



ALUMINIUM, a Wise Decision for a Green Future

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Talum Castings



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100ha of factory yard, production buildings > 100.000m²



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Located in the middle of Europe.

Excellence in delivery timing and quality.



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1947



Year of
establishment

1954



Year of starting
up production

Joint stock
company



Organization

Talum group
1.300
Talum Castings
350



Number of
employees 2024

SDH – 86.25 % >100 000 t



Ownership



Total
production 2023

Talum group >350
mio EUR
Talum Castings 44 mio
EUR



Neto
sales
revenues
2024

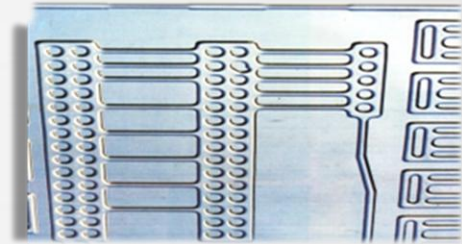
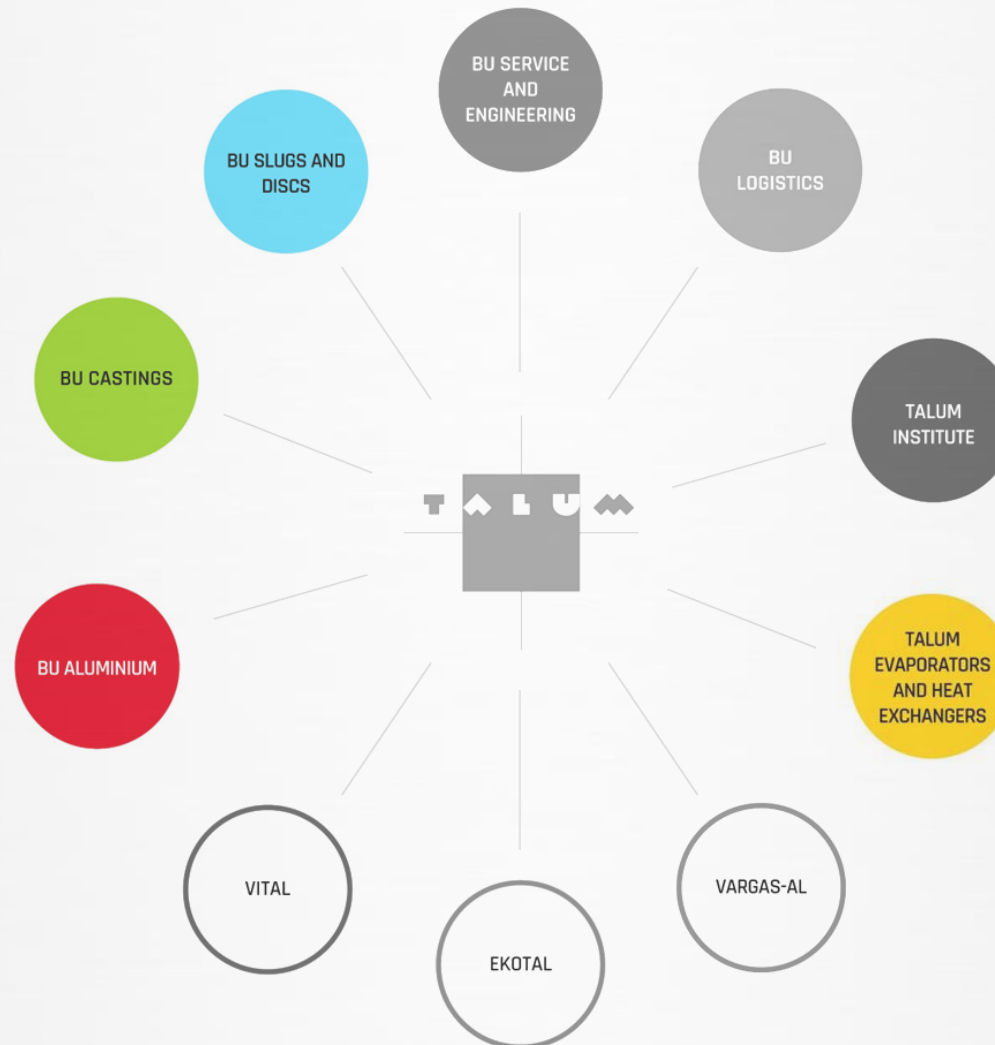


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Group Talum





Certificates

- **IATF 16949:2016** Automotive quality management systems
- **ISO 9001:2015** Quality management systems
- **ISO 14001:2015** Environmental management systems
- **ISO 45001:2018** Occupational health and safety management systems
- **ISO 50001:2018** Energy management systems
- **TISAX (VSA-ISA)** Information security assessment , AL 3
- **ISO 17025:2017** Accreditation certificate for laboratory testing
- **Quality Assurance System** Pressure Equipment Directive 2014/68/EU



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Carbon neutrality and ASI principles

Reducing the carbon footprint of our organization and our products with the aim of achieving carbon neutrality by 2030.

Operating in accordance with ASI principles and making a significant contribution to sustainable development throughout the entire value chain.

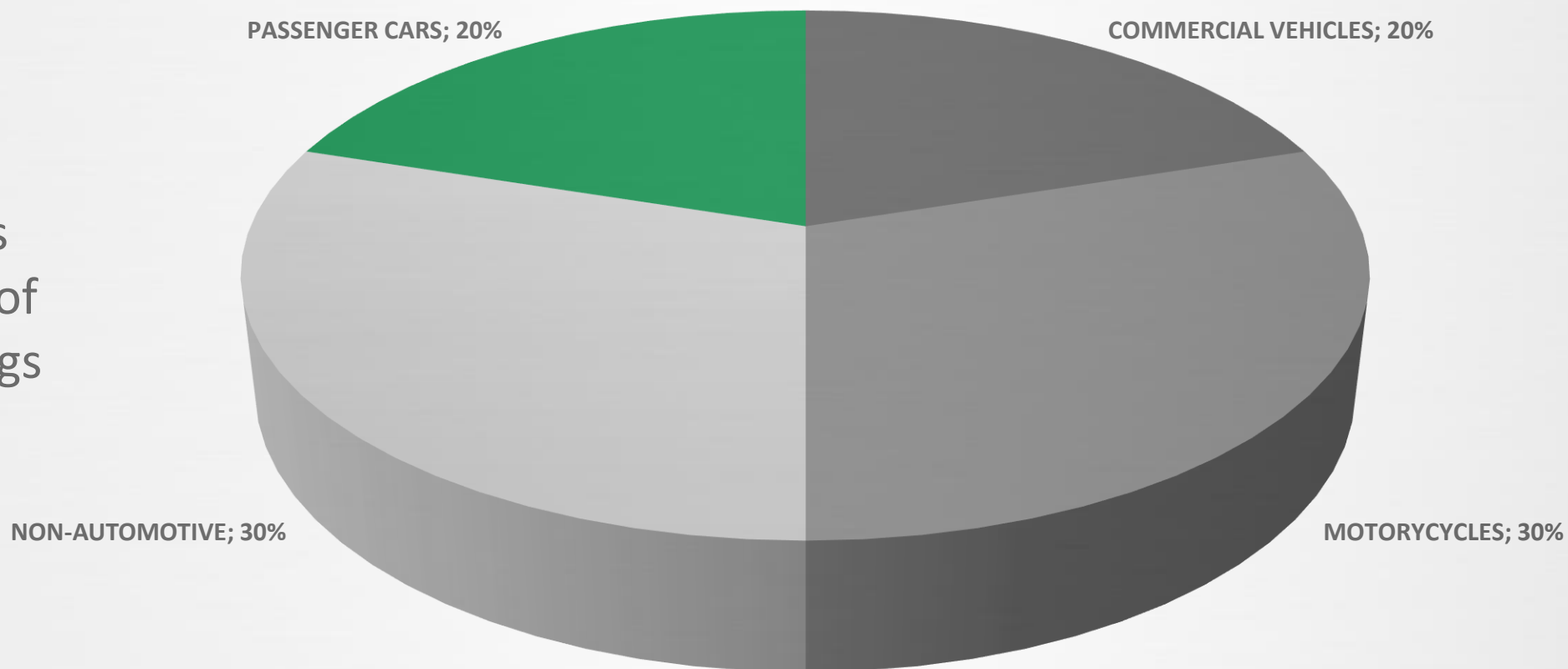




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Business
portfolio of
BU Castings

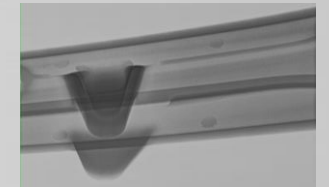
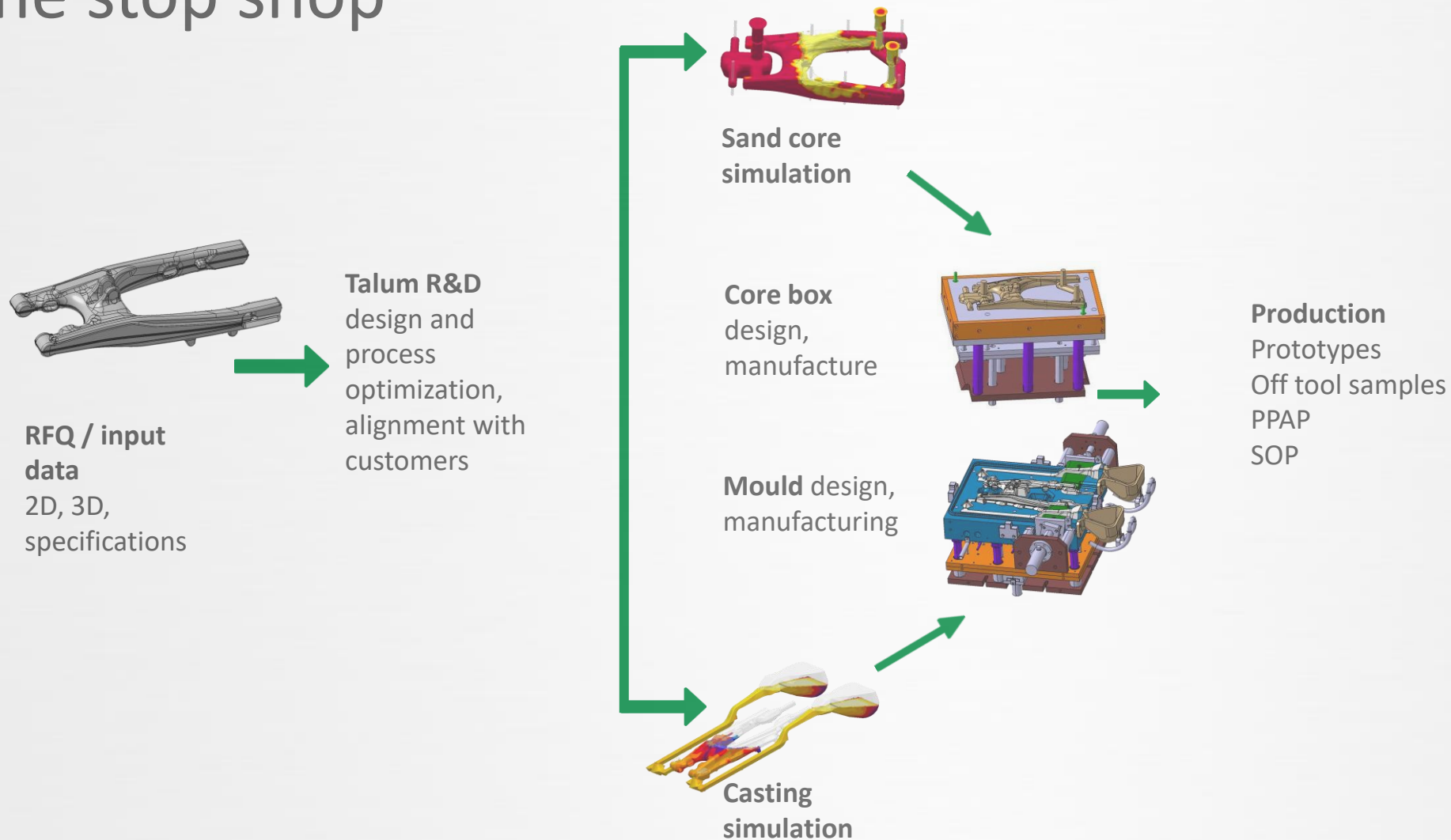




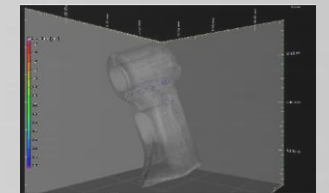
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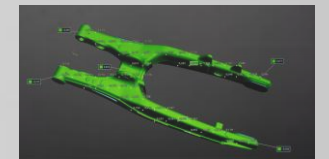
One stop shop



X-ray



Computer
tomography



3D scan



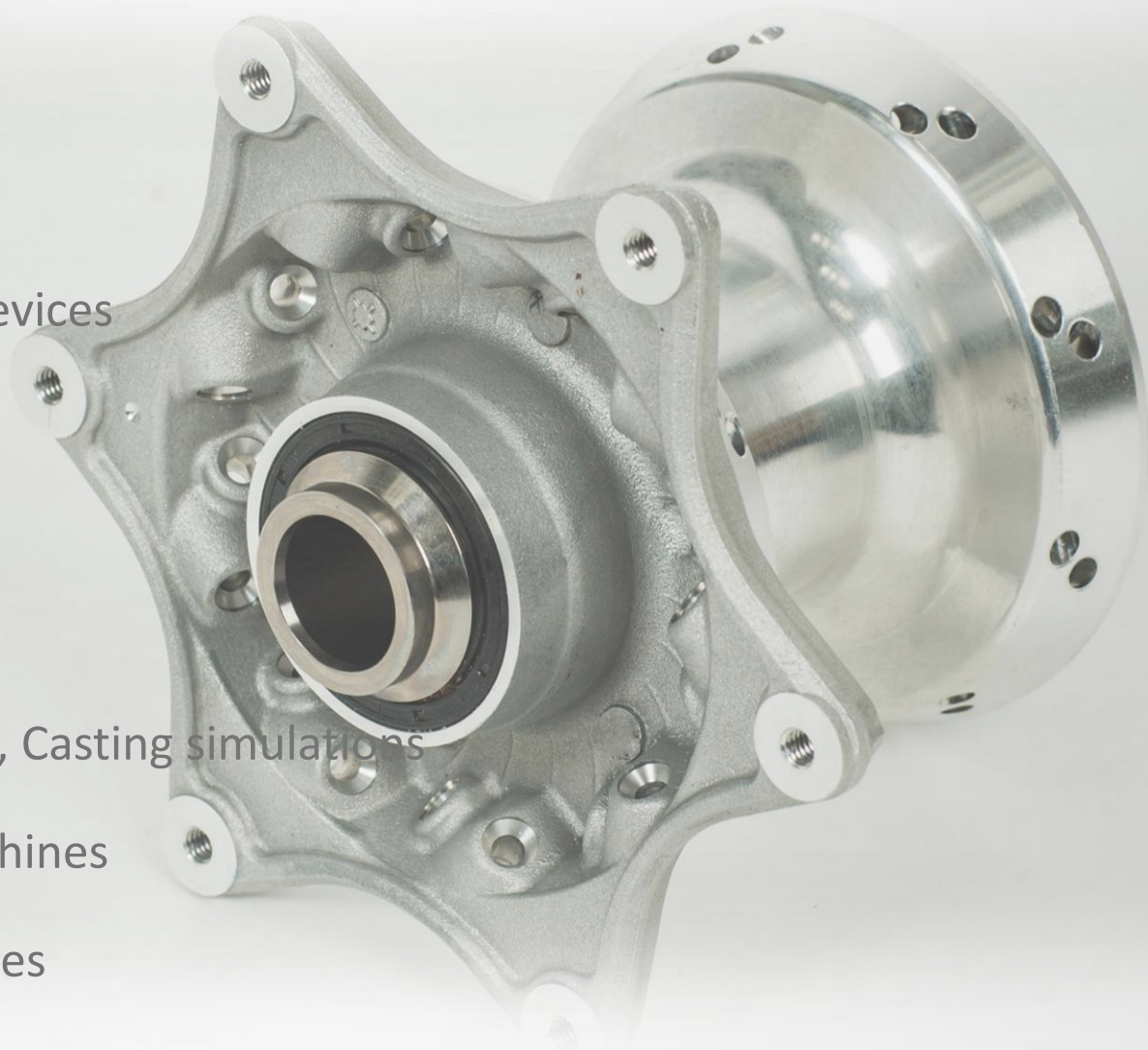
30 mm



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Development competences

- **CATIA V5-6:** Design of dies, clamping devices
- **AutoCAD:** Design of layouts
- **VX Elements, Geomagic:** 3D Scan
- **Volume Graphics:** Analysis of CT Data
- **MagmaSoft:** Core shooting simulations, Casting simulations
- **MasterCAM:** Programming of CNC machines
- **Calypso:** Programming of CMM machines





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Casting technologies

- HPDC - high pressure die casting
- LPDC - low pressure die casting
- GTC - gravity tilt casting

Heat treatment (T5, T6)

- 40% of castings are heat treated

CNC machining and assembly

- 80% of castings are CNC-machined
- 20% of castings are assembled (bearings, bushes,...)

Other technologies

- Cracks control
- Passivation
- Powder coating, Anodization



Melting

Tilt gravity



Low pressure



High pressure die casting



Casting



Machining/Assembly



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Automotive – passenger cars



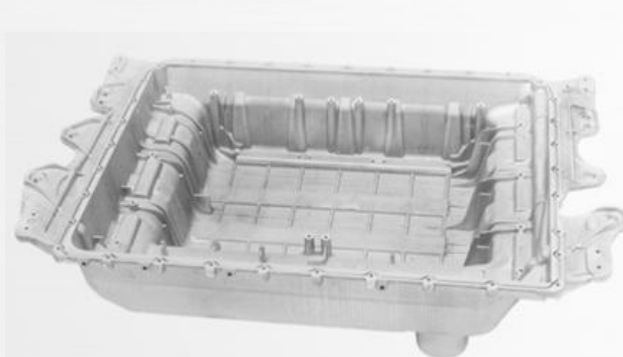
ENGINE PART - HOUSING



E-MOBILITY - STABILIZER



SUSPENSION BRACKET



E-MOBILITY - BATTERY HOUSING

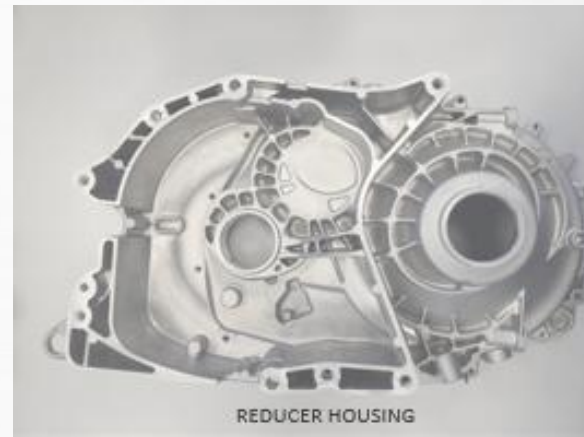
Automotive – commercial vehicles



PUMP HOUSING



REDUCER COVER



REDUCER HOUSING



CAB BRACKET



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Motorcycles



SWING ARM



AXLE HOUSING



HUB

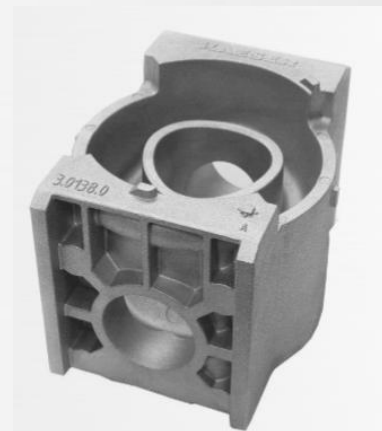


OIL SUMP

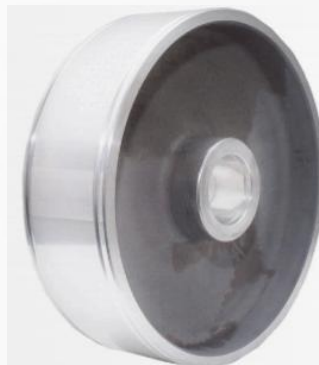
Non - Automotive



HEAT EXCHANGER



FILTER HOUSING



ROPEWAY WHEEL



ELECTRIC SWITCHER BRACKET



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Production equipment

Melting

- ZPF
- MARCONI
- Hindenlang

Melt preparation (degassing with Ar):

- Foseco

Secondary alloys:

- AlSi8Cu3 (226A)
- AlSi9Cu3 (226D)
- AlSi12Cu1 (231)

Primary alloys:

- AlSi7Mg0,3
- AlSi10Mg (239 A)
- AlSi10MnMg





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Sand Core production

ColdBox technology,
max. volume 65dm³

- Laempe (L20-65)





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Gravity tilt casting

**Robotized pouring of metal
and extracting of parts,
automatic heating of dies**

16 machines

- Senator (KM 4-8)
- Talum (KM6)





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Low pressure die casting

8 machines

- LPM (single, shuttle system)
- Röperwerk (single)





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High pressure die casting

- 3 machines
- Bühler 105 Carat, closing force 1050 tons
- Bühler 140 Carat, closing force 1400 tons
- Bühler 180 Carat, closing force 1800 tons

Other equipment

- Dosing furnace : Striko
- Spraying: Wollin
- Robot: Kuka
- Trimming: Weko, Diesse Presse
- Thermocast: Robamat





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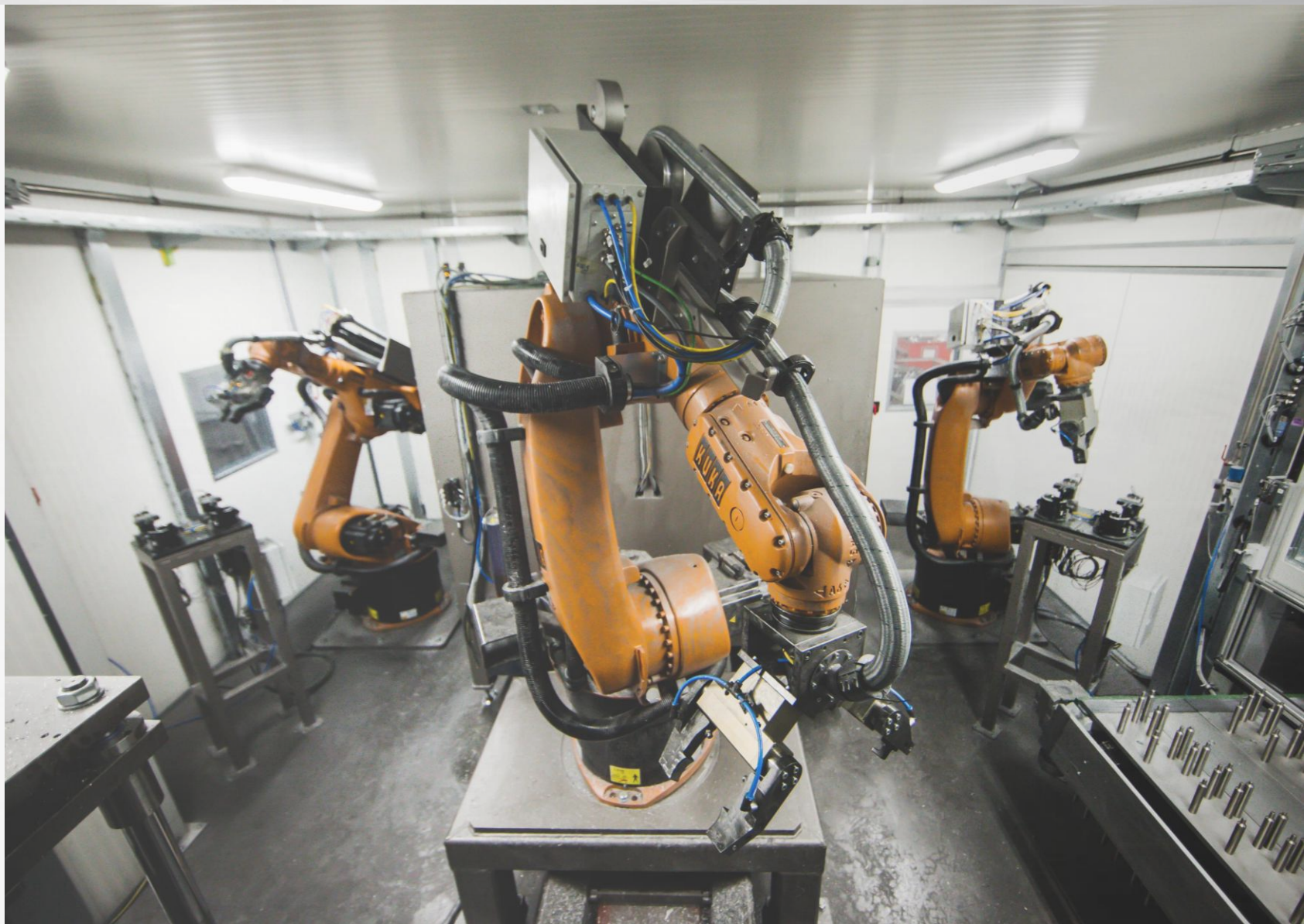
Feeder cutting and deburring

High volume solutions:

- Robotic cells; 2÷4 robots (Pakman, Talum)

Mid and low volume solutions:

- CNC Milling 3 or 4 axes (Wemas, WD)
- CNC Sawing-milling machines 5 axes (Koyama)
- Manual sawing and grinding





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Shot blasting

Stainless steel balls

- Cogeim
- Gostol

Heat treatment T5, T6

- Otto Junker
- Rade Koncar
- Talum





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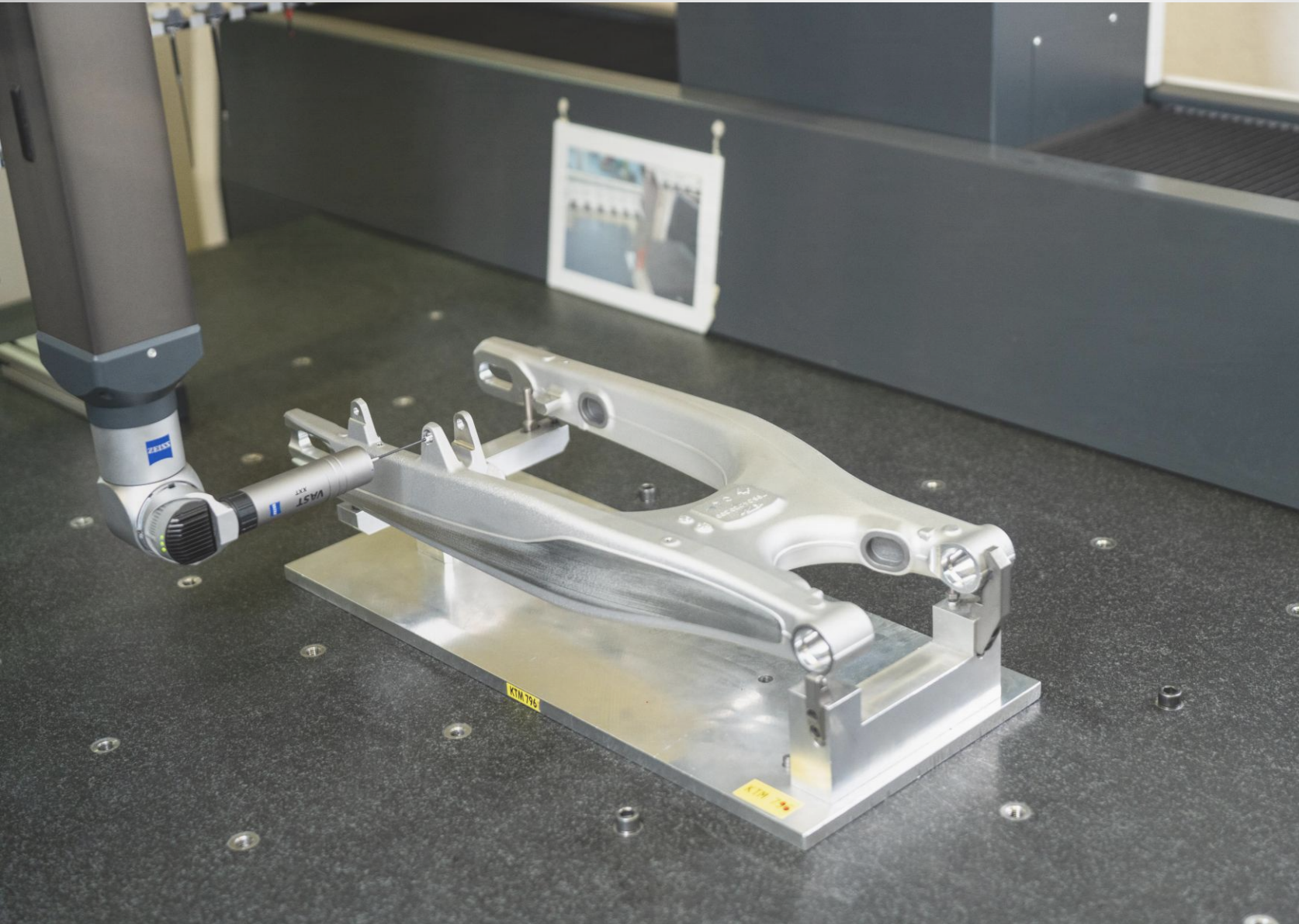
CNC Machining

- CNC Milling; Double spindles; 4 and 5 axes (Chiron, Licon)
- CNC Milling; Single spindle; 4 and 5 axes
Horizontal (Mori Seiki, Makino, Toyoda, Unior) and Vertical (Doosan)
- CNC Milling; Transfer machine; 6 stages (Gozio)
- CNC Turning; (Doosan)
- Part washer machines (Karl Roll, Hein Hesso, Nerkon)





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Laboratory, control equipment

- Spectrometry (ARL)
- Thermo analyze (Ideco)
- Vacuum test (UDIP)
- Microscopy (Leica)
- X Ray , Computer tomography (GE Seifert, Bosselo)
- CMM measurements (Carl Zeiss, Dea)
- 3D Scan (Creaform Handy scan 700)
- Mechanical properties (Zwick)
- Surface roughness, contour-graph, profile projector (MAR)
- Leak test devices



Cleanliness laboratory

- cabinet Pall
- microscope Leica
- cleanliness inspection
acc. to VDA 19.1 / ISO 16232



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References

AISIN



BOSCH
Invented for life

Doppelmayr

Husqvarna

KAESER
KOMPRESSOREN



MAGNA



RENAULT

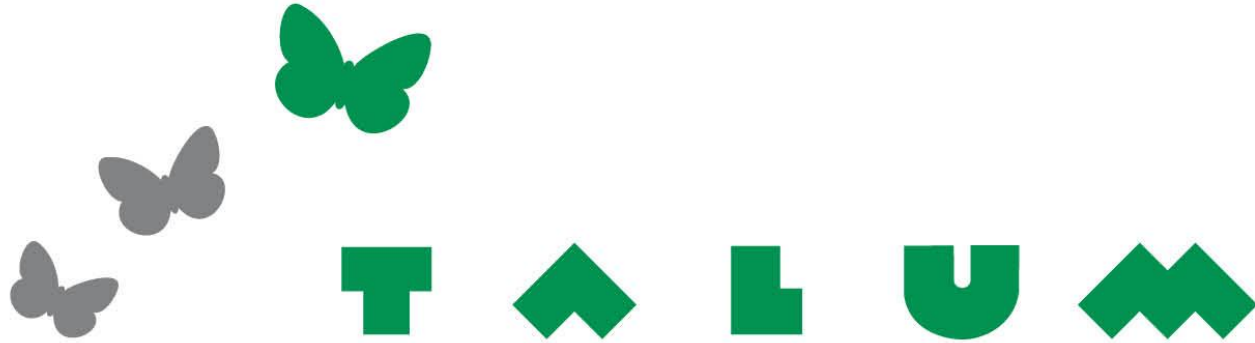
SAMSUNG
SAMSUNG SDI BATTERY SYSTEMS

SCANIA

THK
The Mark of Linear Motion

Vibracoustic





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Thank you for your attention.