Industry Trends and Challenges in Latvia

Toms Grinfelds Chairman of the Board MASOC – Association of Mechanical Engineering and Metalworking Industries of Latvia

Digital Transformation of the Engineering Industries in the Baltic Sea region Conference in the framework of "Tech Industry 2018"

> Riga 30.11.2018



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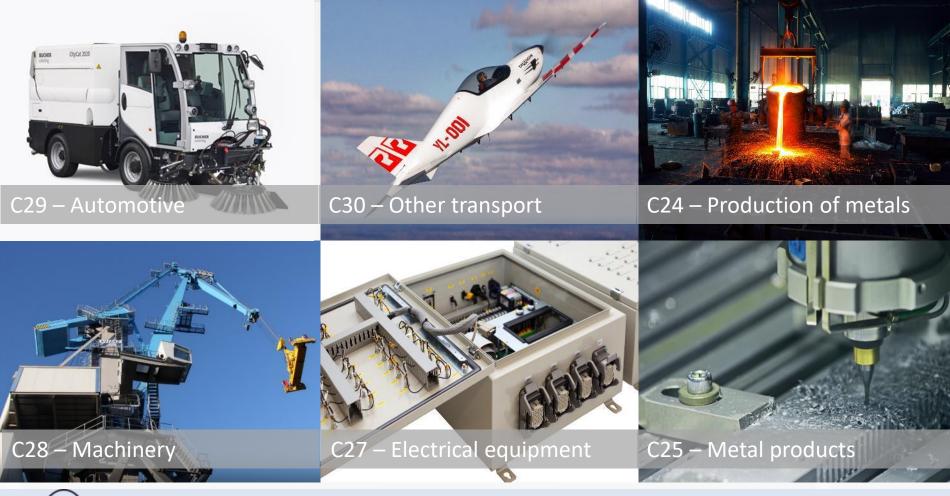
- Established in 1994 as informative and consultative centre for the specified industrial sector
- Voluntary, membership based organisation
- 165 members (companies, education and research institutions)
- Member companies produce over 70% of the sector's total output, over 50% of sector's employment
- Implements activities typical for trade associations and cluster organisations
- The main goals:
 - To promote the competitiveness and growth of the sector;
 - To promote mutual cooperation
 - To promote professional growth of the specialists in the sector





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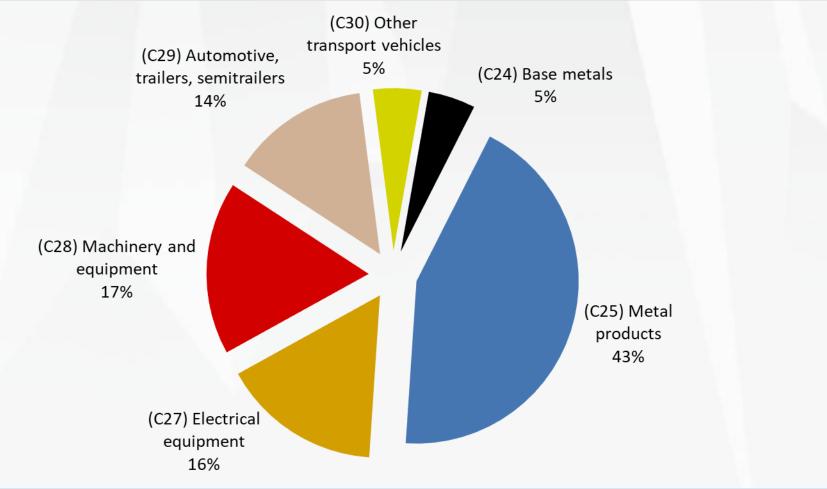
What is mechanical engineering and metalworking industry in Latvia?





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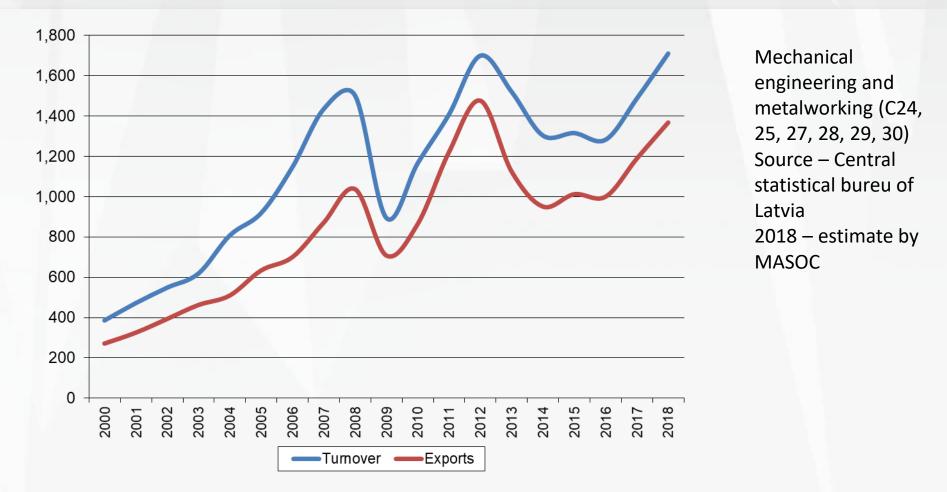
The structure of the sector % of total turnover, 2017





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Turnover and exports

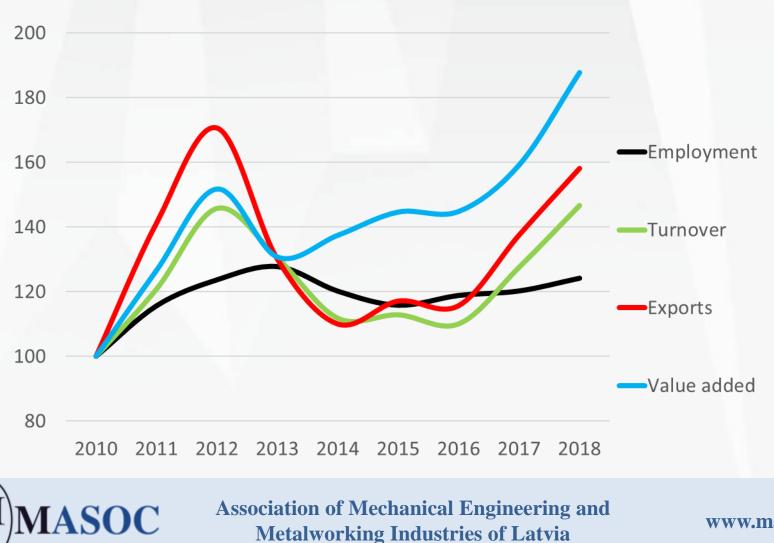




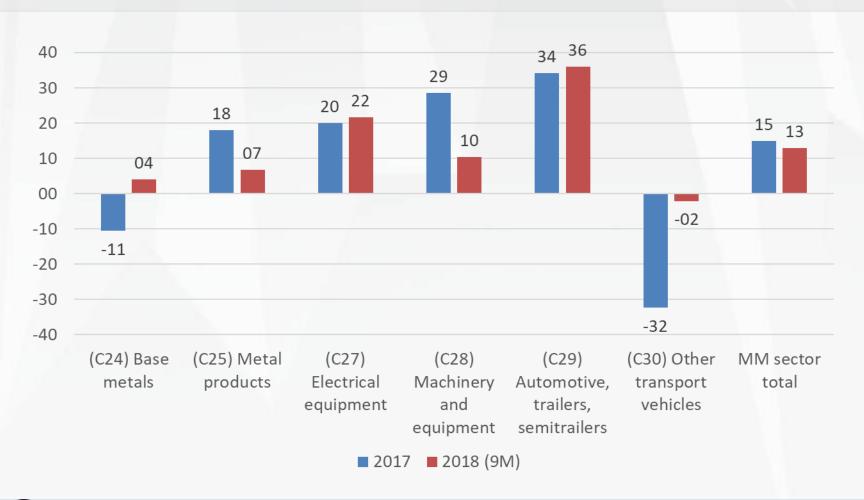
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Key indicators

Mechanical engineering and metalworking, 2010=100%



Change in turnover, %



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Key challenges

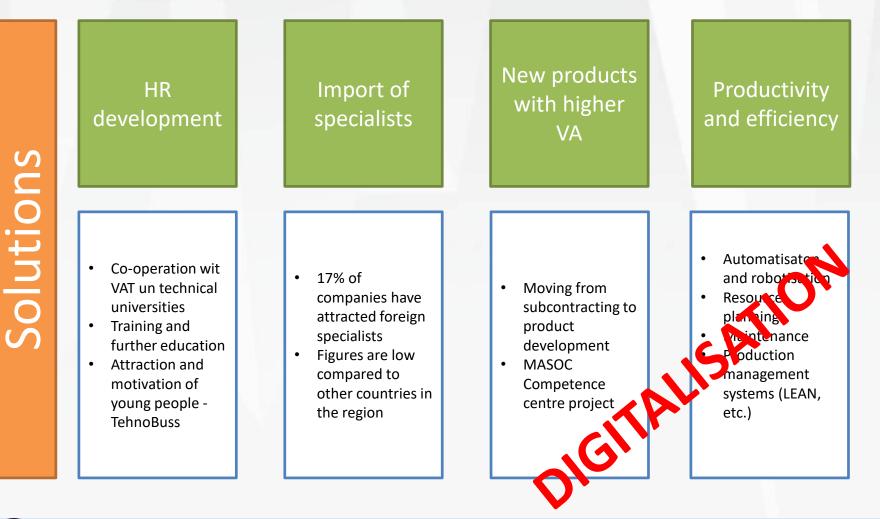
- Lack of skilled workforce
 - More than 70% of companies surveyed indicated lack of specialists as the most important problem (survey by MASOC, March 2018)
- Rising labour costs
 - According to official statistics and surveys made by MASOC, the salaries increase about 8-9% annually in the MM sector
- Energy prices
 - The energy prices are higher than in other BSR countries
- Productivity
 - Improving, but still behind EU figures





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Main challenge Lack of qualified specialists





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Areas for improvement

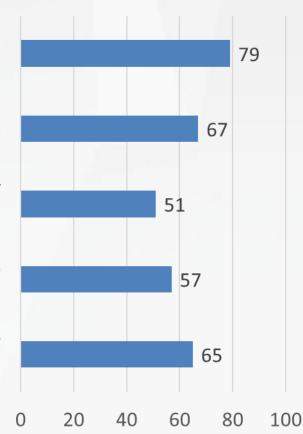
Improvement of the overall organisation of the production

Energy efficiency measures

Upgrade of the overall IT system in the company

Introduction of automations and robotics

Maintenance system for equipment and assets



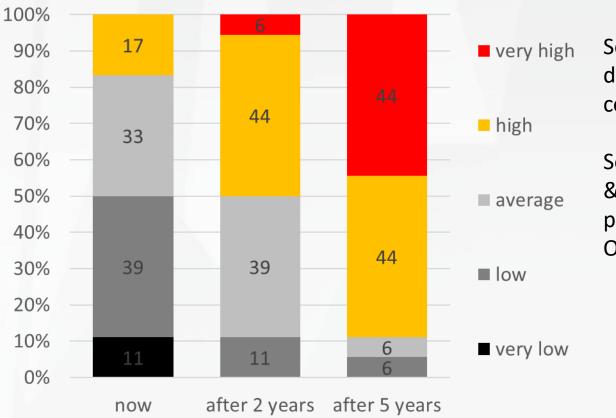
Selected areas where companies are planning to introduce new measures to improve the productivity and efficiency. % of companies surveyed

Source – sector survey by MASOC, March 2018



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Level of digitalisation



SOC

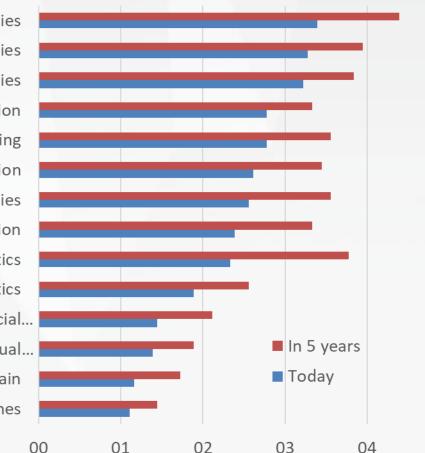
Self assessment of the digitalisation level by companies in MM sector

Source – survey by LIKTA & MASOC within Diginno project October 2018

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Importance of selected digital technologies

Autmation technologies Database technologies Wireless technologies Security/encryption Cloud computing Data visualization Sensor technologies Virtualization/simulation Robotics **Big data/analytics** Machine Learning/Artificial... Argumented reality/Virtual... Block chain Drones



Assessment of the importance (1-5) of selected technology fields by surveyed companies in MM industry.

Source – survey by LIKTA & MASOC within Diginno project October 2018



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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 ٠
 - About 6M EUR invested in R&D, 3M EUR of which from ERDF
- Three main focus areas:
 - Automated production systems
 - New material technologies ٠
 - Transport technologies
- Second round 2019-2021
 - Overall framework project has been prepared and pending evaluation
 - R&D project ideas of companies identified •
 - Even bigger focus on cross-sectorial projects, itegration of IT and • digitalisation





MASOC

MAŠĪNBŪVES KOMPETENCES CENTRS MECHANICAL ENGINEERING COMPETENCE CENTRE



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Association of Mechanical Engineering and Metalworking Industries of Latvia

MASOC - Association of mechanical engineering and metalworking industries of Latvia

masoc@masoc.lv www.masoc.lv



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