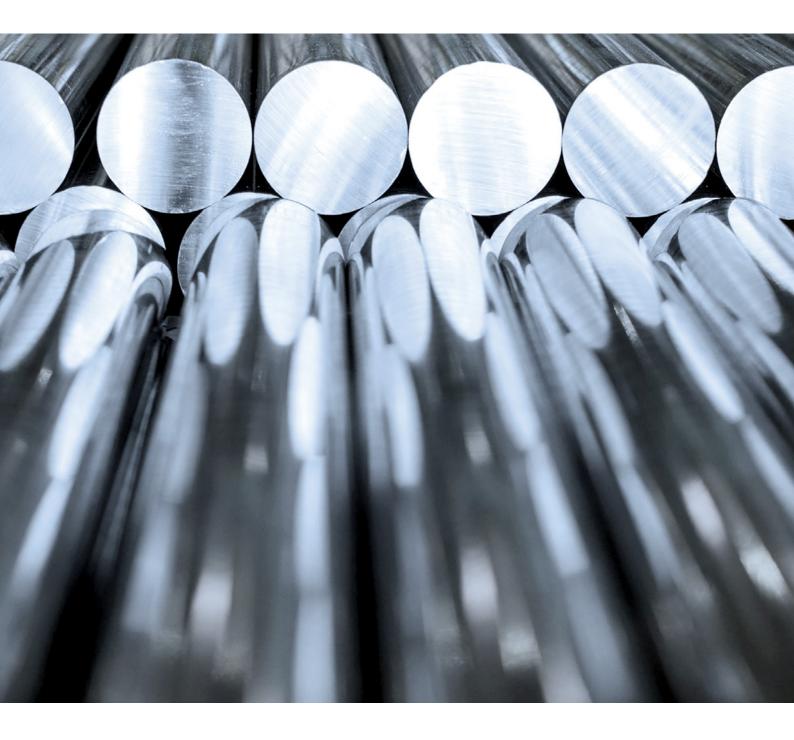
MATERIAL HANDLING INDUSTRY



RENEWABLE ENERGY



MINING



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