

# Insights, perspectives and challenges of mechanical engineering in Latvia

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Toms Grinfelds  
Chairman of the Board  
MASOC

# MASOC – basic facts

- Established in 1994
- About 170 members in the network
- Represents and brings together – leading engineering and metalworking companies + related and supporting institutions (material and equipment suppliers; IT; testing and certification; design; research; education and training)
- Activities:
  - Representation of interests
  - Joint projects and activities
    - Human resources / skills / education / training
    - Information and knowledge sharing
    - R&D and innovation
    - Marketing and export promotion
    - Co-operation and networking
- Member of ORGALIM, Latvian Employers Confederation, Latvian Chamber of Trade and Commerce
- **General objective – international competitiveness of the member companies and the sector in general**



# Metalworking and mechanical engineering sector in Latvia

(structure, % of total turnover, 2020)

11%



C29 – Automotive

5%



C30 – Other transport vehicles

6%



C24 – Metal production

16%



C28 – Equipment and machinery

19%



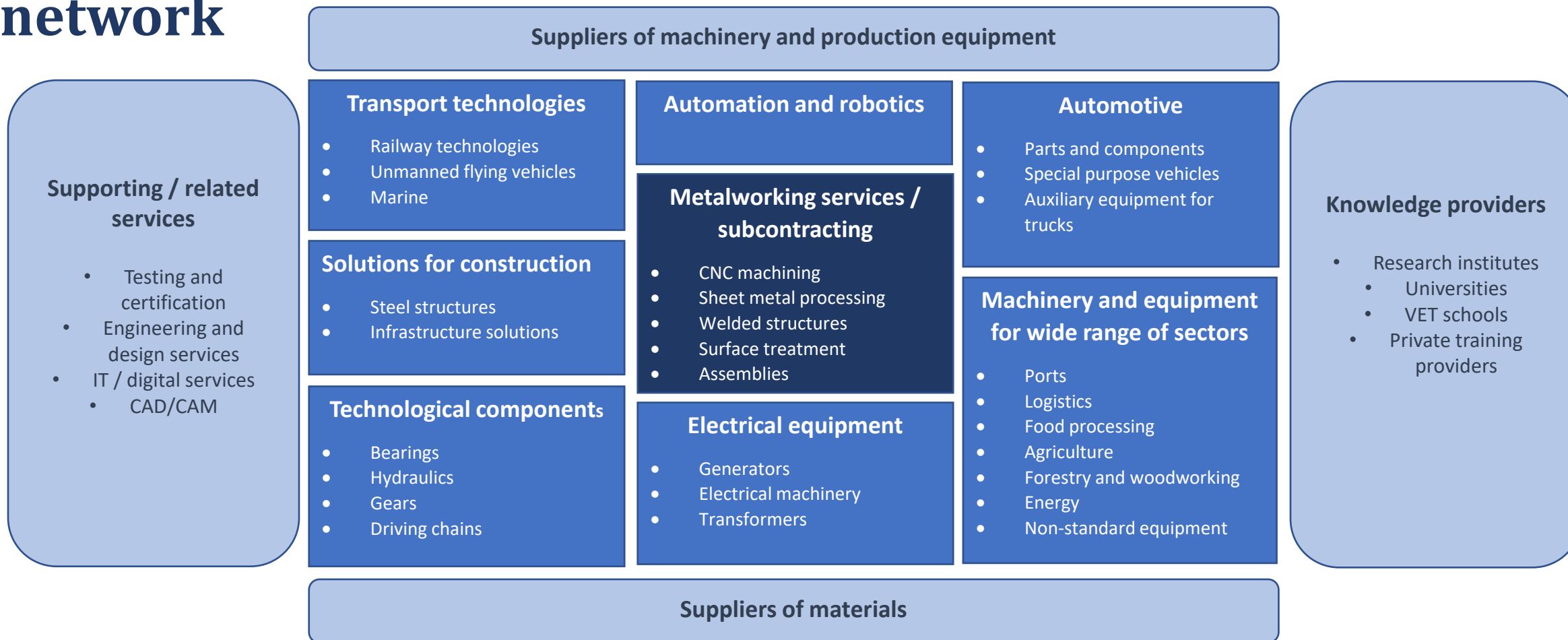
C27 – Electrical equipment

44%



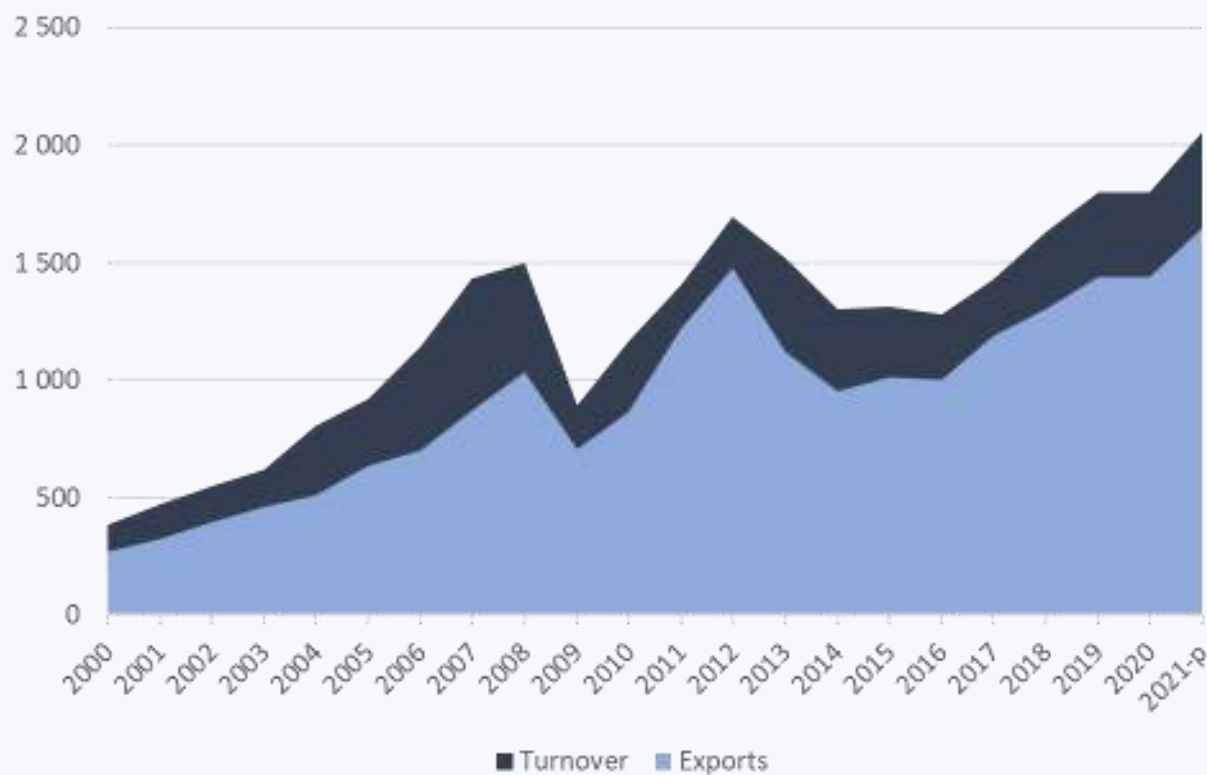
C25 – Metal products

# MASOC ecosystem – main areas and players within the network

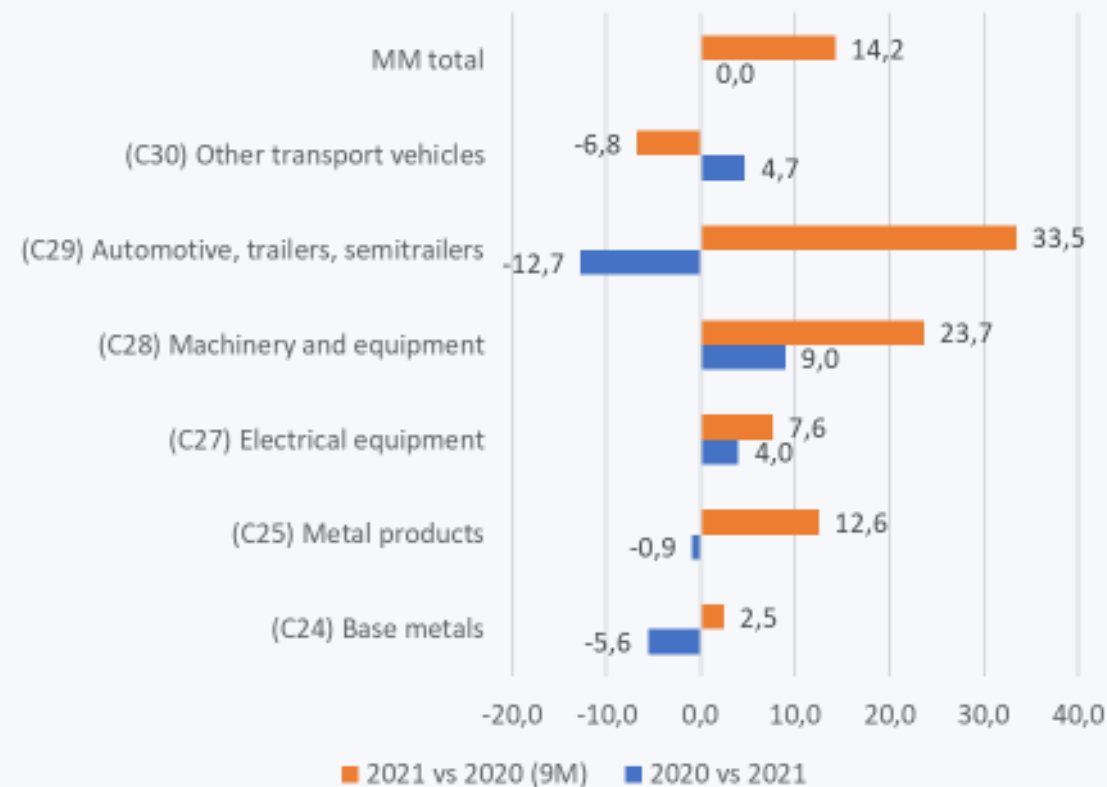


# Turnover and exports in the sector

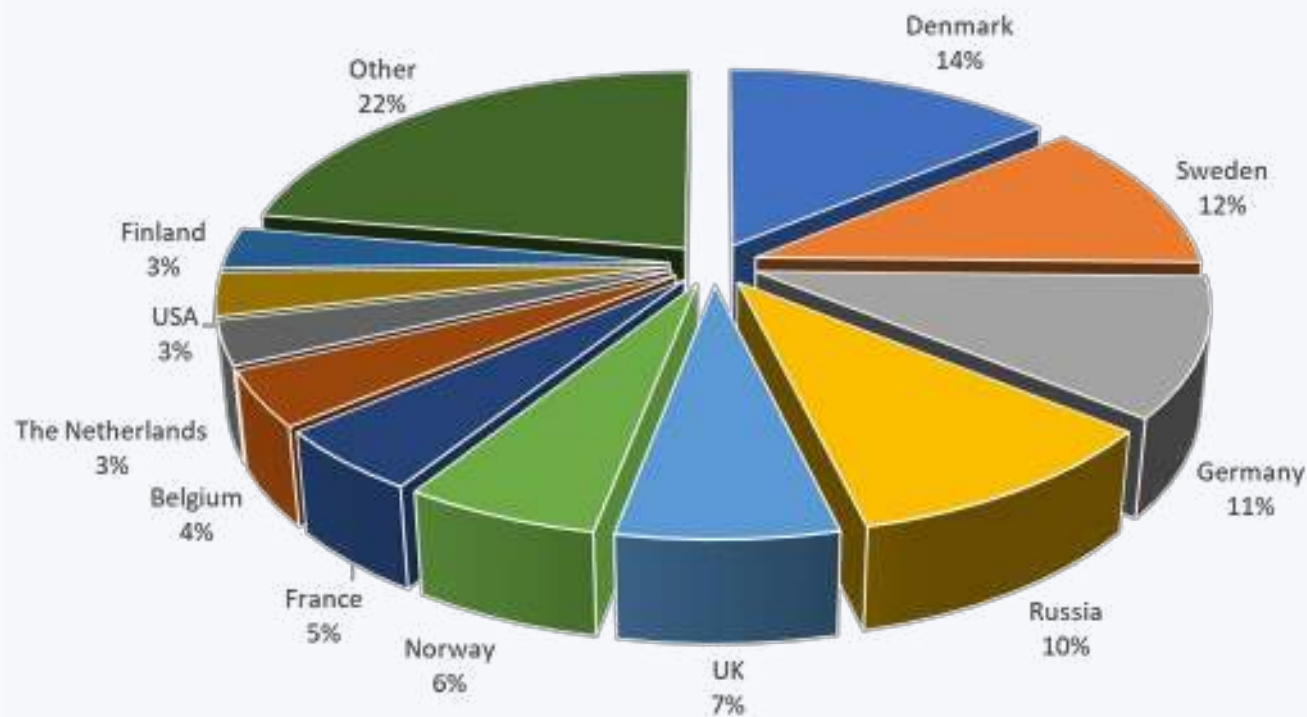
Turnover and exports (million EUR)



Changes in turnover in subsectors, %



# Main export markets – mechanical engineering and metalworking, 2020



About 80% of production is  
exported to more than 100  
countries.

The biggest market - EU



# Employment

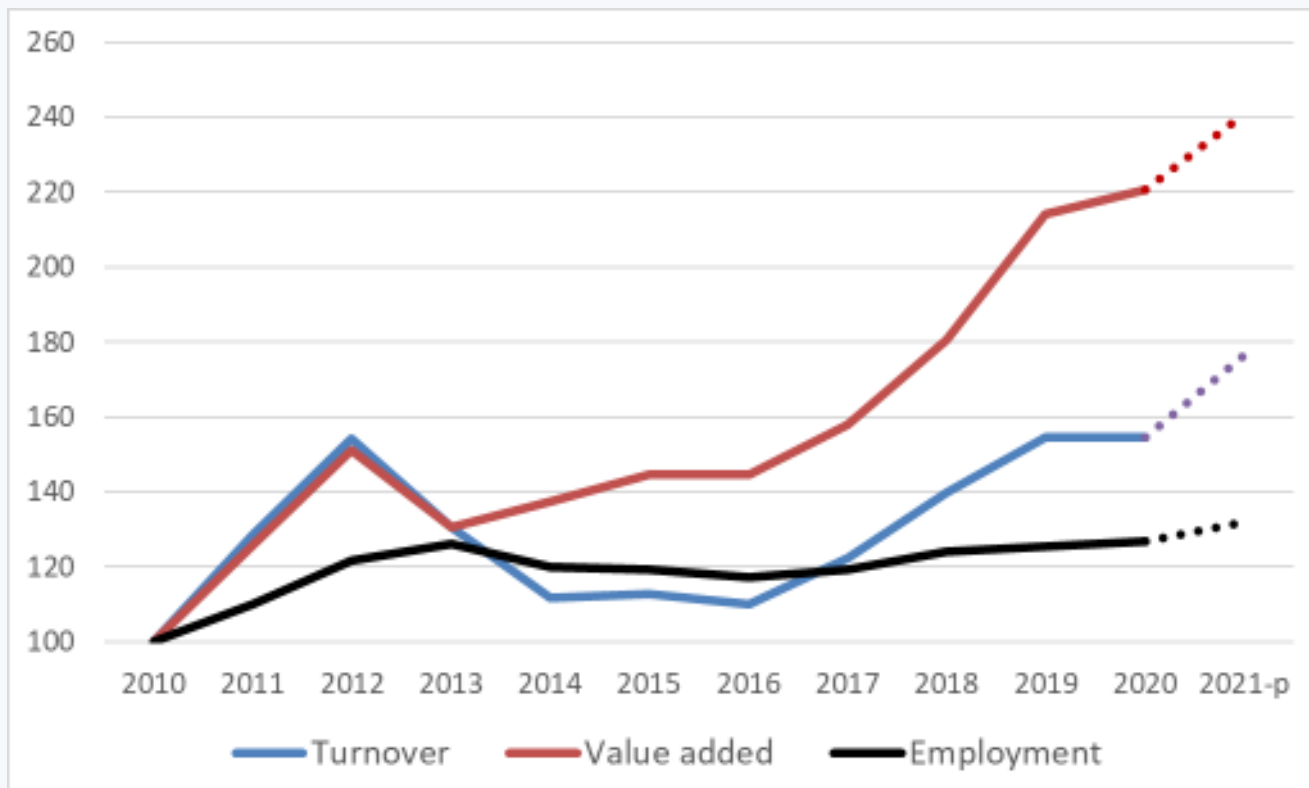
Number of persons employed,  
mechanical engineering and metalworking (C24; 25; 27; 28; 29; 30)



- Decrease in employment -2% in the second quarter of 2020 (2020 Q2 / 2020 Q1)
- Increase in employment in 2021
- Lack of qualified specialists still remains as key challenge according to MASOC's sector study

# Turnover, value added and employment

2010=100%



- Overall productivity keeps growing
- Employment increasing, but at a slower pace than turnover and value added
- The forecasted increase in turnover in 2021 is about 15% compared to 2020 in actual prices
- Increase in value added is expected similar, yet less certain due to dramatic price increase for raw materials, components and energy products

2010-2020 – data from Central Statistical Bureau  
2021 – forecast by MASOC based on short term statistics



## Key challenges

- Costs and availability of raw materials and components
- Energy costs
- Covid and related restrictions, vaccination requirements
- Availability of skilled specialists

# Innovation – Mechanical Engineering Competence Centre

- Project initiated by MASOC
- **General objective – to support industrial research and development of new products and technologies**
- First round 2016-2018
  - 27 research projects
- Second round 2019-2022
  - 22 research projects
- Three main focus areas:
  - Automated production systems
  - New material technologies
  - Transport technologies
    - + cross-sector projects



# ADMA TranS4MErs – a new Pan-European initiative to



## Advanced Manufacturing Assistance and Training for SME Transformation

A project supporting the transformation of 1,000+ manufacturing SMEs to become 'Factories of the Future' embracing the ecological, digital, and societal challenges across Europe by 2025.

### Project Key Figures

- Total budget: 5.6 M€
- EU funding: 5.6 M€
- Duration: 36 months
- Partners: 38 partners from 27 EU countries (project coordinator: Irish Manufacturing Research)
- Partners from Latvia: MASOC and Latvian Technology Centre

LinkedIn: ADMA TranS4MErs

<https://www.linkedin.com/company/adma-trans4mers>

Twitter: @ADMA\_Trans4MErs

[https://twitter.com/ADMA\\_Trans4MErs](https://twitter.com/ADMA_Trans4MErs)

## New partnership for defence industry- PATRIA 6X6 project

- First meeting with PATRIA representatives in Riga during Tech Industry 2019 exhibition (November 2019)
- Pre-selection and sight visits of potential suppliers with assistance of MASOC
- First contracts signed with Latvian suppliers end of 2020
- First prototype produced and presented in May 2021
- Contract between MoD of Latvia and Patria on full scale production signed
- 4 new vehicles produced and supplied. 200 vehicles planned in total
- First stage – sourcing of parts and components from Latvian suppliers
- Later stage – final assemblies in newly established factory in Cesis, Latvia





## Examples of recent investment projects - Caljan



- Company profile – design and production of telescopic conveyors for logistics sector.
- New production site officially opened in October 2020. Located in Liepāja, territory of the former metallurgical plant «Liepājas metalurģs»
- In 2021 additional production site acquired, one more to be constructed
- Working at full capacity. Production fully booked till October 2022.
- Production output in 2021 foreseen almost two times higher than in 2020
- High demand due to increased online shopping and delivery volumes globally

# Bucher Municipal



**BUCHER**  
municipal

- Has grown into one of the largest mechanical engineering companies in Latvia
- Main product – street sweepers
- Keeps investing in production efficiency and new technologies
- Growing segment – electrically powered sweepers



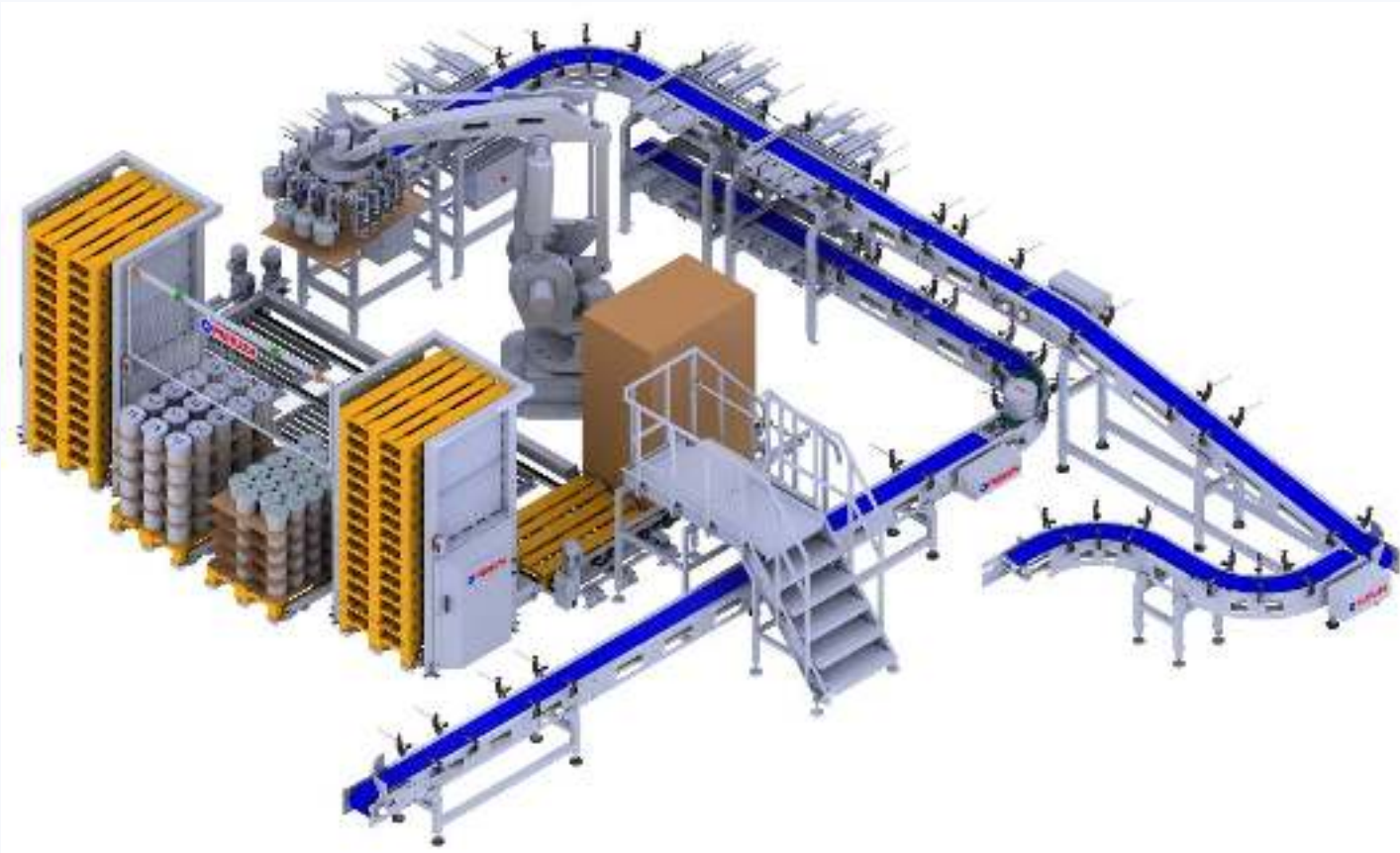
# Recent investment projects

## KÄRCHER



- In September 2021 the investment project of Kärcher was officially announced
- The company has acquired existing metal processing company near Jelgava
- Further investment and development is expected
- Main products – municipal street cleaning machinery

# Robotisation and automation solutions for a wide range of sectors



- Leading producer of automated and robotised production equipment
- Continuous investment in R&D
- Recent projects include robotised and automated solutions for such sectors like:
  - Logistics
  - Food processing
  - Automotive
  - Waste treatment

# EMJ Metāls



- One of the fastest growing companies in the sector and biggest sheet metal service centre
- Investment in new production premises as well as equipment (production premises increased from 4000 to 9000m<sup>2</sup>)
- Laser cutting and bending of sheet metal parts up to 8m long
- Recently acquired AQAP 2110:2016 certificate for defence and military sector

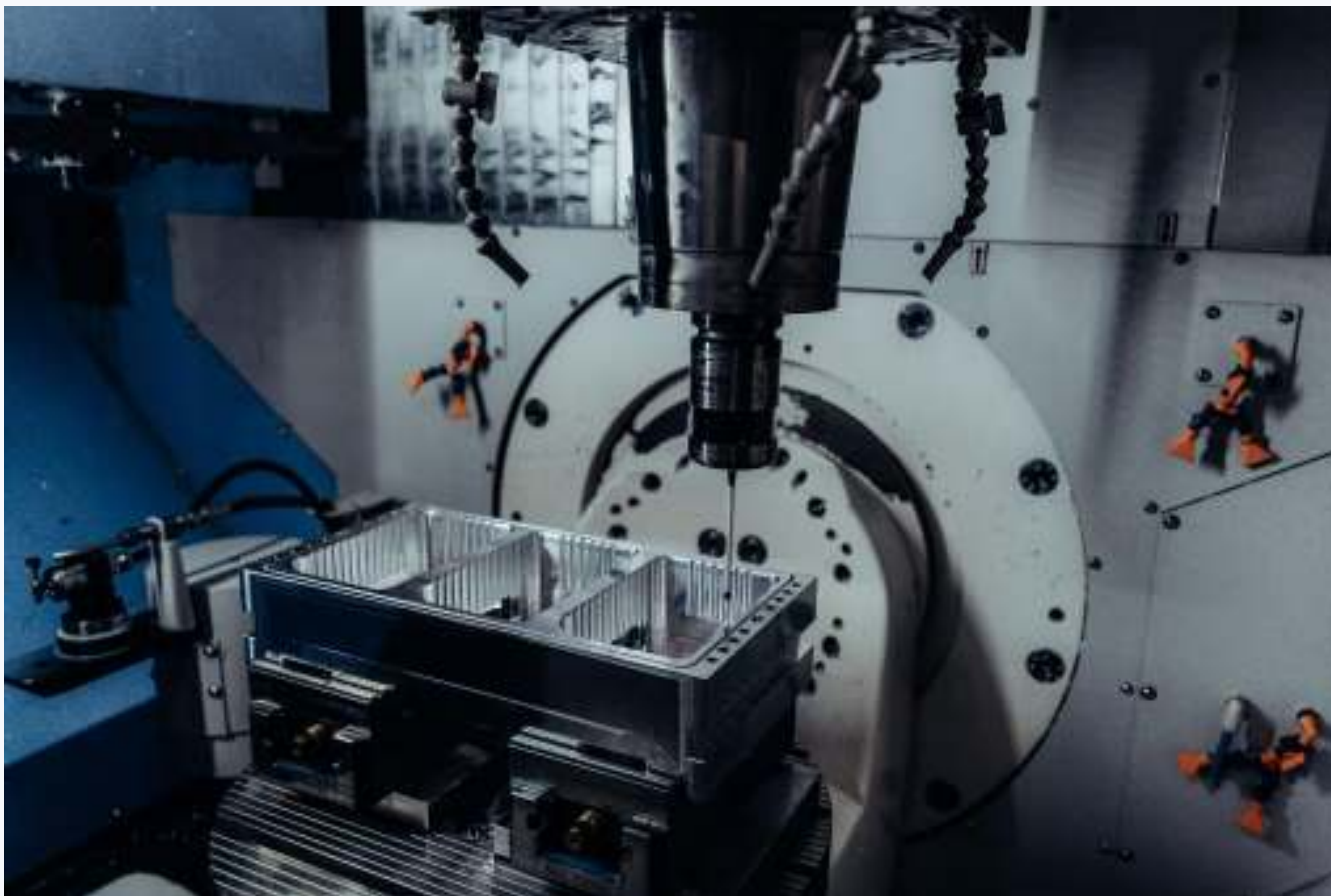


## Precise machining services - ANTTROM



- New and fast growing company specialised in CNC machining services of complex parts with high accuracy
- The dimensions of the processed parts can vary from 0.5 mm to 500 mm in diameter and up to 1500 mm in length
- Accuracy to the micron
- Customers from aerospace, medical equipment, robotics and other industries

## Precise machining services - EXIGUM



- New and fast growing company specialised in CNC machining services of complex parts with high accuracy
- Investment in new technologies continue
- Focus on highly automated production

**Thanks for your attention!**