



*... and we'll return your mold to form*



[www.alfachrom.cz](http://www.alfachrom.cz)

# Our services

## Molds repairs and modifications



Our goal is to provide complete services in the mold preparations for serial production (fine tuning), known as pre-service, preventive molds maintenances, repairs of burrs/flashs at parting lines, die spotting, dimensional correction of deformation, modification, molds polishing for painted parts, textured parts, as well as optical parts with mirror gloss

**We are able to process molds up to a weight of 50 tons.**

### Facility layout

aprox. 2600 m<sup>2</sup> of production area

### 2+2 bridge cranes

2 bridge cranes in two ships  
- max load 10 and 50 tonns

# A word from our CEO

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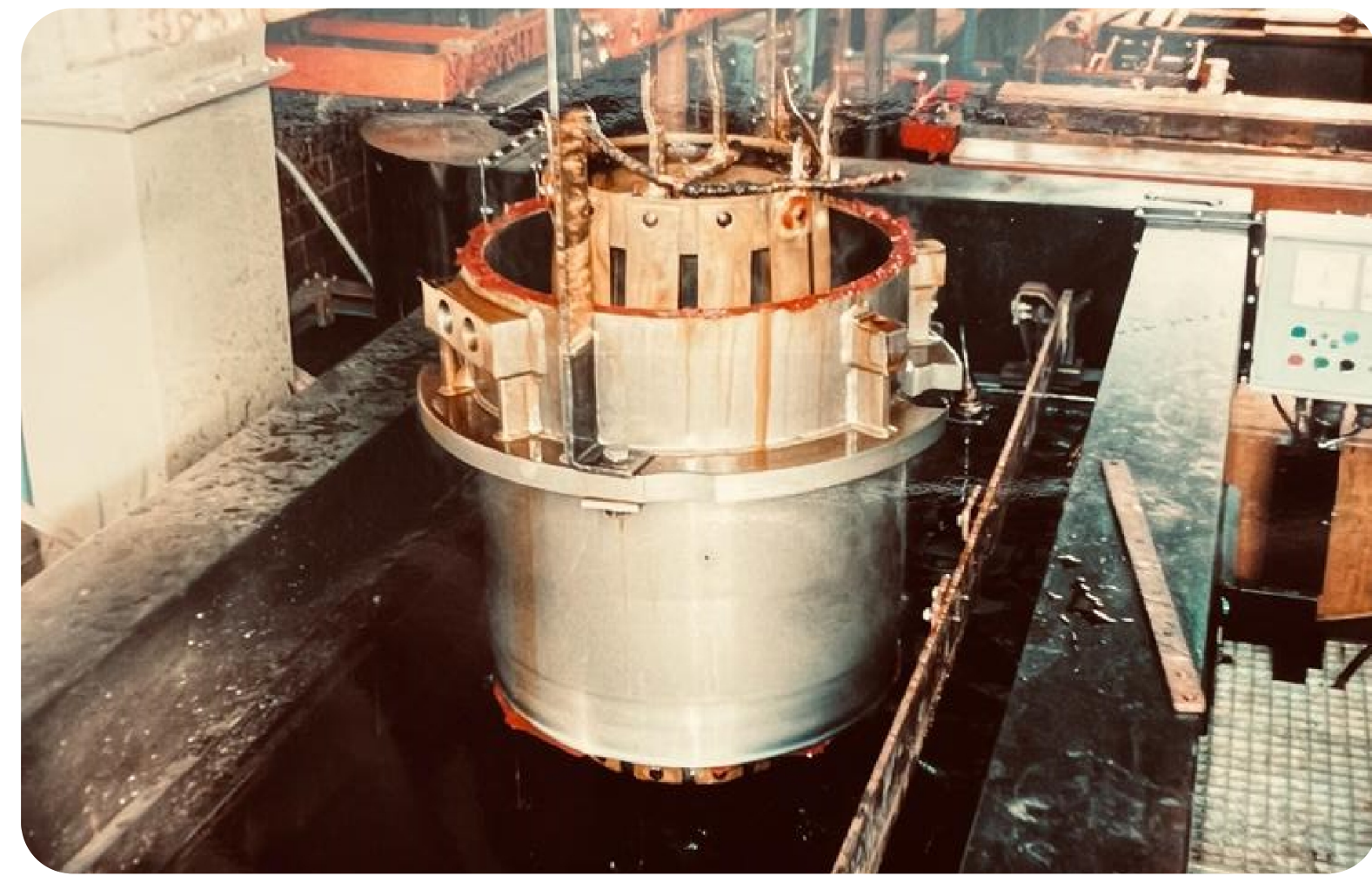
The intention of our company is to offer a comprehensive portfolio of services in the field of mold servicing, similar to the system of regular car inspections, but also service interventions in the event of various mold accidents.

We rely on the personal and professional approach, experience and manual skill of our staff, flexibility, communication and effort to solve the problem.



**Aleš Koutný**  
CEO

# History of company



Starting a business  
ALFA CHROM Company  
- chrome-plating plant

1. 11. 1991

1993

Purchase of  
Selective Plating  
technology

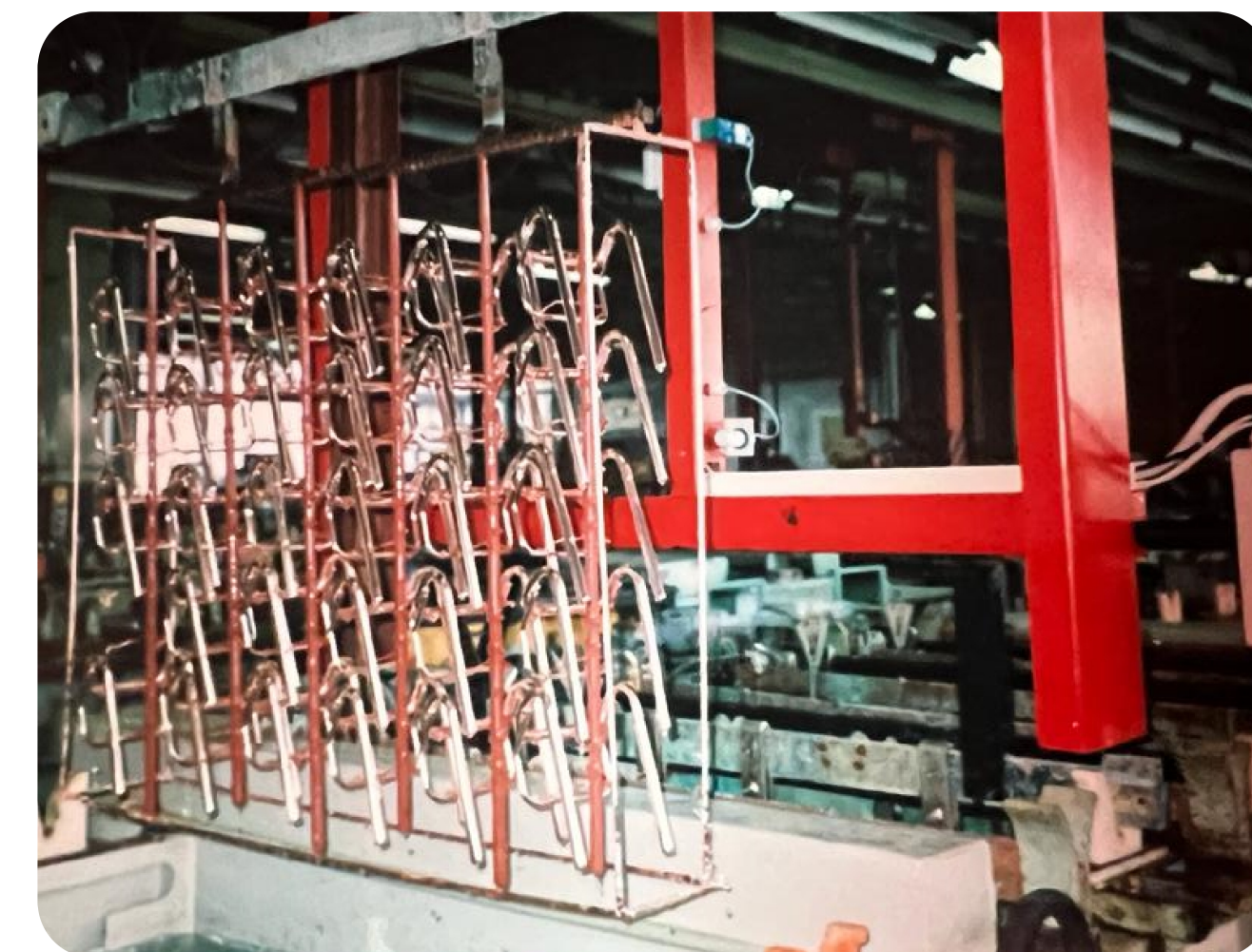


Division of activity into  
electroplating and service  
of molds and rollers

1997

1999

Lease of ETA Litovel  
electroplating  
plant



Buyout of ETA Litovel  
electroplating plant  
first Skoda Octavia bumper

2001



Sale of electroplating plant  
We start from scratch  
Only service and 8 people

2005 - 2012



Construction of a new  
operating hall

2015 - 2018



Extension  
of the hall

2003

Headquarter at the  
address Polni in  
Bruntal

2013 - 2014

Machine and technical  
equipment purchases

2021 - 2022



# What do we offer you as part of the 2nd stage?

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- › Complete mold disassembly
- › Cleaning from conservation, lubrication of moving parts
- › Connecting hydraulic circuits, checking function and tightness
- › Connection of cooling circuits, function and tightness check
- › Revision or assembly of electrical components
- › Inspection of the parting lines of molds, execution of the image on the ink press
- › Complete photo documentation of all performed technological operations
- › Preparation for transport to the customer
- › Other services according to the customer's wishes



# CAD/CAM Technologies

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## CAD

- › Design solutions for modification and modification of molds
- › Preparation of 3D and 2D for machining
- › We use Catia – V5 - preferred data formats CATPart, STP, IGS

## CAM

- › Preparation of programs for CNC milling centers
- › We process data in the WorkNC program (formats used: native WorkNC data)



# Micro-welding

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## Laser micro-weld

- › welding of complex, small and hard-to-reach shapes
- › the properties and types of additives are the same as for pulse micro-welding

## Pulse Micro-TIG

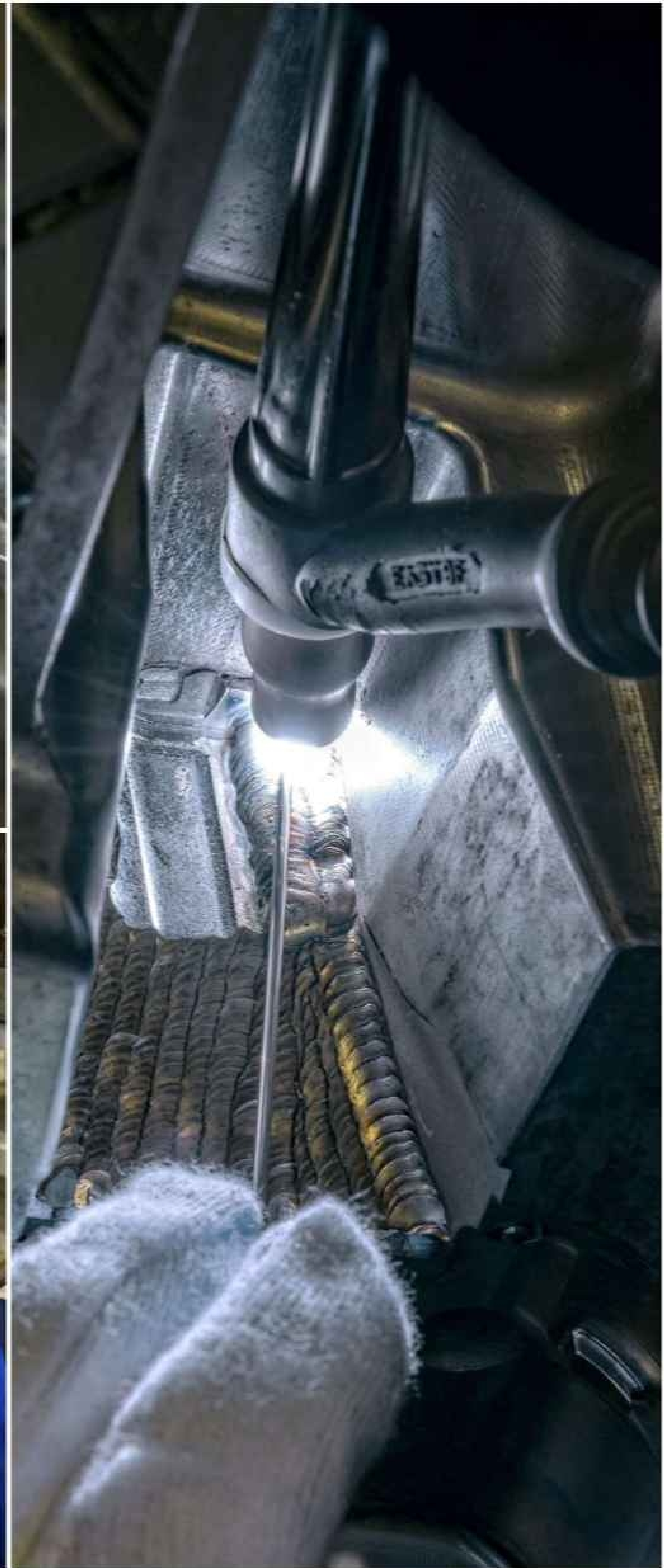
- › Shape changes, dimensional correction and adjustments
- › Refurbishment of parting lines and inlet/feeding systems
- › refurbishment and modification of cutting and bending edges in stamping tools

## Cold micro-weld

- › Filling scratches and rough damages on the cylinders and hydraulic piston rods. Thanks to careful application the weld does not cause damage or affect the chrome coating.







# CNC milling

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## 5-axis CNC milling center FIDIA GTF2214

**Axis travels:** X=4200mm, Y=2200mm, Z=1400mm

**Table dimensions:** X=4000mm, Y=2000mm

**Table load:** 9000kg/m<sup>2</sup>

**Spindle Parameters:** HSK63A, 55 kW - 24.000 1/min – 88 Nm



## 6-axis CNC milling center FIDIA KR199 - 1200

**Axis travels:** X=1650 mm Y=750 mm Z=850 mm

**Table dimensions:** X=2000 mm Y=1250 mm

**Rotary table diameter:** 1200 mm

**Rotating table load:** 10000 kg

**Total capacity of the table:** 3500 kg

**Spindle Parameters:** HSK100A, 65 kW - 15.000 1/min – 124 Nm





# EDM - spark erosion

## Exeron EDM 316 XXL

**Axis displacements:** X=2000 mm Y=1180 mm Z=800 mm

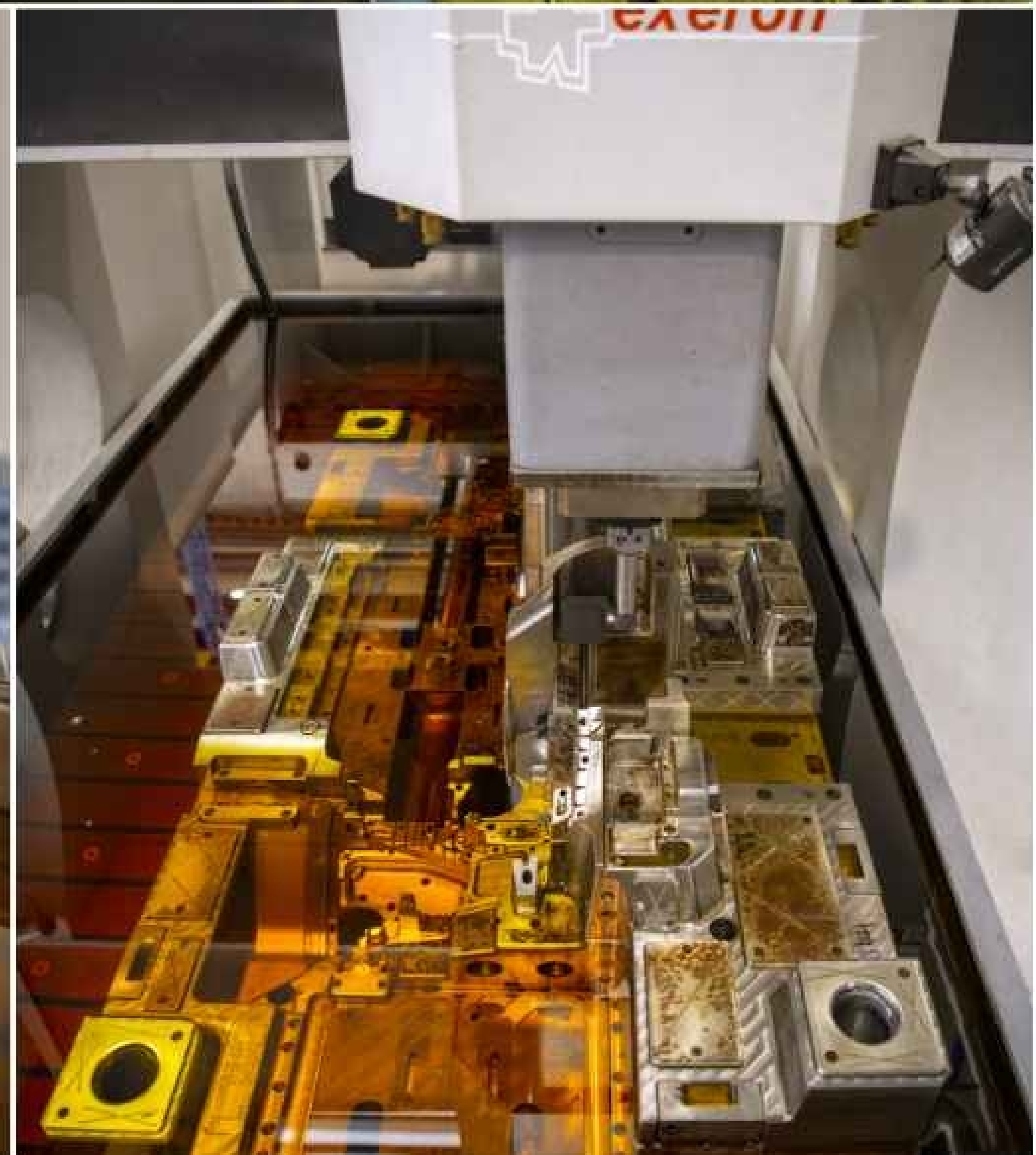
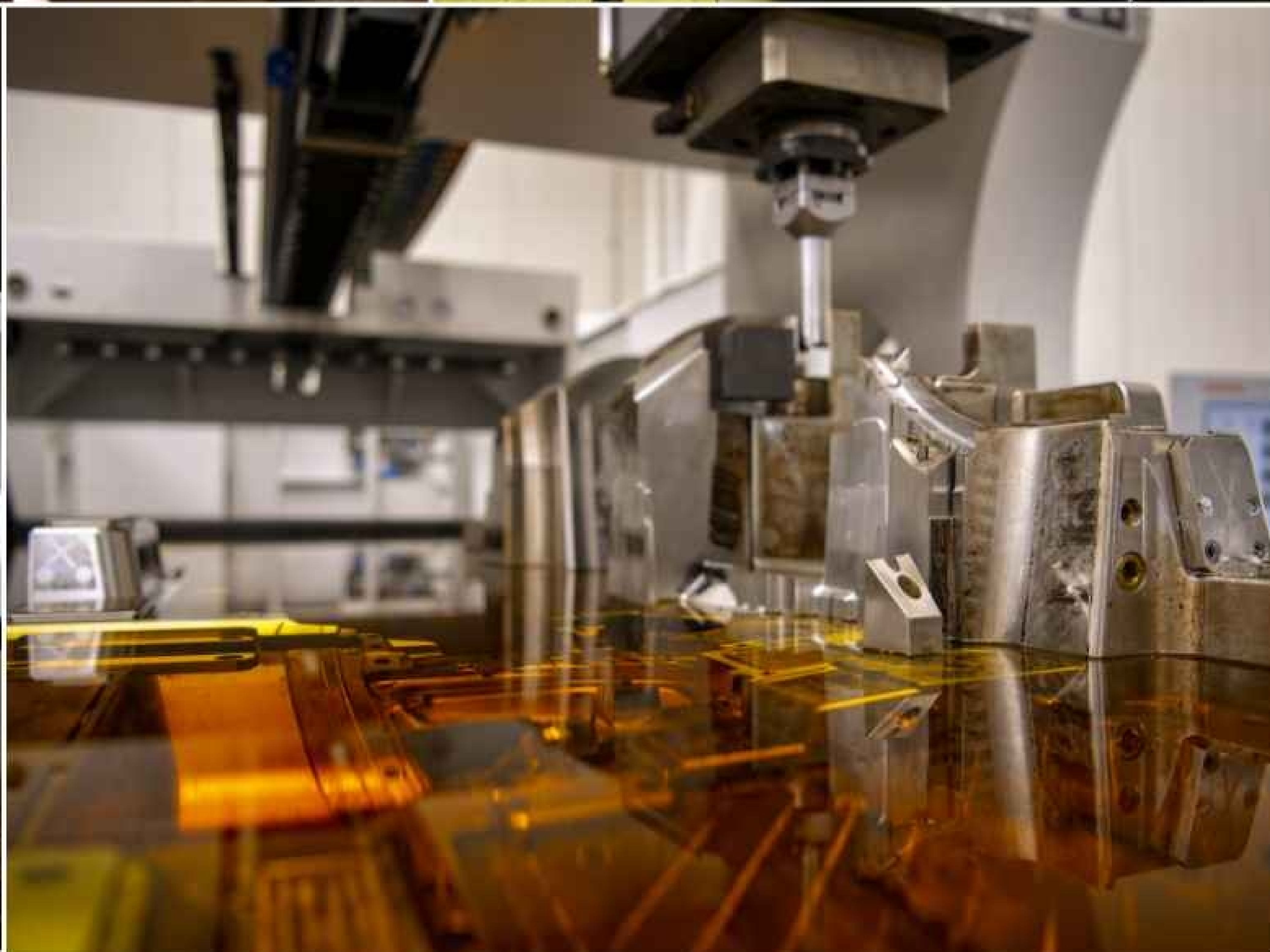
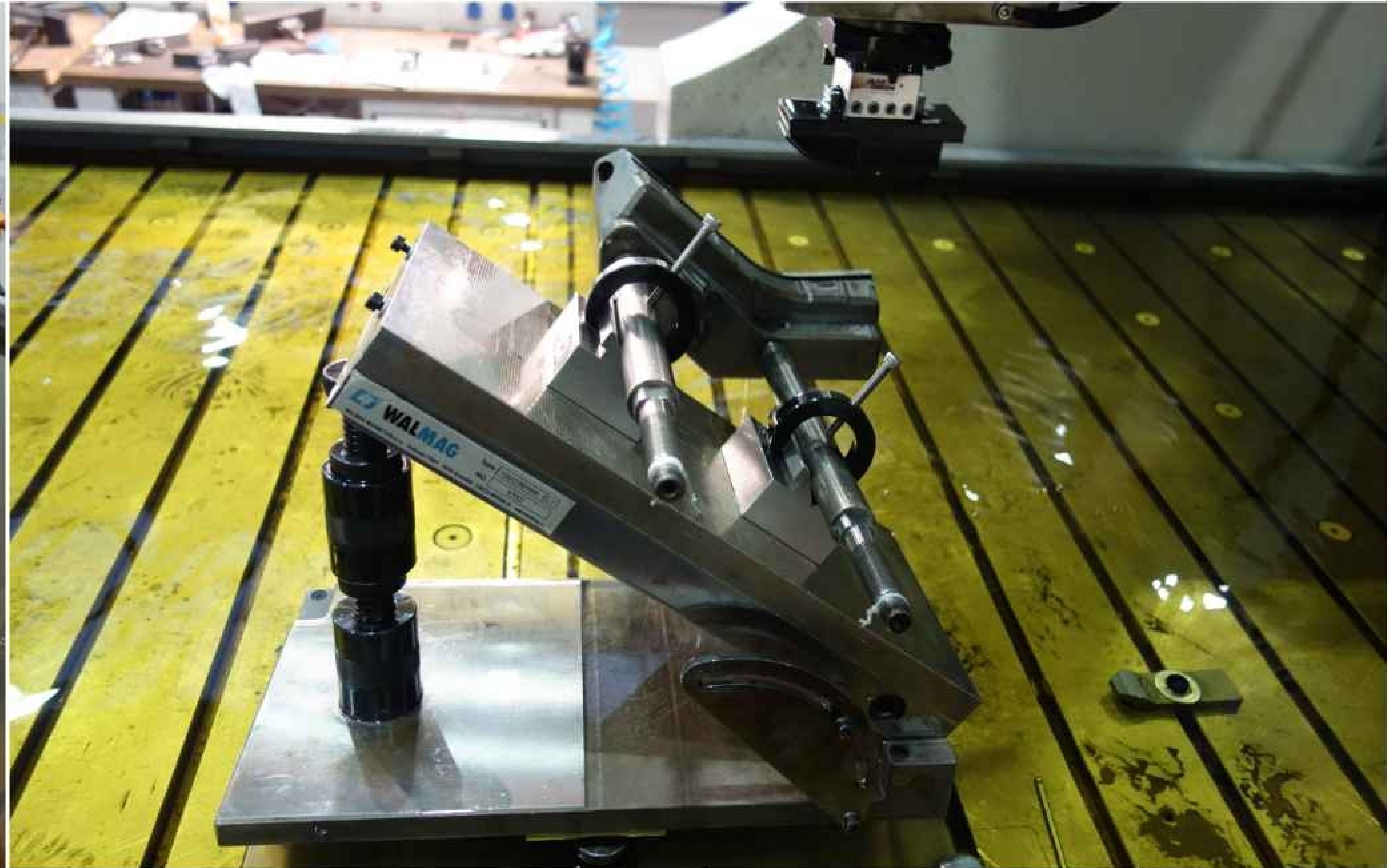
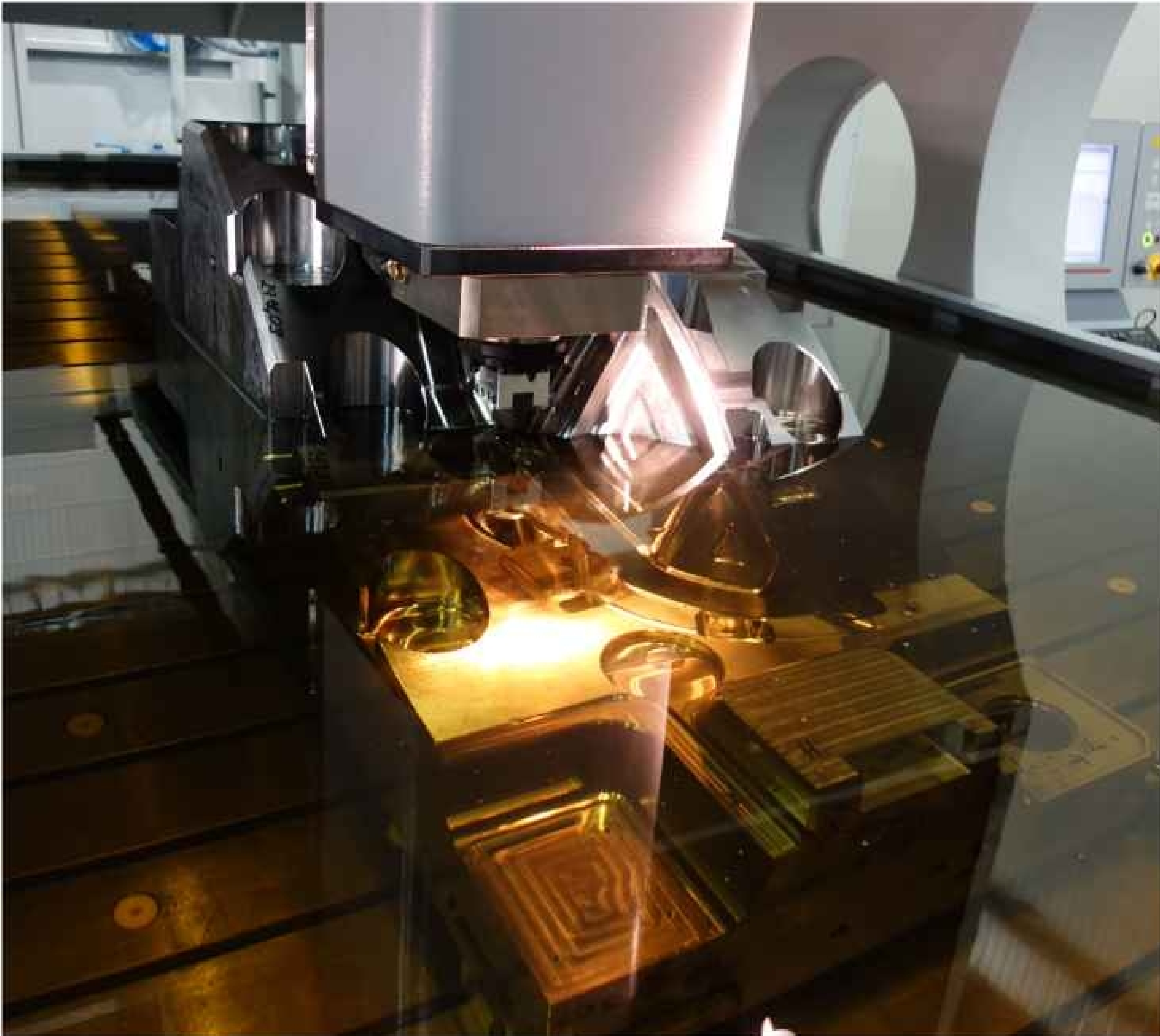
**Table dimensions:** X=2500 mm Y=1350 mm

**Workpiece load capacity:** 8000 kg

**High-speed generator** Exopuls+ 120A with minimal electrode wear and adaptive current control

**Clamping system:** Erowa





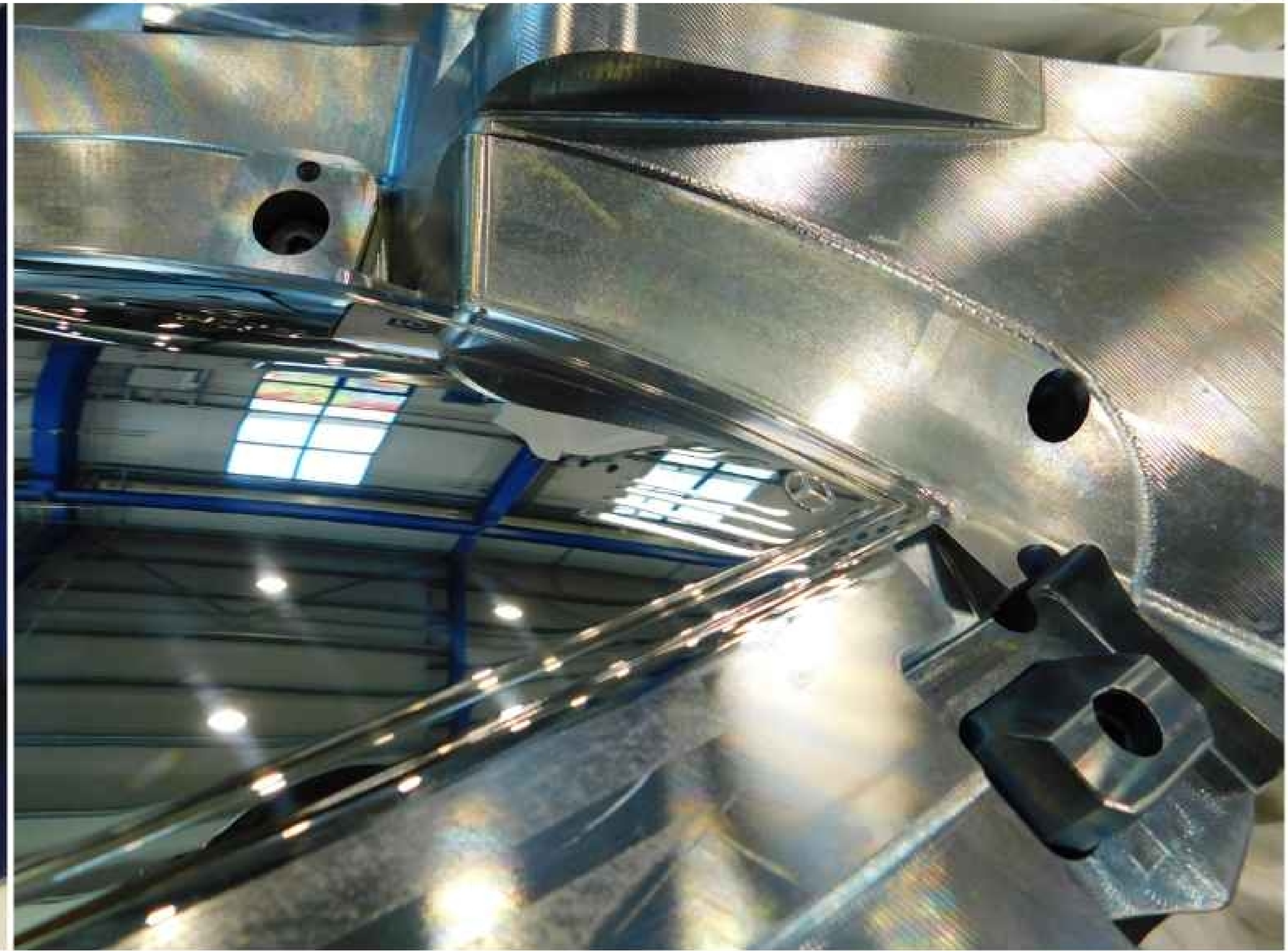
# Polishing of mold shapes

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Used for:

- › molds for the consumer and automotive industries





# Die-spotting

We provide die-spotting and revisions of parting line of molds up to 60 tons of weight.

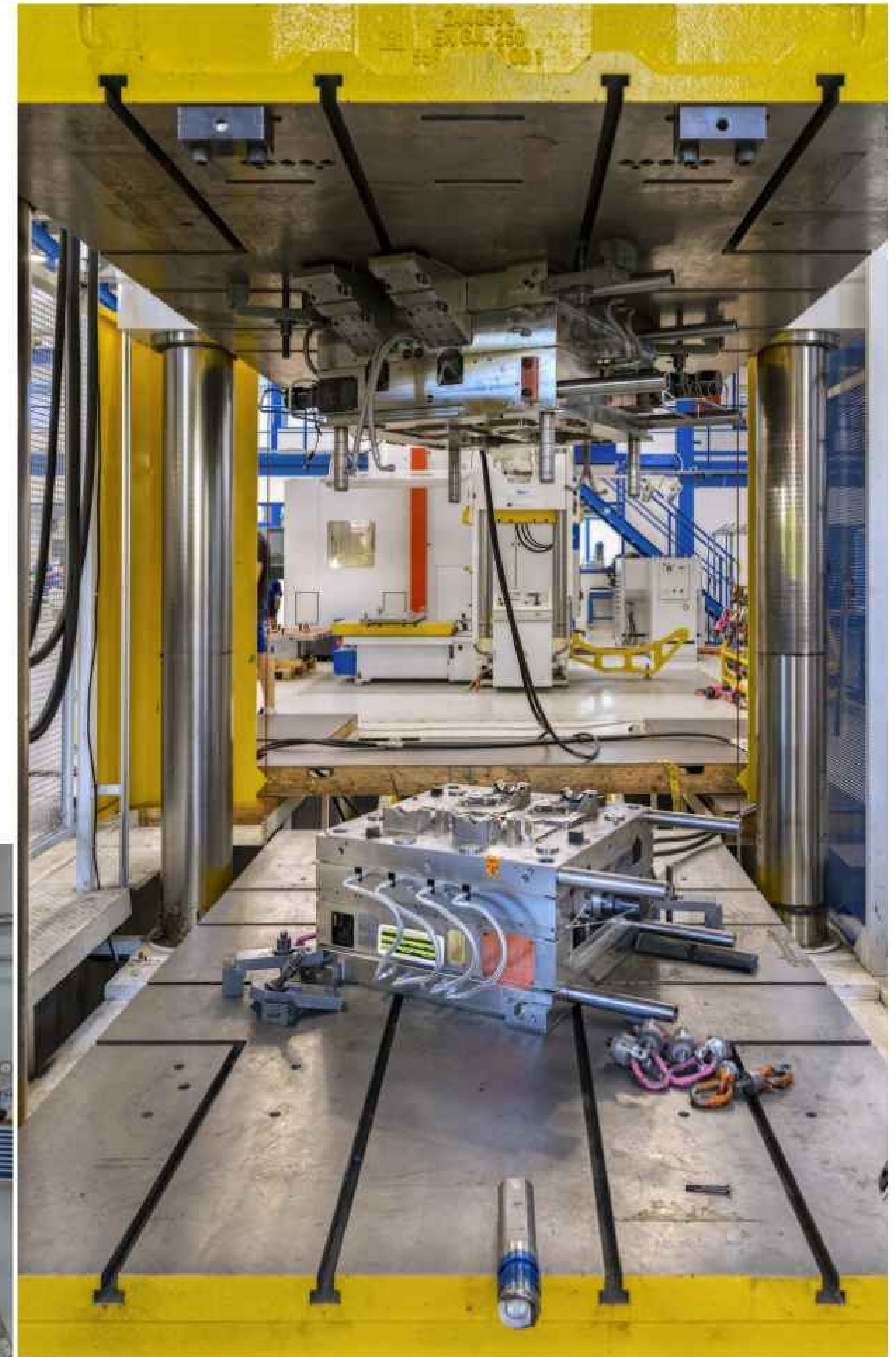
## 2 die-spotting machines:

### TUS 100 - weight of mold up to 10 tonns

- die-spotting table with dimensions – 100 x 130 cm

### TUS 200 - weight of mold up to 60 tonns

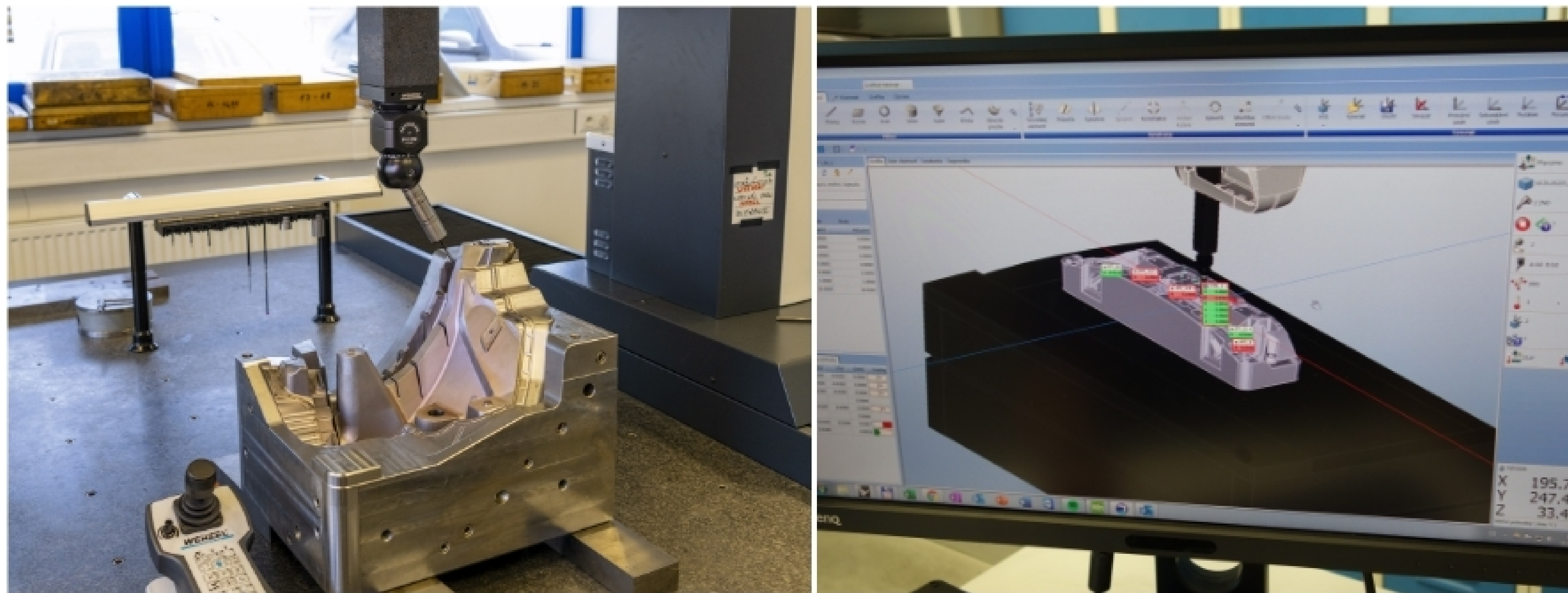
- die-spotting table with dimensions – 200 x 300 cm  
(eg. molds for automobile bumpers)





# Measuring

## 3D measuring



## Chromium coating thickness measurement



## Roughness measurement



## Non-destructive hardness measurement

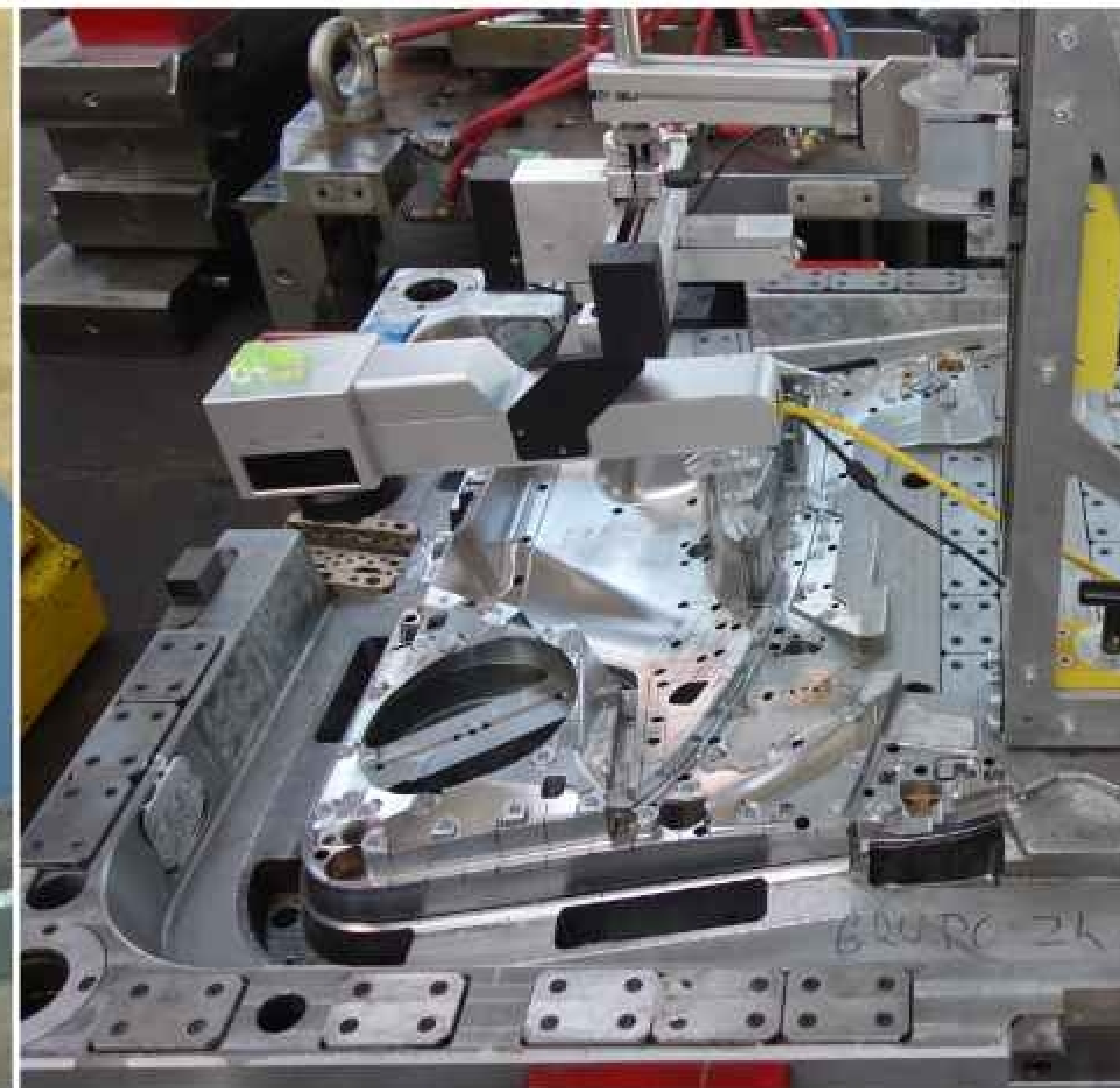


# Engraving

## HXM20 - COMPACT II

Smart laser is an engraving system, used directly for materials with low reflectivity (such as plastics, wood, paper and others), including for marking sub-metals with low reflectivity.

Use in the production of labels, date grids and labels.



# Repairing of rollers and pistons

## Local metal coating

### Used for:

- › repairs of machine parts, molds, cylinders, hydraulic piston rods and rollers with plating (hard-chrome, nickel, etc.)
- › the possibility of applying a precisely defined layer
- › without the need for subsequent machining
- › anti-corrosion protection
- › abrasion protection



# Polishing and grinding head tool

We have developed a polishing and grinding head by which we can repair the surfaces of large rollers directly in the machine without the need of dismantling.



# Cleaning unit for cooling circuits of molds

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The device comes as a compact unit consisting of a tank (for its own active chemical substance), a water tank for washing, a capture sump, PP and PVC piping, stainless steel valves, a stainless steel heating coil and sensor, a thermostat, and a stainless steel pump with a frequency converter. Depending on the opted configuration, the unit can be equipped with a digital flowmeter for accurate flow measurement. For visual control of the flow, float flowmeters are provided according to the number of cleaned cooling circuits. The entire device is equipped with two fixed and two swivel hand wheels for ease of handling. The entire structure is welded from PP boards in order for it to be a self-supporting unit without the need of a supporting frame.

**For 6 circuits** with flush



**For 12 circuits** with flush



# Magnetic clamping ball NEOSPHERE

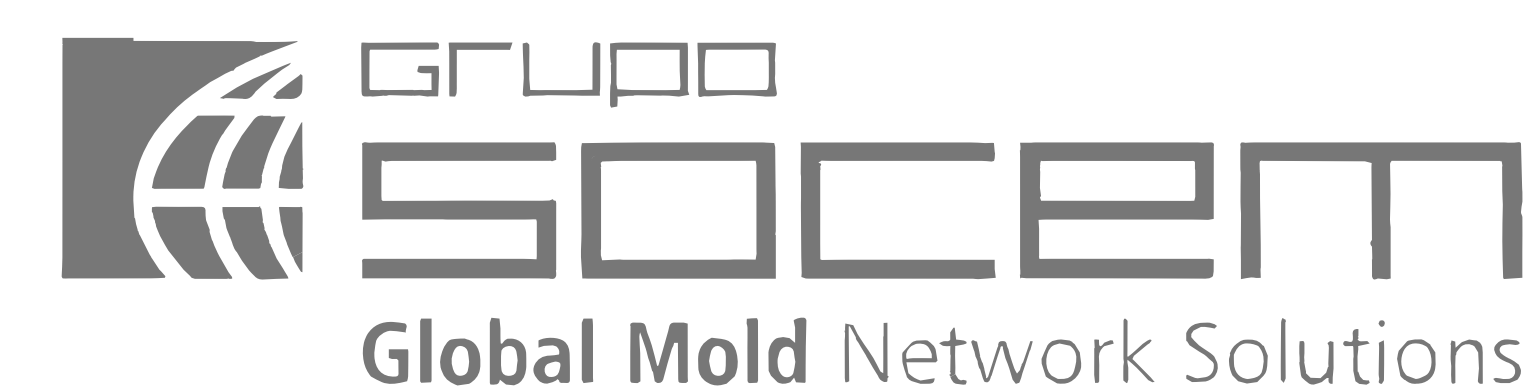
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The powerful magnetic chuck is switched on with the hexagonal T-key provided.

By turning the key by 120 °, the magnetic chuck is fully activated, and partial activation is also possible by positioning the workpiece. High quality NEOSPHERE consists of polyamide housing sphere, which is fitted with fine magnetic chuck poling.



# Our customers



# Contact



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