

2021

PLASTIKA

COMPANY PROFILE

Key Facts

Founded:	1956
Employees:	562
Plant area m ² :	30 000
Sales in 2020 mil. EUR:	24,9



Milestones

1956

Founded as
manufacturing
co-operative

1975

Opened
Toolshop

2006

Ultrasonic
welding,
Hot stamping

2012

Extension of
ISO/TS 16949

2018

Flatbed painting

1970

Launched injection
moulding technology

2003

Transformed
to joint stock
company

2008

Vertical automatic
painting line

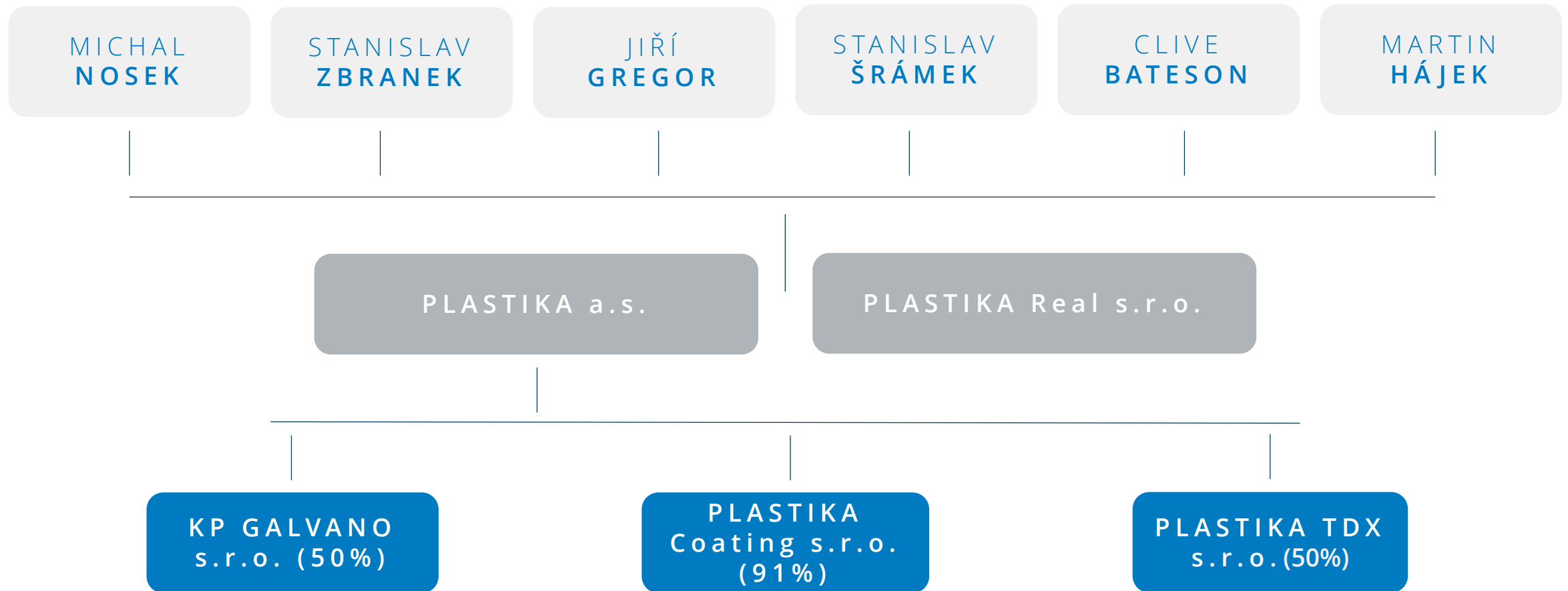
2014

Design Center

2021

KP Galvano

Ownership



Organizational Structure

CEO

SALES AND
PROJECT PHASE

MANUFACTURING

COMPETENCE
AND PROCESS
DEVELOPMENT

FINANCE
AND
CONTROLLING

INVESTMENT

Sales

Injection Moulding

HR

Technical and Process
Engineering

Assembly

IT

Design and Development

Welding

OSH

Quality

Toolshop

EMS

Laboratory and Metrology

Paintshop

Design Center

Purchasing and Supply
Chain

Logistics

Our Customers



ŠKODA

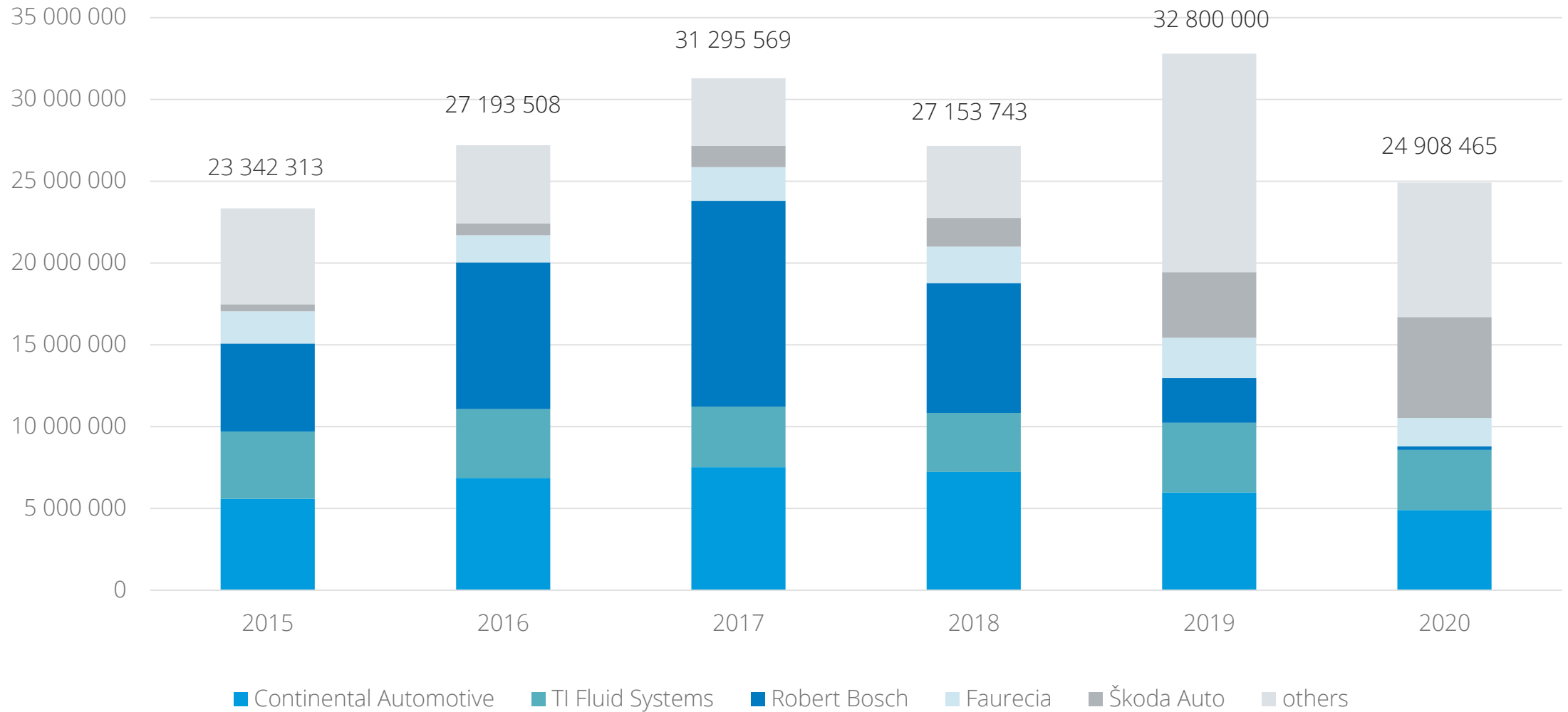


faurecia

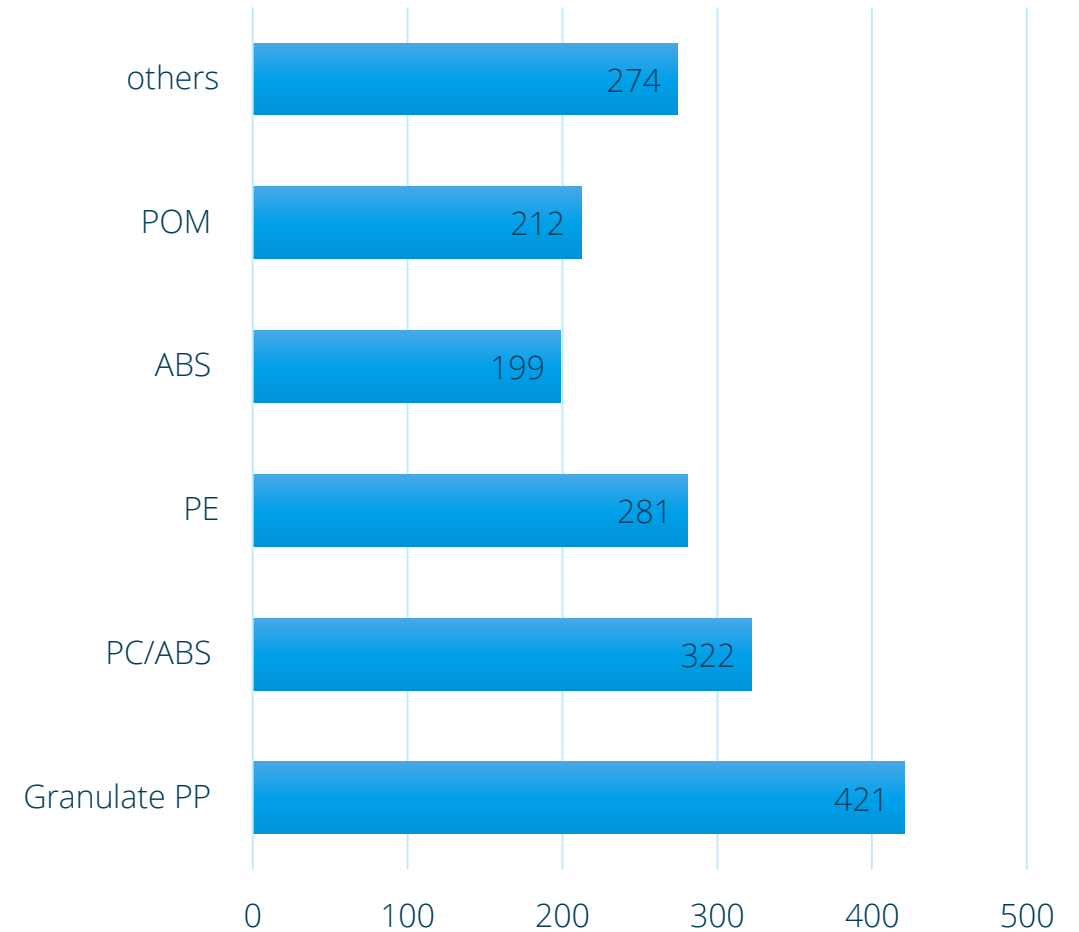
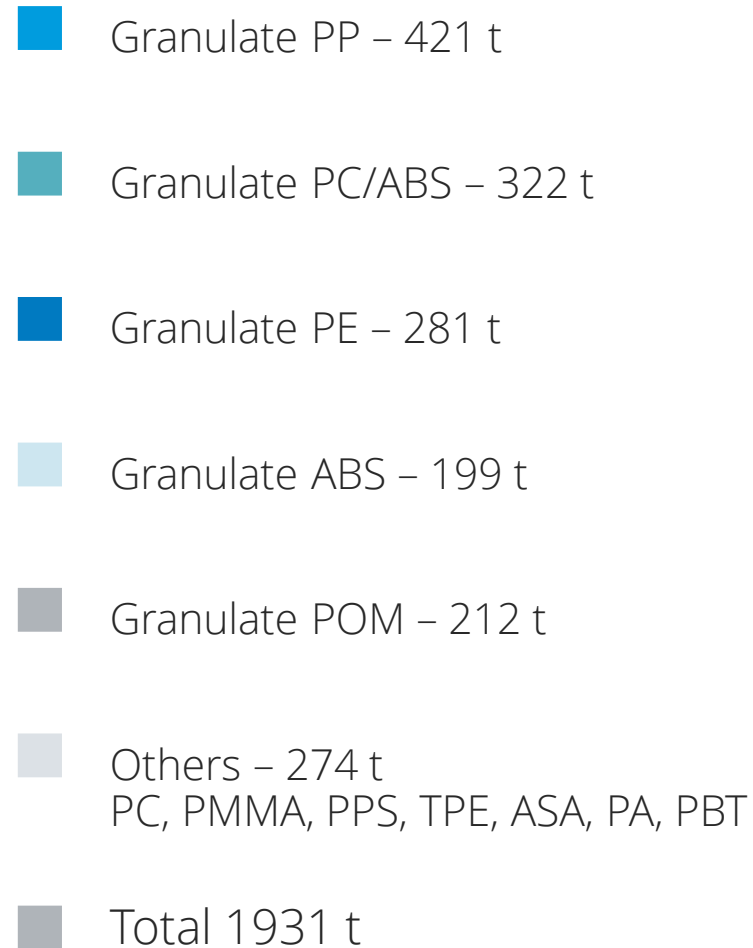


Sales in EUR

Automotive **84 %**



Material Consumption



Automotive

Interior parts



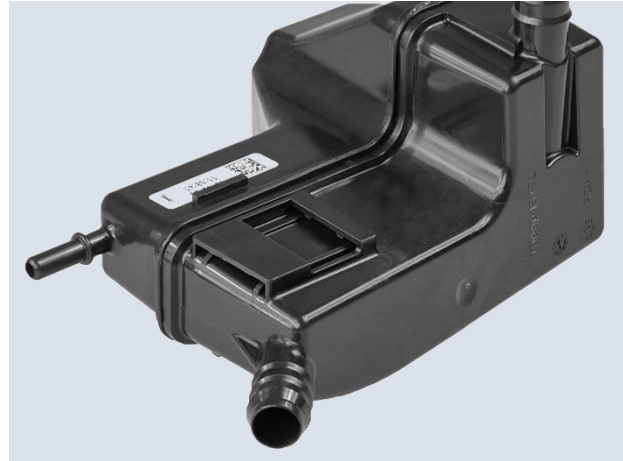
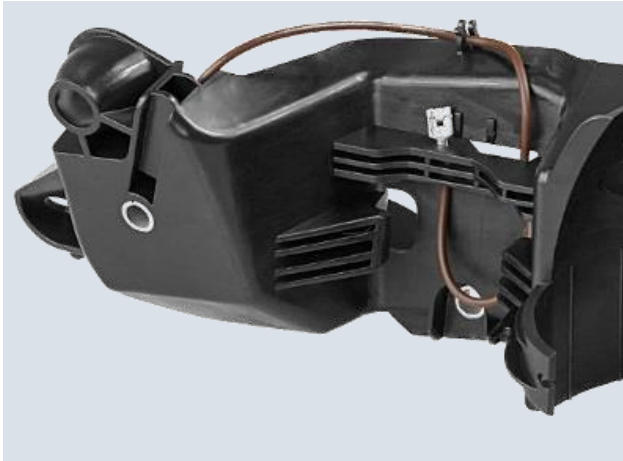
Automotive

Exterior parts

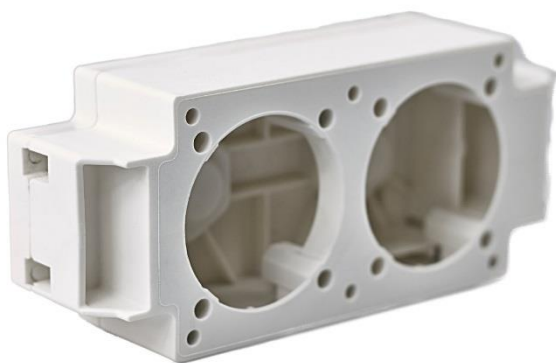
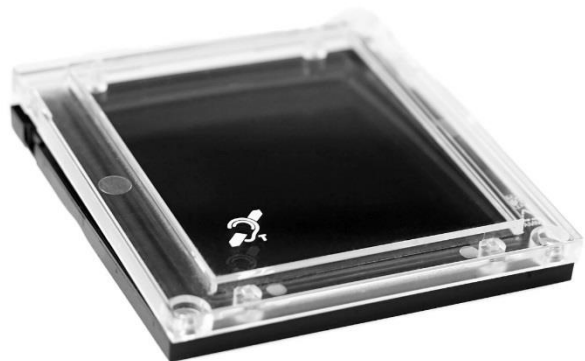


Automotive

Functional parts



Electro



TECHNOLOGY



Product development

Product design

Calculations and simulations

Prototyping

Measurement and testing

Software in use

- Development environment - Catia V5
- Simulation of the injection process - MOLDEX 3D
- KVS, Connect



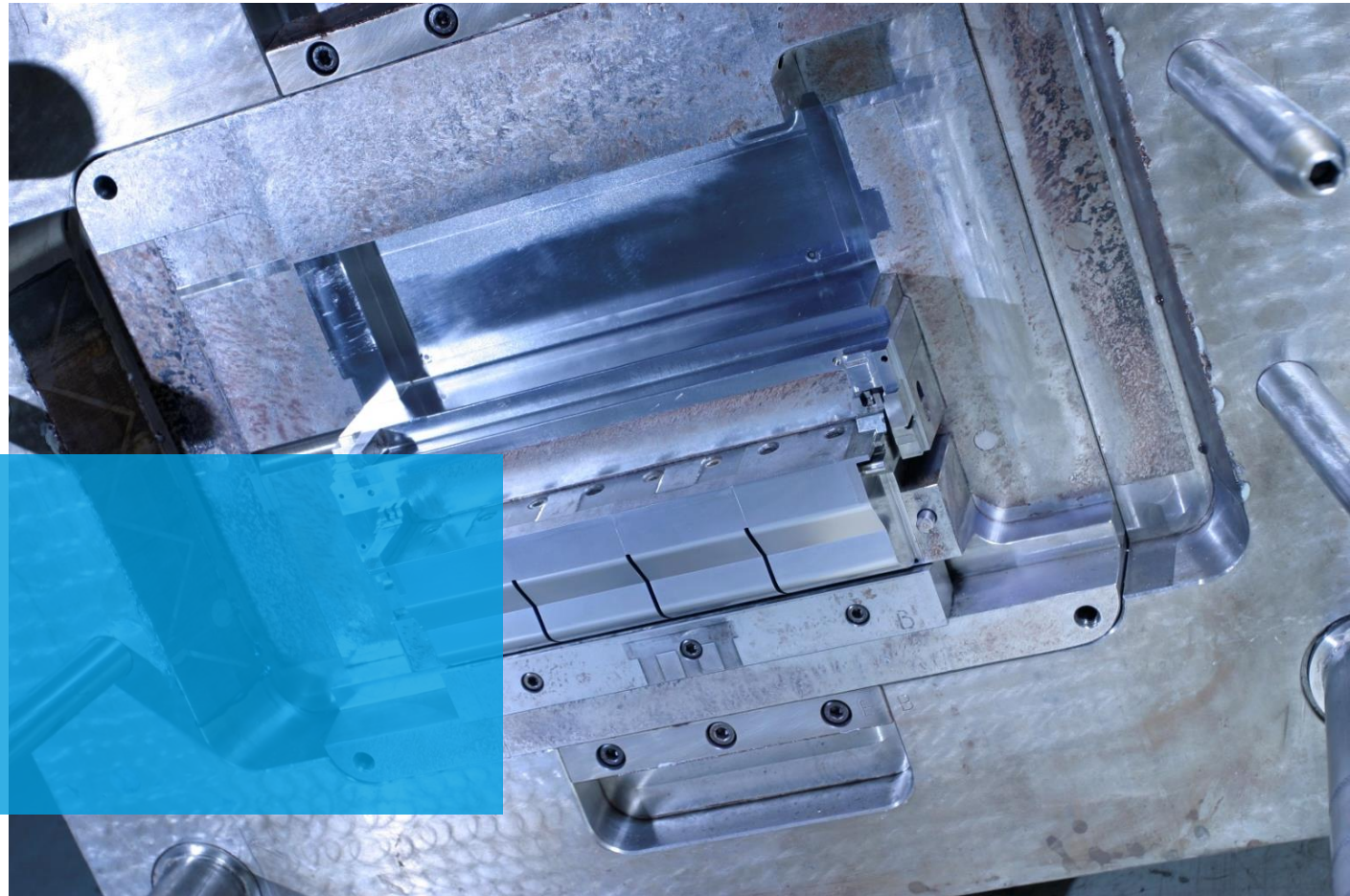
Development and production of moulds

15 % internally

85 % externally

Software in use

- Solidworks
- Catia
- NX
- MOLDEX 3D



Toolshop Machinery

EDM - PENTA, EXERON, FANUC

- Hold driller
- Wire cutting machine
- Electroerosion

CNC Milling - HERMLE, TAJMAC

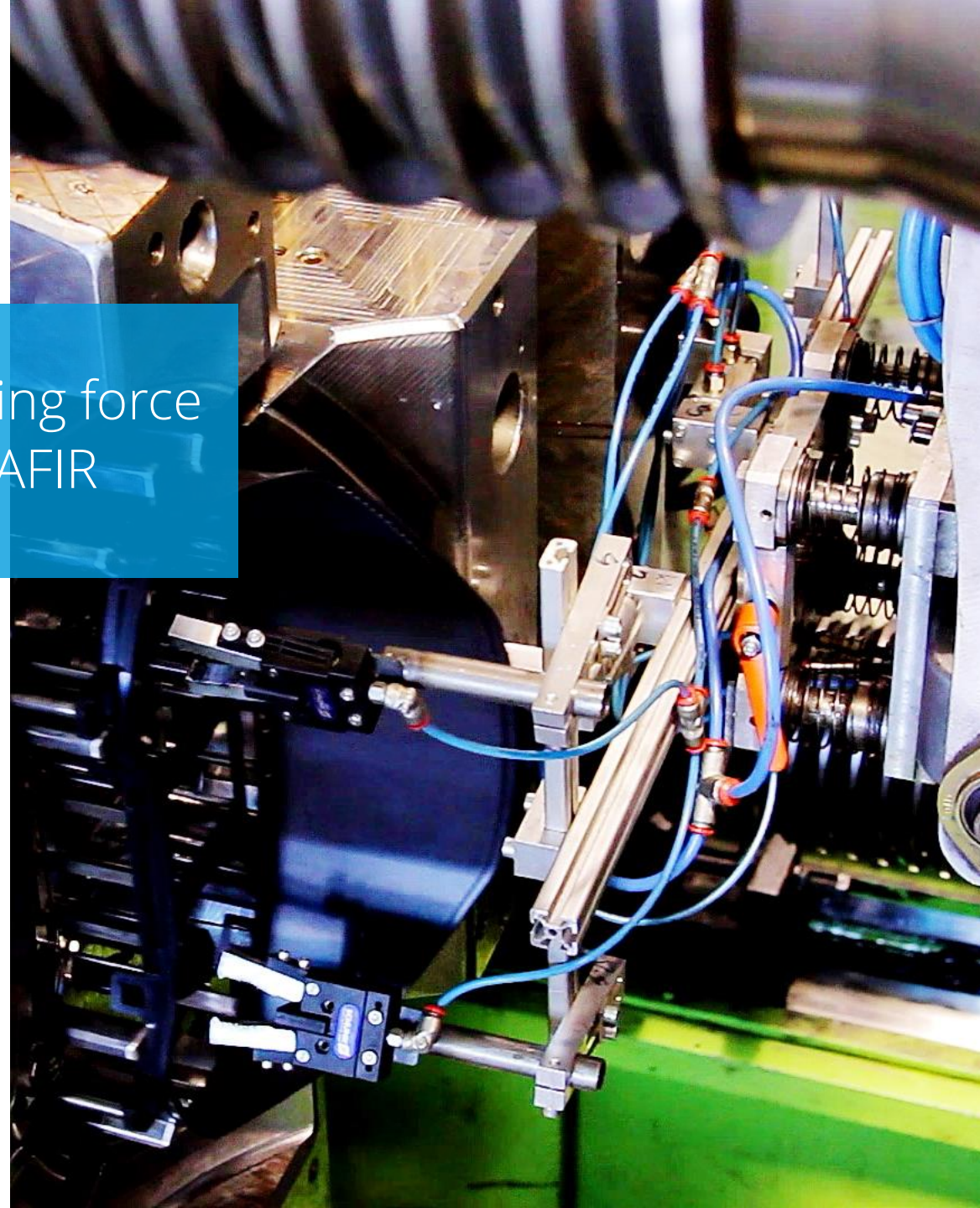
- 3D milling machine for graphite electrodes
- 3D milling machine – table size 1200 × 1000 mm
- 5D milling machine – table size D = 650 mm
- Spotting press



Injection Moulding

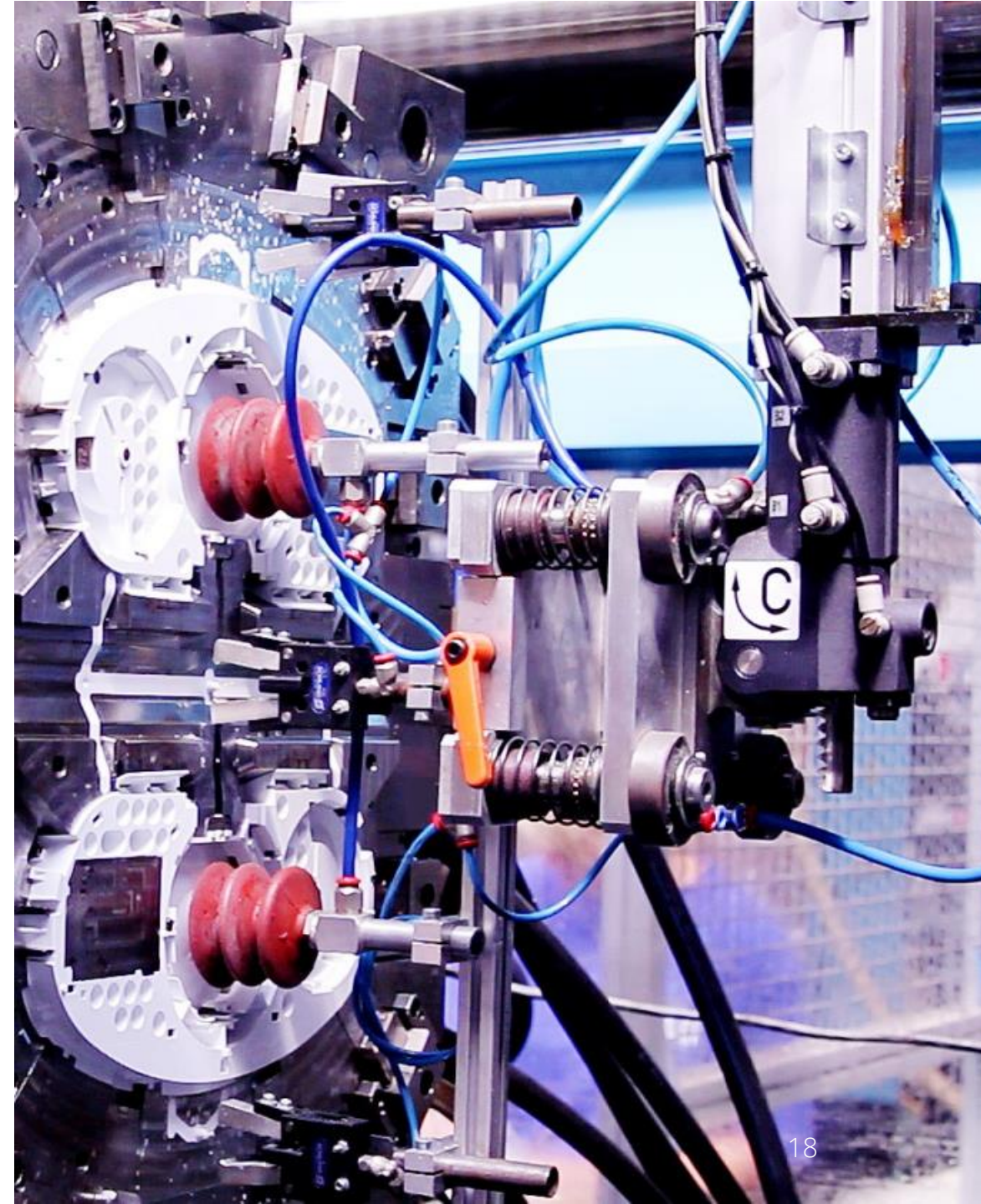
Injection moulding machines with clamping force
from 50 to 800 t - ENGEL, DEMAG, ZHAFIR

- 40 IM machines
- 3 IM machines for 2K injection moulding
120 t, 150 t a 350 t
- 5 electric IM machines



Injection Moulding

- Nitrogen injection moulding
- Parts from transparent materials
- Overmoulding inserts
- Heating of the tool up to 160°C
- Deburring by heat
- Sprue removal by milling
- Sprue removal by laser cutting
- Cyclone pre-cleaning of raw materials



Welding

Hot riveting

Hot Plate welding

Ultrasonic welding

Vibration welding

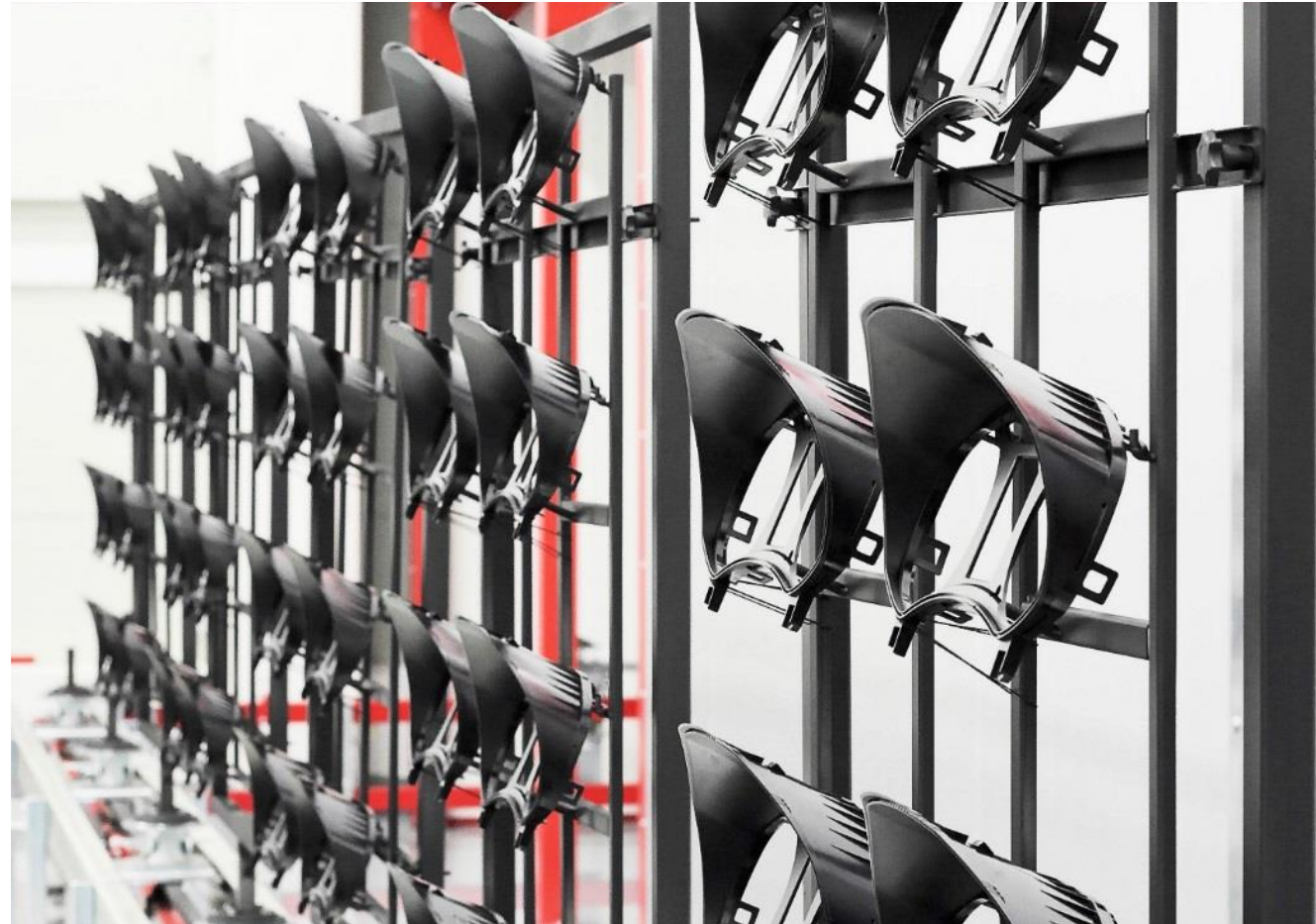
Laser welding



Painting

Vertical automatic painting line

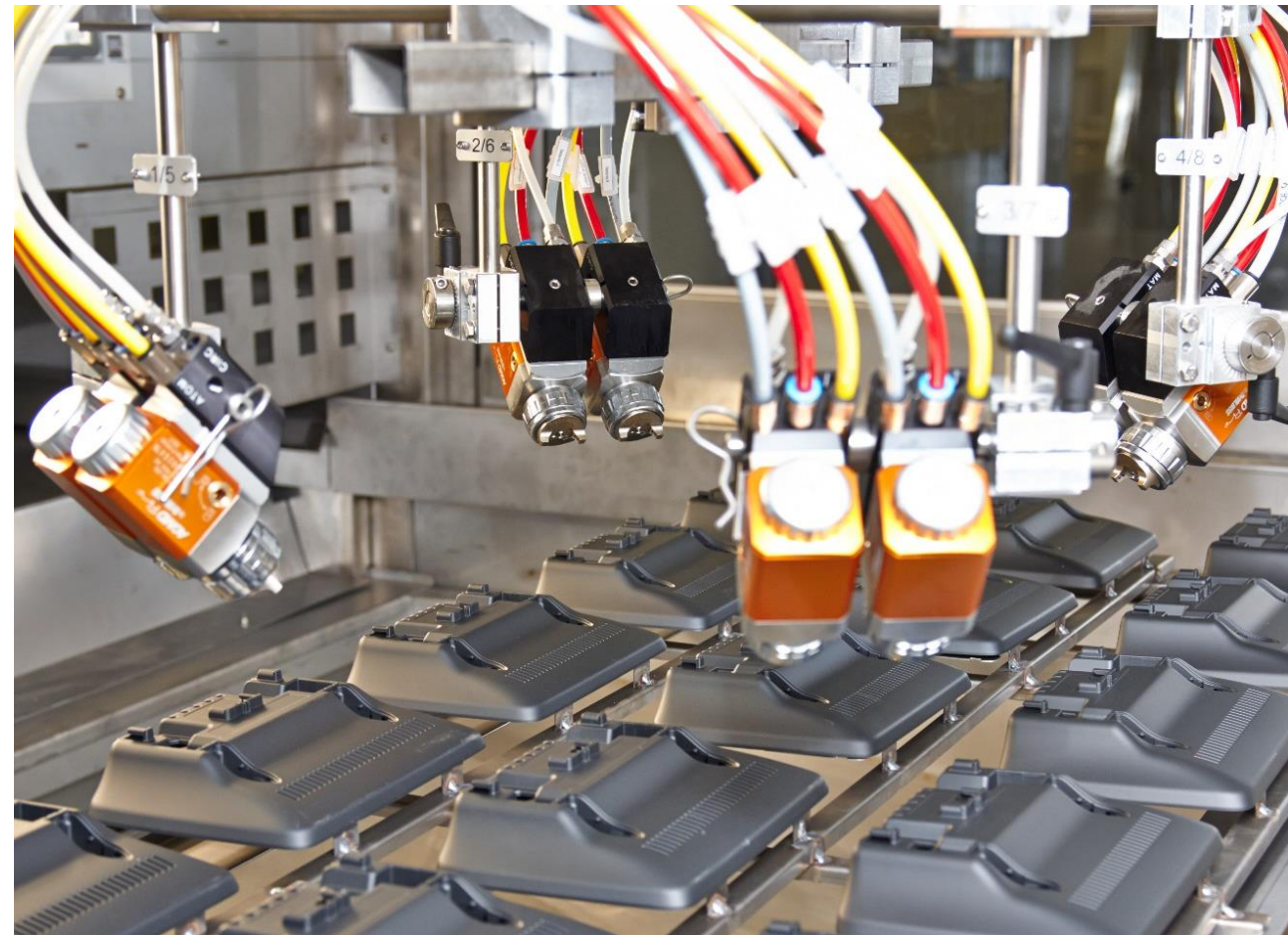
- Robotic **CO₂** pretreatment
- Water based painting systems **1K** and **2K**
- **Nitrogen** medium for painting
- Size of painting frame: **110 × 90 cm**
- Maximum annual capacity: **300 000 m²**
- **Low-pressure plasma** surface pretreatment of plastics for adhesive bonding



Painting

Flatbed painting

- Robotic **CO₂** pretreatment
- Water based painting systems **1K** and **2K**
- Size of painting frame: **128 × 64 cm**
- Maximum annual capacity: **170 000 m²**
- Parts deburning
- **Low-pressure** plasma surface pretreatment of plastics for adhesive bonding



Chrome Plating

Galvanic line

- Designed for plating **ABS** and **ABS/PC** plastic parts
- Maximum annual capacity: **300 000 m²**
- Maximum batch dimension **2600 × 300 × 1200 mm**
- Final chromium plating in **hexavalent** and **trivalent** Cr
- **Microporous** nickel | **Microcracked** nickel | **Satin** nickel

3Q/2021 testing

4Q/2021 start of production

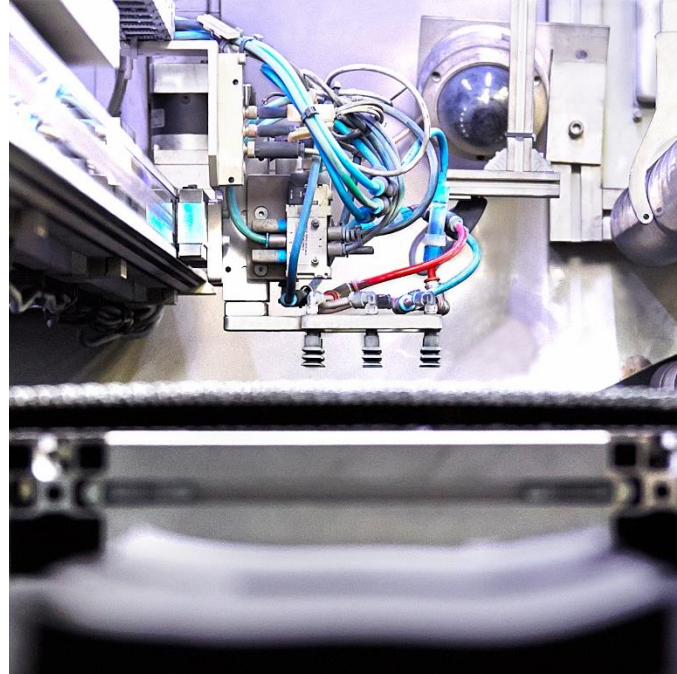


Other technologies



Hot stamping

Film finishing of plastic parts for decorative design



Laser cutting

For complex shapes of different materials



Laser printing

Injected/painted plastic parts

Other technologies

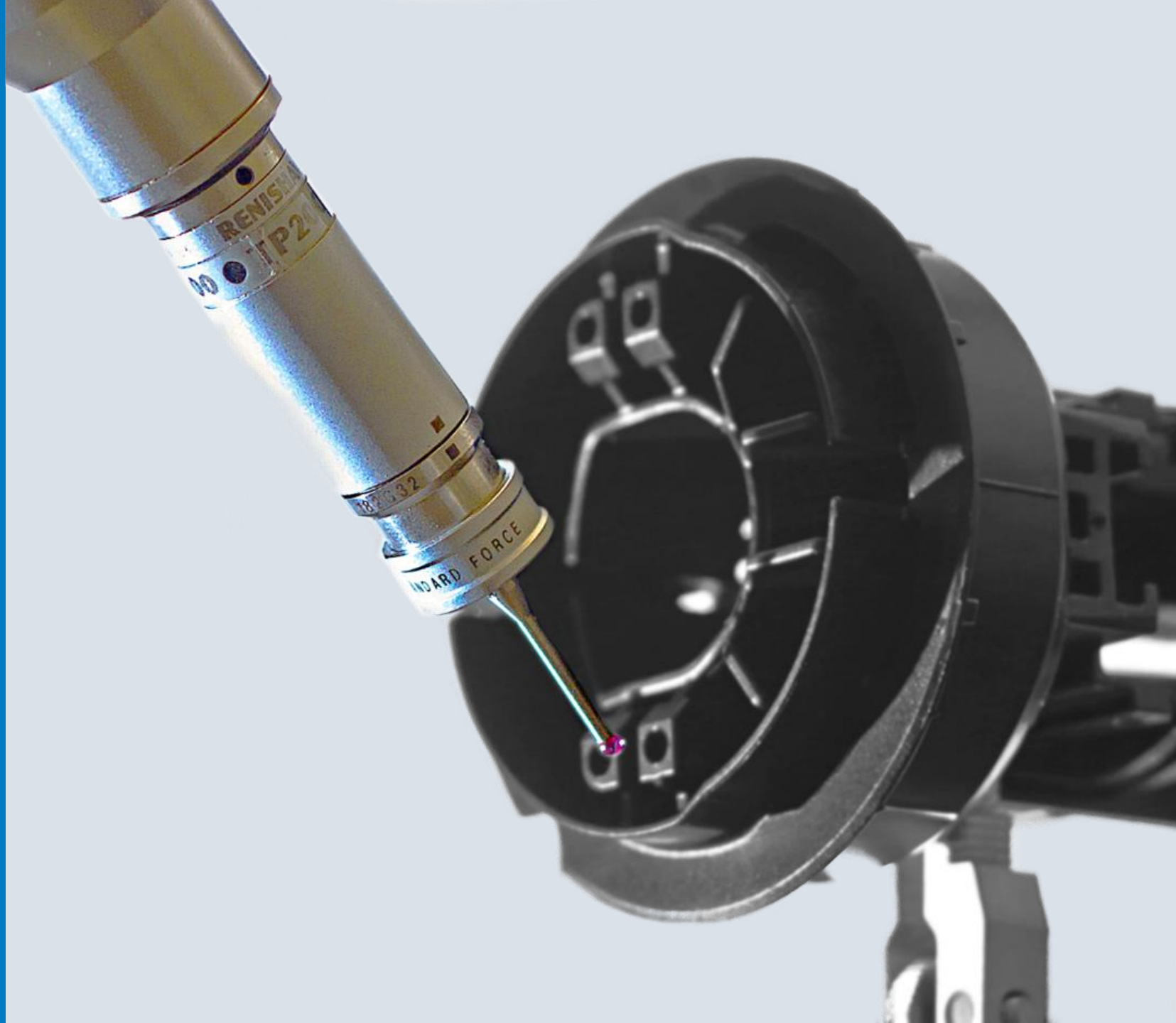


Tampo printing



Assembly

QUALITY



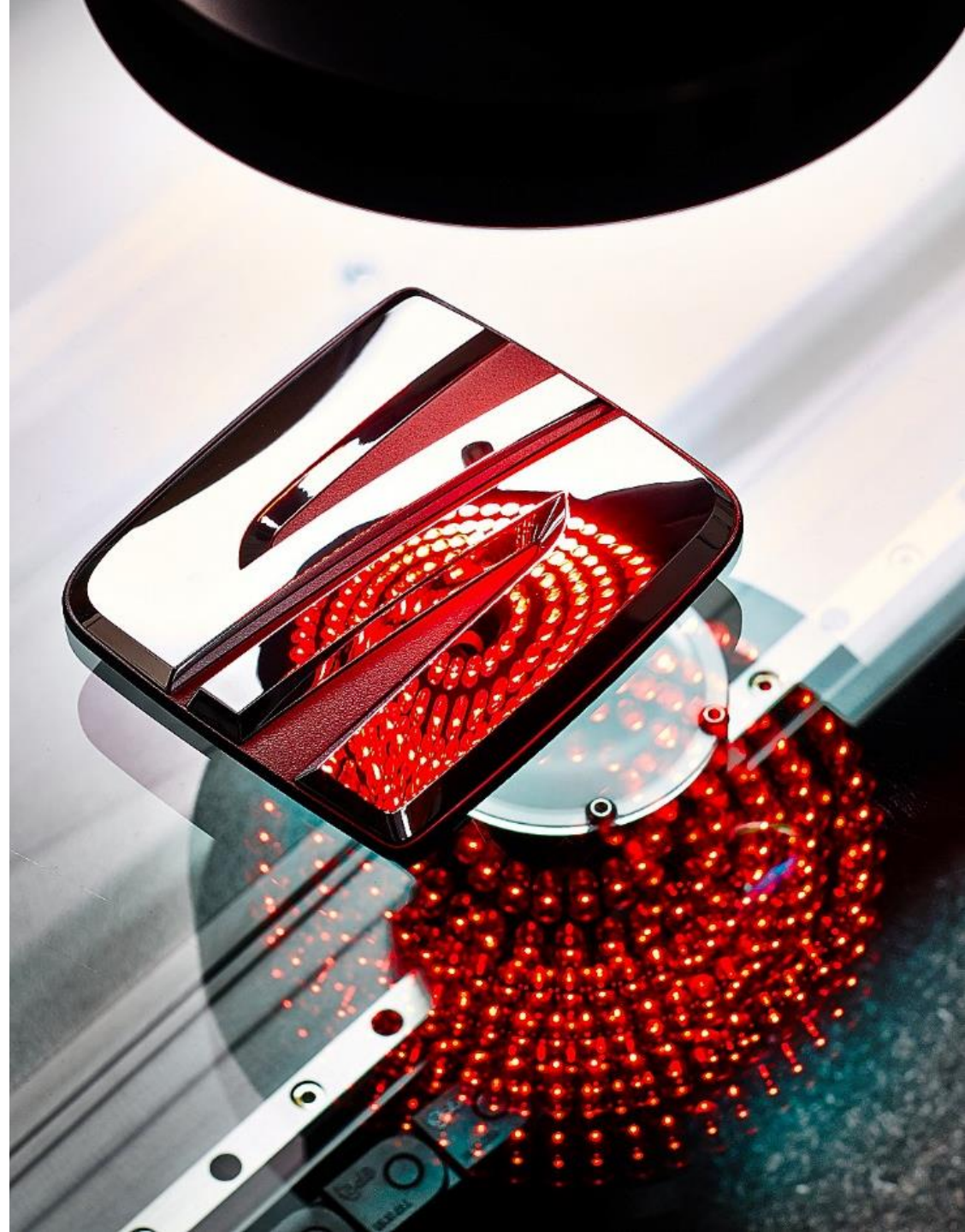
Quality System

Standards

- ISO 9001
- ISO 14001
- IATF 16949

Planning

- APQP - PPAP (PSW)
- VDA 2 - PPF (EMPB)



Testing and Measurement

Metrology

- Excel 1654
- Wenzel LH 65
- Wenzel LH 87
- GOM Inspect Enterprise
- ATOS Compact Scan 12M/Core

Painting

- Spectrophotometry
- Thickness measurement
- Adhesion testing
- Scratch resistance
- Environmental cyclic tests
- Weather resistance and aging resistance
- Care resistance test
- Cream resistance
- Hot water test



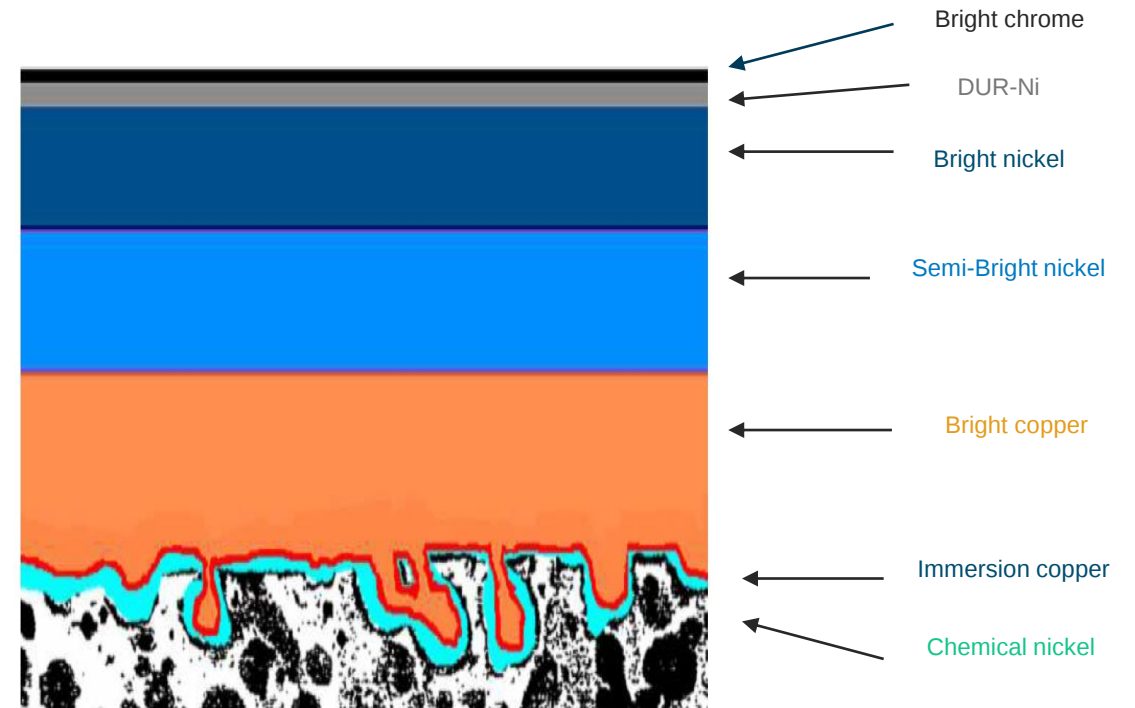
KP Galvano

Solution analysis

- Testing parameters of galvanic baths
- Quality control/process monitoring/optimize galvanic process

Material testing

- Quality control of chrome coated plastic parts
- Chrome-coated plastic parts – analysis of defects and causes of origin



Solution analysis capability

- Surface tension measuring
Bubble pressure method, Wilhelmy Plate, DuNoüy ring
- Atomic emission spectrometry
- Hull Cell
- pH, conductivity, density determination
- UV/VIS Spectrometry
- Analytical determination of baths parameters - titration



Material testing capabilities

- Visual properties (visual evaluation and color matching)
Matte chrome surfaces, high gloss chrome surfaces
- Coating system analysis-coating thickness
Microscopically, coulometric, STEP Test, X-ray fluorescence, Fuhrmann test
- Adhesive strength
Cross-cut test
- Temperature resistance and resistance to environmental cycle test
Stability under heat, resistance to sink marks, PV 1200
- Corrosion resistance
CASS test, PV1200 followed by NSS Test
- Verifying the origins of defects – chrome plated plastics parts
Cut, sample encapsulation, microscopic evaluation



Automated Washing Line

Customer service

- Washing and drying
- Palletizing
- Machine stretch foil packaging
- Records in the information system
- Storage
- Transport back to the customer

CAPACITY: **150** containers per hour



Logistic Services

- EDI communication
- Consignment warehousing
- Barcode labeling

New warehouse hall

- Increase inventory to 4100 pallet locations
- Self-navigation semi-automatic loaders
- unique automatic roller track
- speeding up and streamlining intralogistics processes





THANK YOU FOR YOUR ATTENTION.

Plastika a.s. | Kaplanova 2830 | 767 01 Kroměříž |
+420 573 511 111 | www.plastika.cz