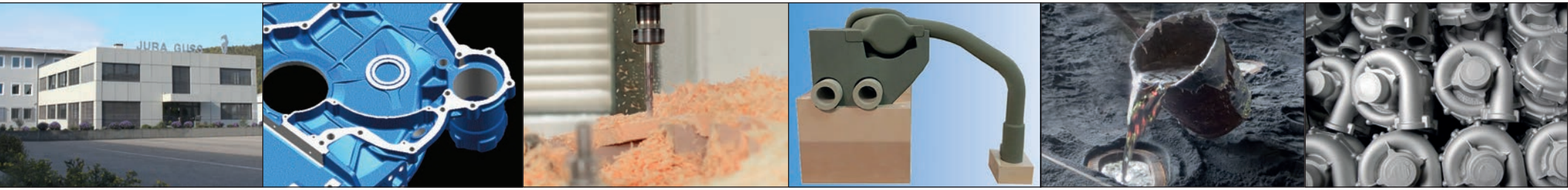
JURA GUSS

ALUMINIUM-GIESSEREI.COM



COMPANY ENGINEERING TOOLMAKING RAPID PROTOTYPING FOUNDRY FETTLING SHOP

MACHINING/ASSEMBLY | QUALITY ASSURANCE | SHIPPING/LOGISTICS | PRODUCTS | APPRENTICESHIP | ENVIRONMENT

JURA GUSS

ALUMINIUM-GIESSEREI.COM


JURA GU

COMPANY

JURA-GUSS GmbH

Established 1953

Company and production located in
92339 Beilngries, Germany

Family-owned company

300 employees

Business divisions

Engineering

Toolmaking

Foundry

Fettling shop

Machining/Assembly

Quality assurance

Shipping/Logistics

Product range

Single pieces, prototypes

Small, medium and large volumes

Raw parts and ready-to-install components

Weight from 0.1 to 1.000 kg

More than 60 years of experience

Our company was established in 1953 in Ebenhausen near to Ingolstadt. We moved to Beilngries (Upper Bavaria / Germany) in 1961, where our company is still located today.

As a medium-sized company we supply aluminium castings in small, medium and large volumes. In total, over 300 employees work for our family-owned business. To our customers we count the well-known European automotive manufacturers, the international machinery sector, and the medical technology industry.

The quality of a casting depends on several factors – from choosing the moulding process through designing the tools up to the mechanical processing. Decades of experience and state-of-the-art equipment ensure the highest quality standards.

CONSTRUCTION

CAD

Preparation and processing of 3D-data (surface and volume models) in Catia V5 and Siemens NX

A casting-compatible development of the parts

Construction of pattern plates and core tools

Construction of gauges and devices

Preparation of documentations

Interfaces to ProEngineer, Siemens NX, AutoCAD

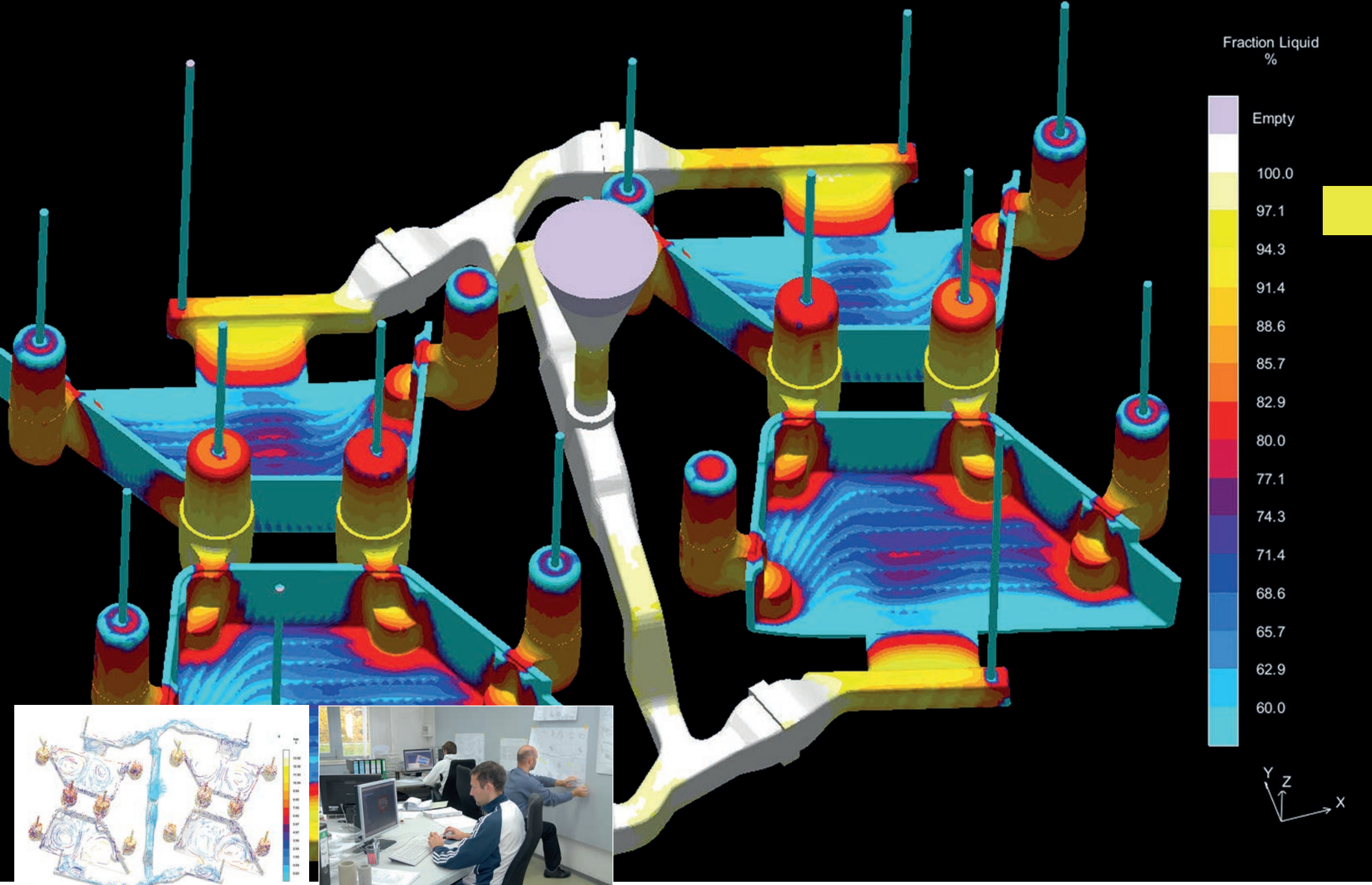
Simulation

Solidification and cavity fill simulation (Magma V5)

It all starts with the perfect mould

When developing castings our CAD team closely cooperates with our customers‘ design engineers. Our state-of-the-art CAD systems enables smooth communication. On that basis our experts construct and build tools for the subsequent manufacturing and testing processes.

Efficient planning and the quality of the tool manufacture are essentials factors for the the production of high-quality castings.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TOOLMAKING

Patterns

Foundry patterns (wood, plastic, metal and polystyrene)

Core boxes (wood or metal)

Assembly- and insert loader

Checking gauges

Fixture constructions

Clamping devices

Devices for leak testing

Decoring devices

Our formula for success

The production of most of the required tools is one of the factors of our success.

Especially the quality of tools, coupled with the production know-how, is the key criterion for the final quality of the casting.

With our own tool making department we are able to react immediately to change requests of our clients.

RAPID PROTOTYPING

3-D-sand printing

3-D-plastic printing

Laser sintering (aluminium)

Polystyrene patterns

Ureol patterns (conventional)

Expertise, and state-of-the-art techniques

To provide prototypes, preliminary samples or small series, we can offer a number of different processes, depending on your timeframe and budget.

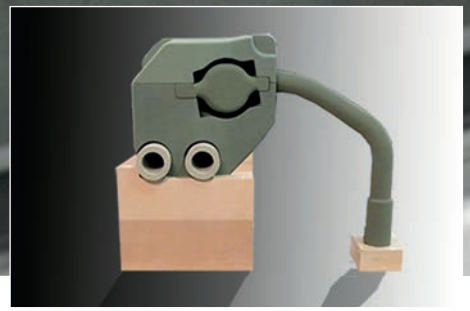
If time is the decisive factor, a generative method will definetely be most suitable.

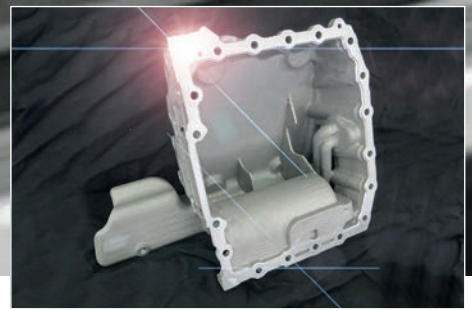
On the one hand we safe time by using direct and modern methods such as printing and sintering technologies .

If the customer planned to order further derivates of prototypes, conventional tool supported moulding methods could be more suitable, on the other hand.

Also combinating generative printing methods and conventional tools is basically possible.

Challenge us with your demands, requirements and wishes.





picture source: www.exone.com

FOUNDRY

Aluminium sand casting

Core shop:

Several automatic core shooters

Shot volumes: 0 - 120 litres

Alloys:

Several primary and secondary alloys according to DIN EN 1706

Green sand moulding:

Fully automated HWS SEIATSU airflow moulding lines:

Flask sizes
- 720 x 500 x 200 mm
- 1.130 x 800 x 350 mm

Cold setting resin moulding:

Manual moulding:

Flask size
- 3.000 x 3.000 x 1.000 mm

Semi-automated moulding:

Flask size
- 2.600 x 1.500 x 800 mm

Aluminium chill casting

Various pulling directions

Use / Application of sand cores

Weight from 10 g to 2 kg

Striking a perfect balance – Mould, process and alloy

Generally, „casting“ is the quickest way transforming liquid metal to an almost finished part. The choice of the appropriate casting process depends on requirements such as mechanical properties, batch volume, or degree of complexity.

FETTLING SHOP

Decoring, sawing, grinding, sand blasting, heat treatment

Automatic decoring maschinery

Band saws

CNC controlled sawing and fettling maschinery

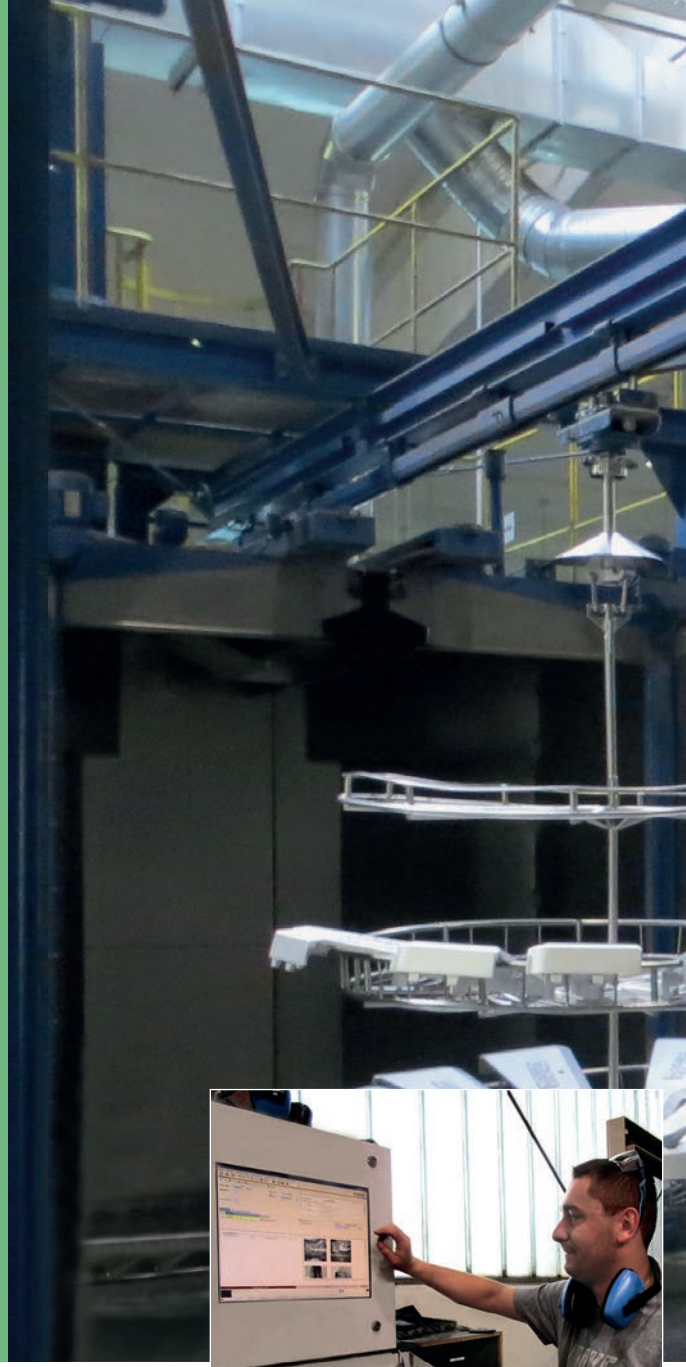
Belt grinders

Fine grinding maschinery

Blasting plants

Automatic heat treatment plant for T5, T6, T7

100 % final quality inspection



The service provider at the foundry

The fettling shop department is responsible for the comprehensive post treatment of the raw casted parts.

First of all the cluster of castings are decored, separated, and freed from metal residues. Thereafter, the surface of the casting is cleaned. The final inspection of this products is 100%.

In order to improve the material properties a heat treatment can be made according to T5, T6, or T7.

With the in-house fettling shop, we have deliberately decided against the general industry trend of outsourcings. The installed capacities ensure that customers' orders are fulfilled quickly and reliably. They are a core competence with regard to know-how and quality.

MACHINING

CNC processing

- Universal machining centres, 3- and 5-axis, maximum dimensions:
  - l = 1,600 mm
  - w = 1,250 mm
  - h = 1,000 mm
- Turning, maximum dimensions:
  - Ø = 850 mm
  - l = 810 mm

Other Services

Cast parts cleaning with minimum wastage

Vacuum impregnation

Surface coating

Hot isostatic pressing („HIP“)

Slide grinding

Finish grinding

Varnishes

ASSEMBLY

Torque monitoring and recording

Data Matrix Code

Precision in metal

Thanks to our mechanical processing, we are able to refine casted parts according to the customers specifications.

Our state of the art machinery is designed for manufacturing single pieces and prototypes, as well as parts for series production. We will maintain development of vertical integration by continuing investing in our machinery.

Besides the mechanical processing we also offer the assembly of mounting and detachable parts, up to ready-to-install components. As a system supplier we will gladly manage the search and selection of suitable suppliers for assembly parts. Taking responsibility for the procurement of the assembly parts is self-evident.

Every step in the assembly process is fully monitored and documentated. Depending on the customer's requirements all information is transferred in a data matrix code and applied to the component.

QUALITY ASSURANCE

Testing and measuring equipment

Screening device

Metallurgical laboratory

Sand laboratory

3D coordinate measuring maschines

3D scanner

Tensile testing maschine

Services

Initial sampling according to PPAP und VDA 6.1

Hardness testing according to DIN EN 6506-1

Tensile tests according to DIN EN 1002-1

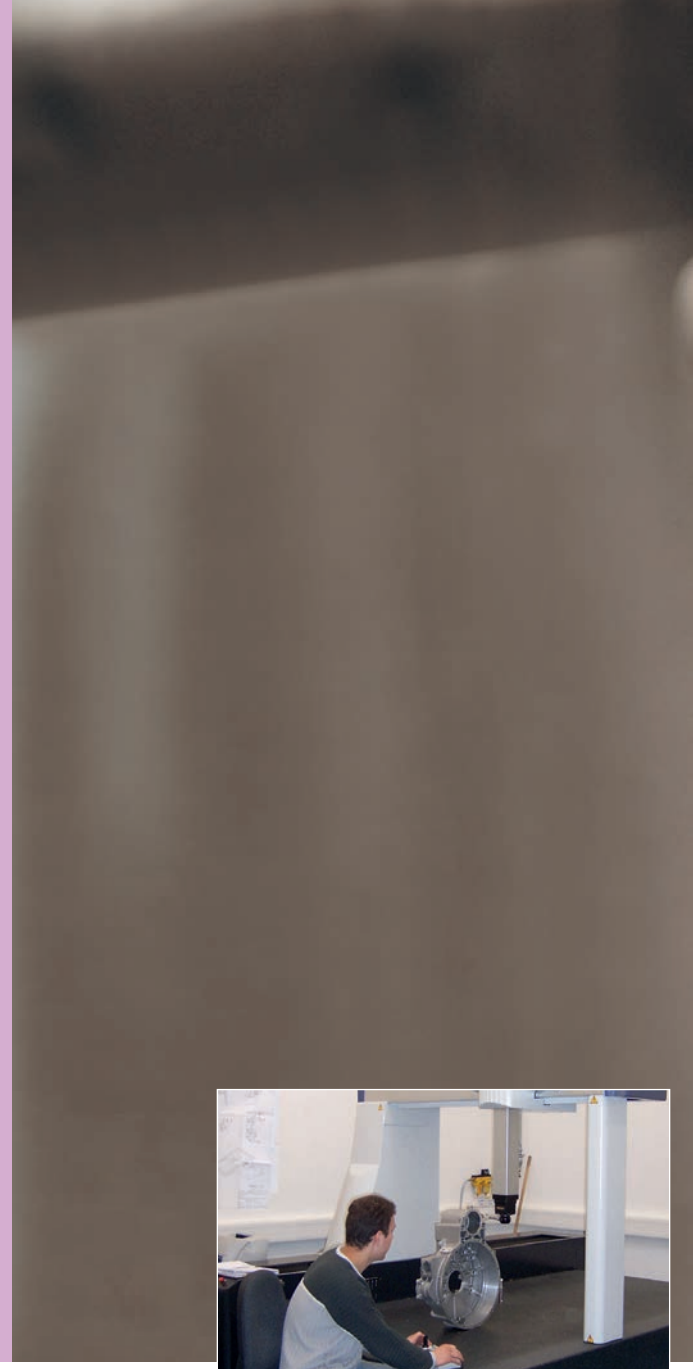
Works test certificates and acceptance test certificates according to DIN EN 10204

X-ray inspection according to DIN EN 13068-3

Dye-penetrant inspection according to DIN EN ISO 3452-1

Leak tests according to DIN EN 1593

Machine code testing (e. G. AIM DPM)



Tested and certified

Our customers trust in the the quality of our products and services. Quality management is not just part of our company's strategy but also an essential part of our daily work.

JURA-GUSS GmbH disposes a wide range of a testing and measuring equipment in order to guarantee the high quality of our products.

Our **quality management procedure is certified according to DIN EN ISO 9001** and based on the ISO TS 16949 standard.


RENISHAW

GE
Inspection Technologies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MÖLLER
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MÖLLER
5
MÖLLER

SHIPPING/ LOGISTICS

Shipping hall and logistics building with loading station

In the high rack warehouse we have a storage capacity for about 1.000 grid palettes

Just-in-time deliveries

Individual delivery and packaging concepts

Fast, reliable, efficient

Concepts like container management, just -in-time, safety stocks, Incoterms, or KANBAN are part of our daily business.

Thanks to our warehouse, we can offer our customers shortest delivery times. With a great flexibility in case of short-term quantity changes requested by the customer.

PRODUCTS

Automotive sector

1 **Manifold**
Dimensions: 1025 x 300 x 195 mm
Weight: approx. 11.5 kg

2 **Distributor housing**
Dimensions: 525 x 439 x 158 mm
Weight: approx. 6.1 kg

3 **Exhaust manifold**
Dimensions: 375 x 295 x 178 mm
Weight: approx. 5.8 kg

Medical technology

4 **Beam arm**
Dimensions: 1400 x 600 x 200 mm
Weight: approx. 35.4 kg

5 **Support arm (coated)**
Dimensions: 350 x 101 x 145 mm
Weight: approx. 1.5 kg

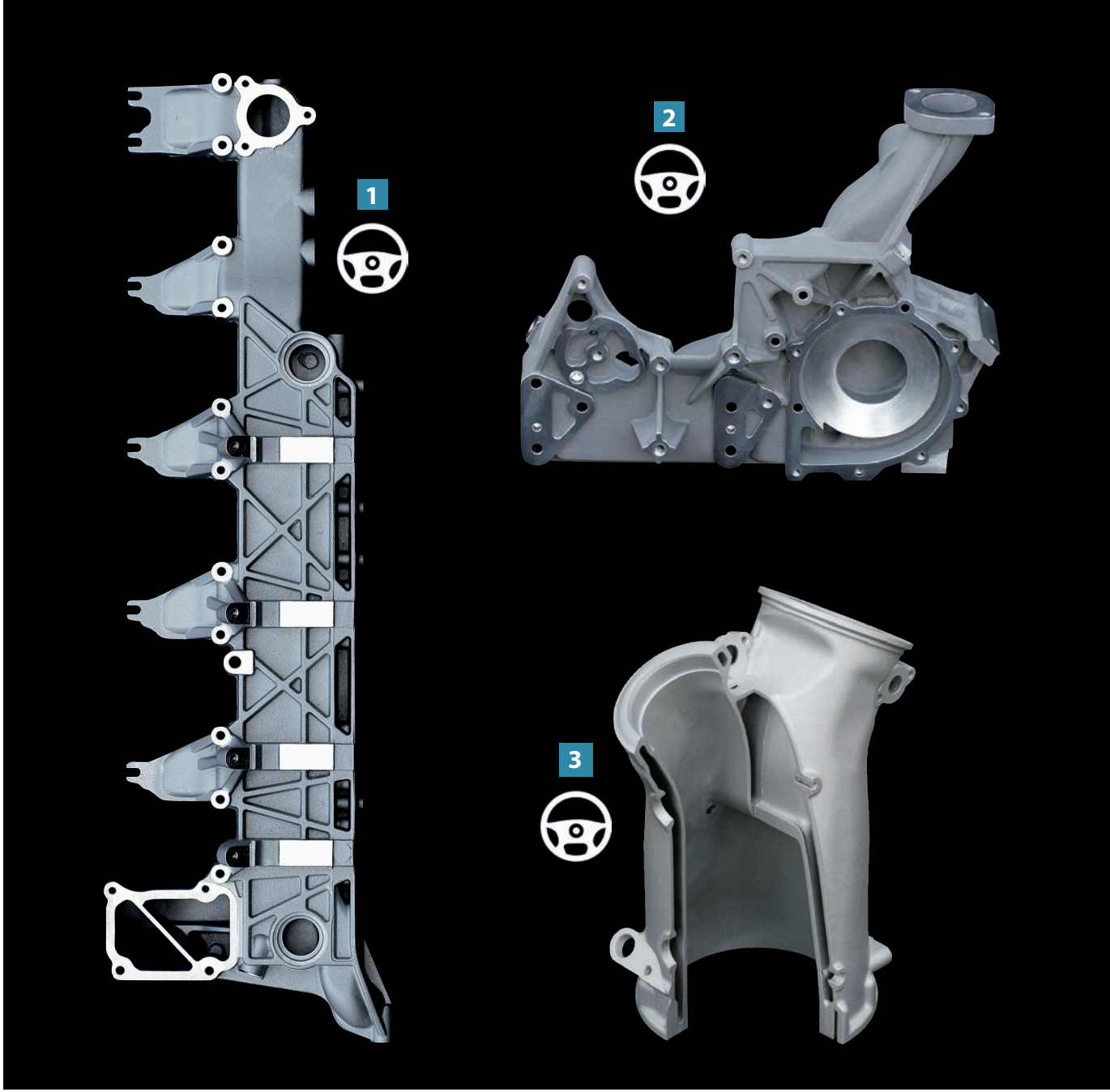
Mechanical engineering

6 **Collision protection**
Dimensions: 1090 x 380 x 150 mm
Weight: approx. 30.7 kg

Electrical engineering

7 **Switch cover**
Dimensions: 1306 x 447 x 168 mm
Weight: approx. 16.75 kg

8 **Electrical control cover (chill casting)**
Dimensions: 200 x 160 x 40 mm
Weight: approx. 0.7 kg

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APPRENTICESHIP

Trainees

We train and qualify new employees
in the following professions:

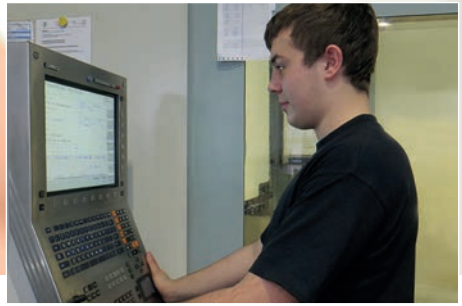
- Electronics technicians for industrial engineering
- Industrial mechanics, specialised in maintenance
- Industrial mechanics, specialised in production engineering
- Foundry mechanics, specialised in manual casting
- Technical model constructor, specialised in foundry model design
- Industrial clerk
- IT specialist, specialised in systems integration
- Materials tester

Training benefits

Training workshops

Trainers

Cost absorption of the teaching materials



Opportunities for up-and-coming talents

As a committed training company, we offer technical and administrative positions to our graduates each year. This allows us to train employees in understanding our commitment to quality and the company's philosophy.

ENVIRONMENTAL PROTECTION

Environmental measures

Exhaust air purification

Minimizing energy consumption by using waste heat utilisation

Minimizing noise emission by extensive sound insulation measures

Waste avoidance by recycling

Continuing education and sensitization of our employees

Not just a catchword

Economic action is mostly associated with interventions in nature and in environment. We aim to ensure and improve the environmental compatibility of our services and products as well as to reduce the consumption of valuable natural resources.

Not only the natural resources, but also our company benefits from the environmental protection. We always aspire environmentally compatible solutions for our services and products – from production to disposal.

The continual improvement of all of our processes is a fixed part of the company's philosophy. With our certified **environmental management system (DIN EN ISO 14001)** we have created the conditions to push our environmental objectives. This will further strenghten the confidence of our customers, employees, and residents.

Zertifikat
für

JURA GUSS
ALUMINIUM-GIESSEREI.COM

Jura-Guss GmbH

Industriestr. 5
92339 Beilngries, Deutschland

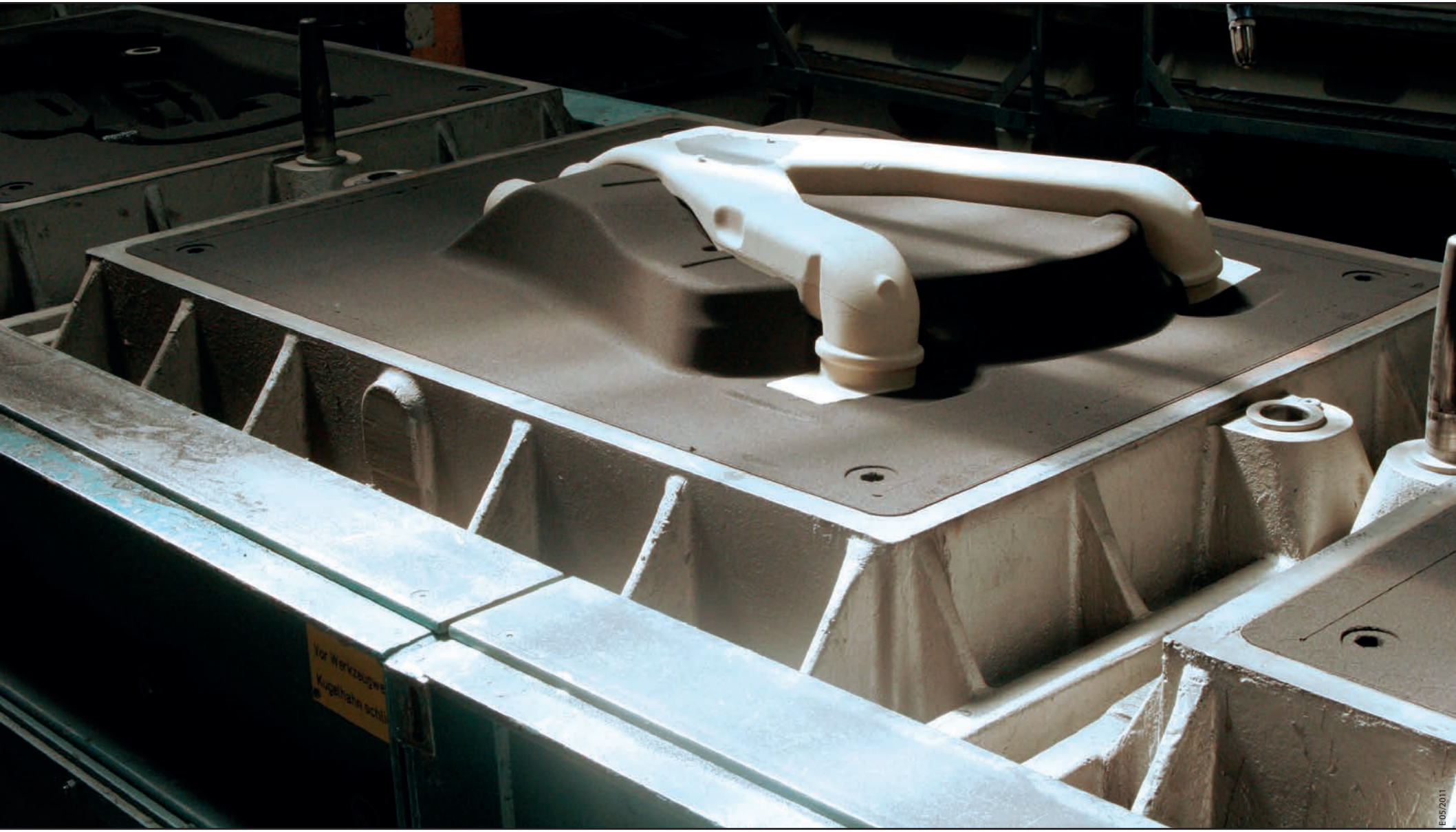
Bureau Veritas Certification bestätigt, dass das Management-System der oben genannten Organisation bestätigt wurde und die in den folgenden Normen und Regelwerken festgelegten Anforderungen erfüllt.

Normen/Regelwerke

DIN EN ISO 14001:2009

Anwendungsbereich

Leichtmetallgießerei, Mechanische Bearbeitung, Modellbau, Kokillenbau, Werkzeugbau, CAD/CAM, Konstruktion, Fertigteilkomponenten



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