



**FACHHOCHSCHULE
WIENER NEUSTADT**
Austrian Network for Higher Education

FHWN Research and Learning Factories

Short-online presentation of each pilot factory and testbeds
(thematic focus, infrastructure, offerings, projects, etc.)

1. Infrastructure

What can our labs generally offer?

2. Benefits and services

What do we offer SMEs?

3. Contact

How can SMEs contact us with enquiries?

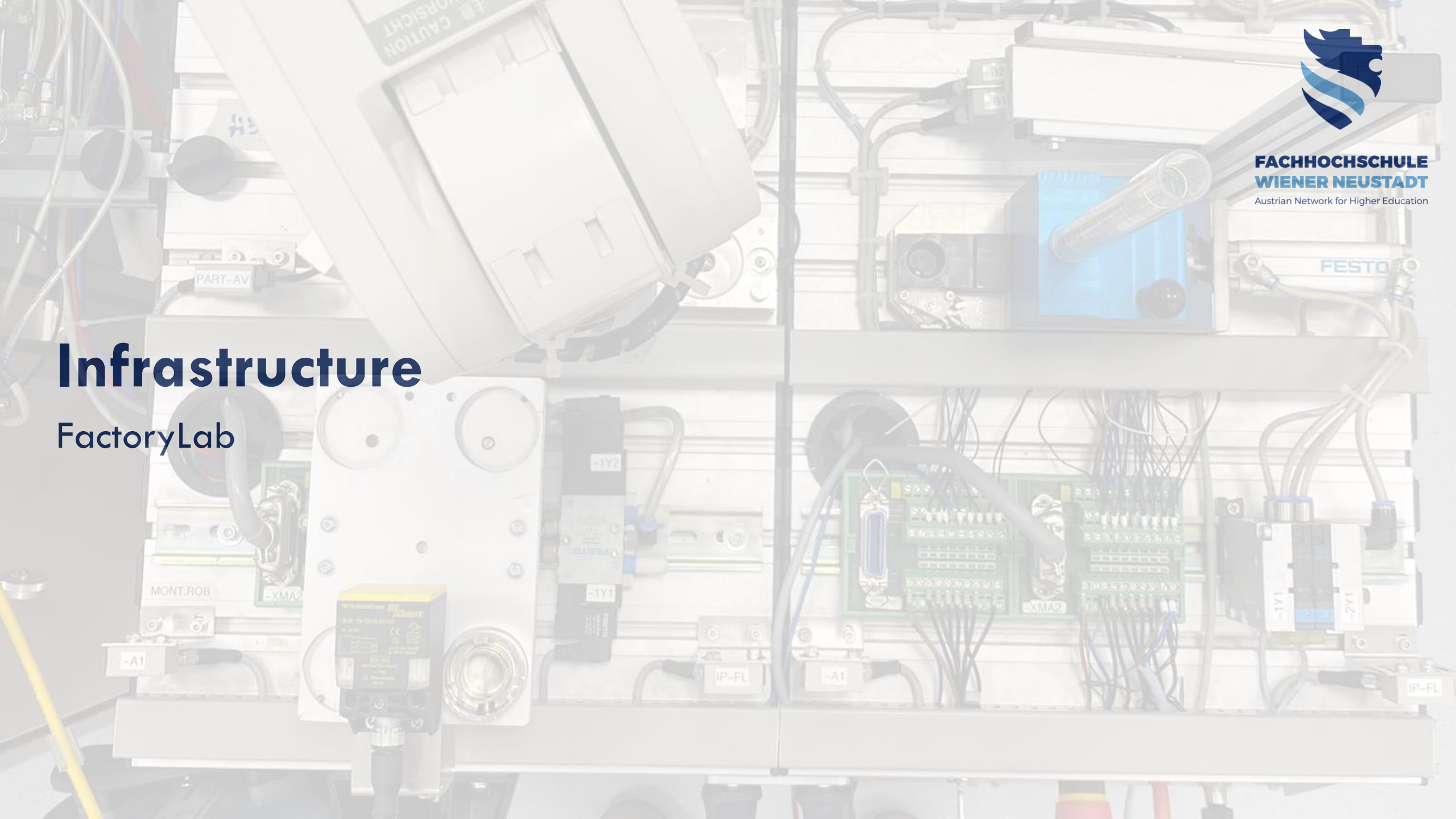




**FACHHOCHSCHULE
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Infrastructure

FactoryLab





Content:

- The Factory Lab consists of a **production line** based on a FESTO FMS 50 system
- Simulates a **semi-automated production** process from incoming goods to production, assembly, storage and outgoing goods
- The system consists of practical, **industry-typical technical components** such as:
 - light and induction sensors
 - RFID read and write heads (TURCK)
 - intelligent camera systems (SICK)
 - pneumatic and electric linear and circular drives (FESTO)
 - a handling robot (MITSUBISHI)
 - various conveyor and handling technology, programmable logic controllers (SIEMENS)
 - simulation software (CIROS)

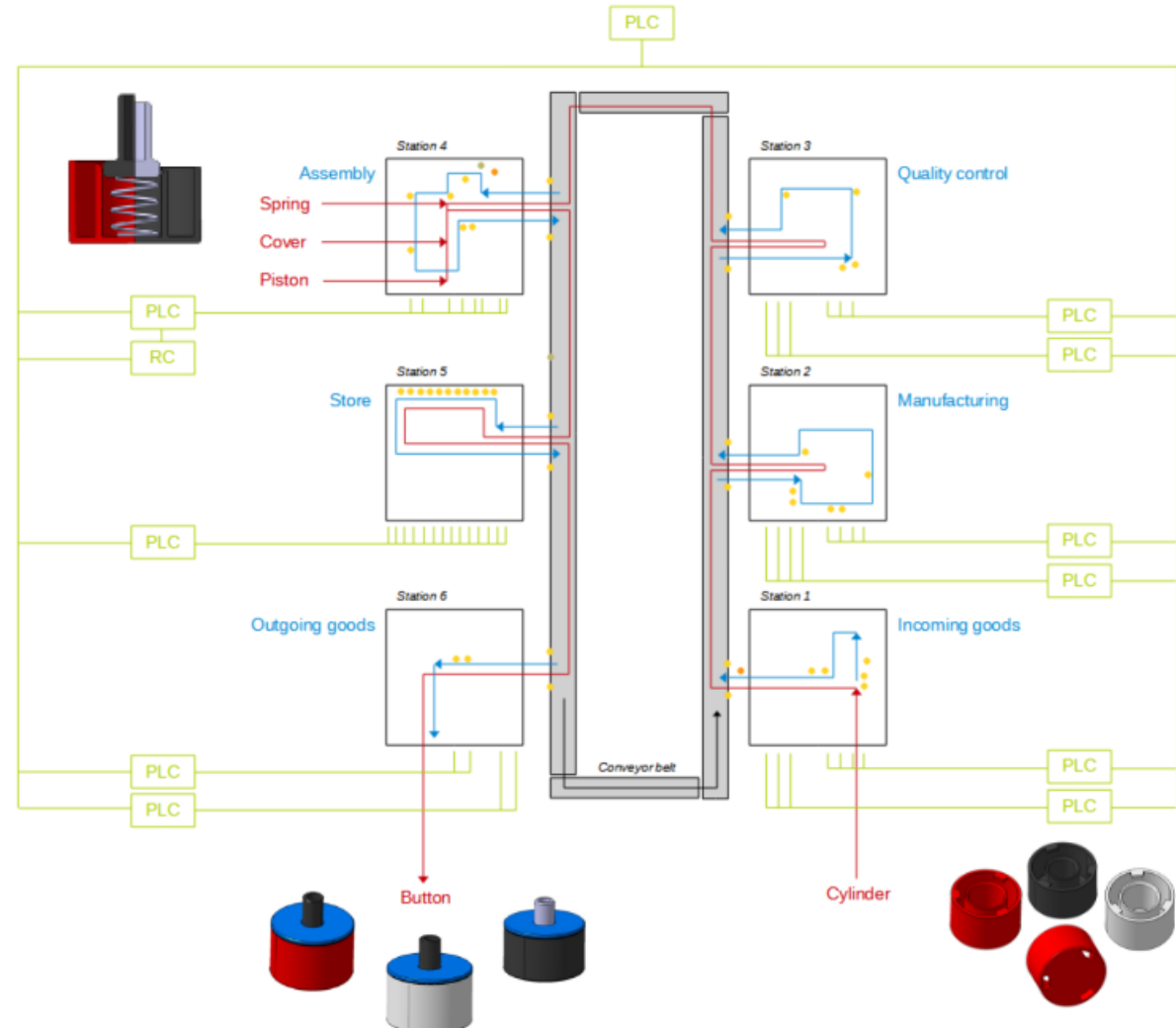
FactoryLab

Focus on teaching:

- Basics of **automation** and **production control**
- **Intelligent** automation and **AI application** in production **planning** and **control**
- **Conveyor** technologies
- Work and **material flow** optimization

Research focus:

- **Intelligent** automation and **AI application** at different levels:
 - at workplace and machine level
 - at the level of planning and control of the overall system
 - in multi-variant production



Infrastructure

FactoryLab

Partners:



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FESTO

SICK
Sensor Intelligence.

ELAGE
Engineering your visions

NEUMAN
ALUMINIUM

M
MAPLAN

 **MLReef**



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Infrastructure

InnovationLab





Content:

- The Innovation Lab is an **open workshop environment** in the sense of a Fab Lab or Maker Space for private individuals, start-ups, SMEs, students
- It consists of **workshops** for metal, wood, plastics, textile processing and electronics and robotics development.
- **Conventional tools** and **modern production technologies** such as computer-controlled machines and 3D printing are available:
 - TROTEC, EMCO, FELDER, ALZMETALL, ABB, IGUS, PRUSA, HAGE 3D, ...
- A total of **24 workstations** are provided.
- In addition, there is 250m² of **free space** for individual teaching projects.

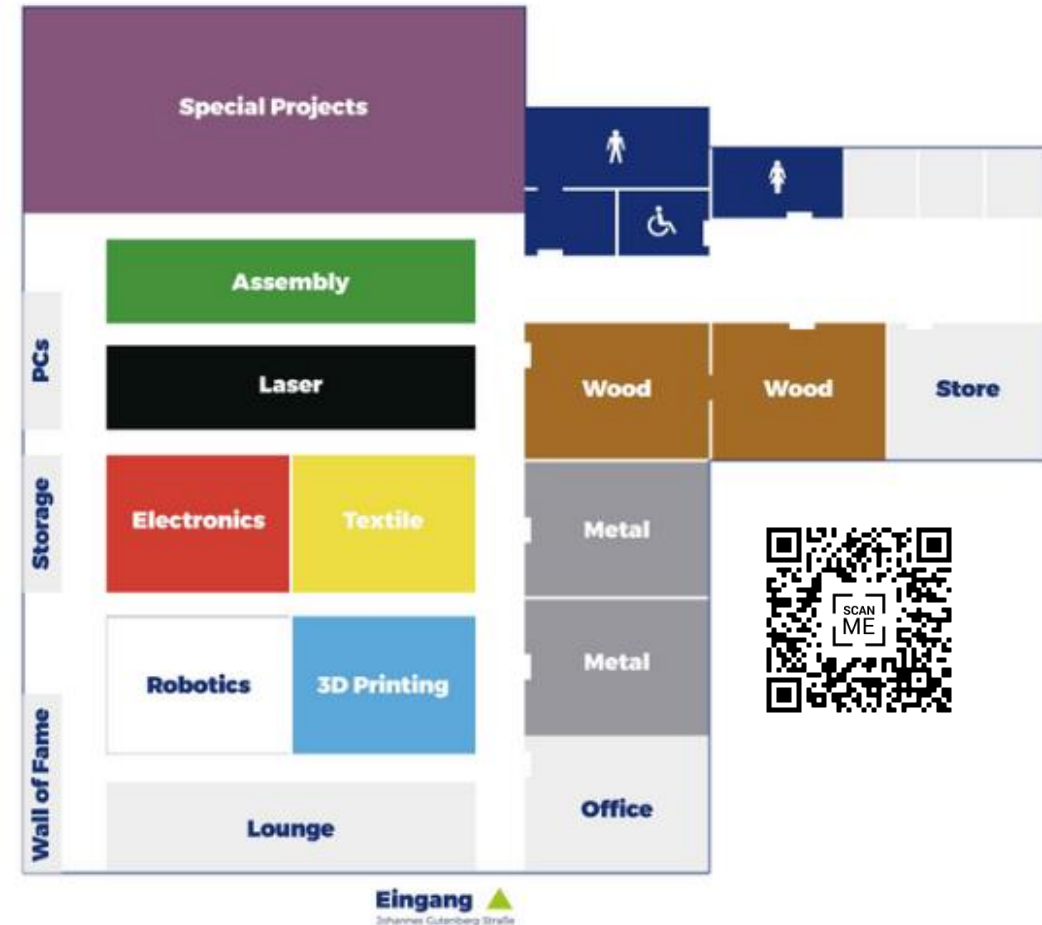
InnovationLab

Focus on teaching:

- **Practical** Manufacturing Technology
- Industrial **CNC** Machining
- Industrial **3D printing**
- **Robotics** and robot gripper development
- **Electronics** development
- Prototyping with **different materials**
- **Manufacturing** technologies

Research focus:

- **Circular** product development
- **Rapid prototyping** with 3D printing



Infrastructure



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InnovationLab

Partners:





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Benefits and Services

For SMEs

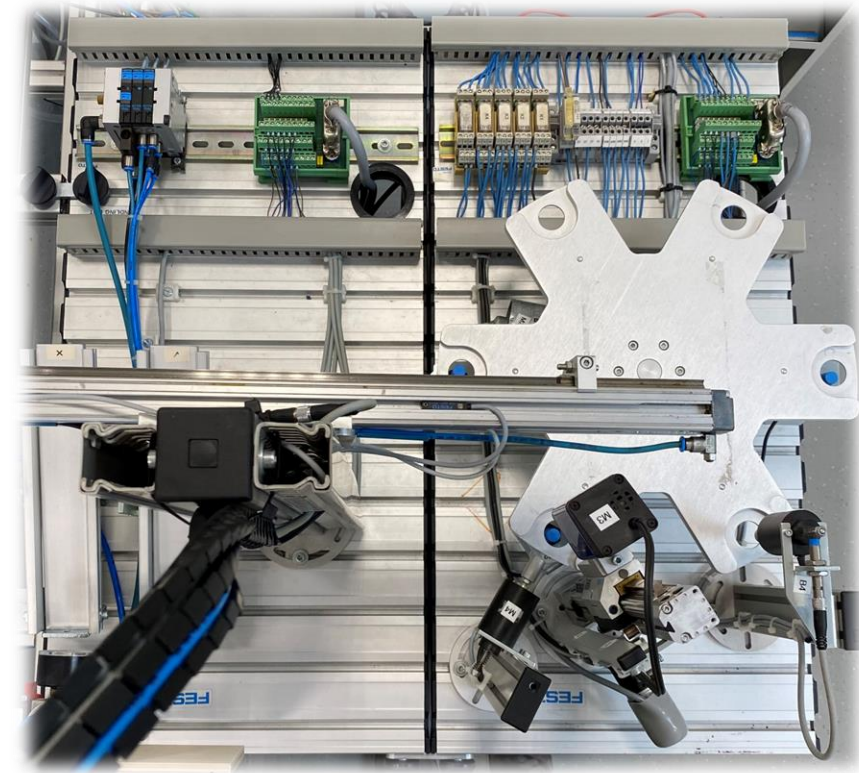
Benefits and services



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What do we offer SMEs?

- ✓ **Workshops** and **advice** on special topics in production technologies and management, AI in production, digitalization, automation, sustainability in production
- ✓ **Live Demonstration** of different production technologies and management concepts in our labs
- ✓ **Cooperative** research projects with our industry **partners**
- ✓ **Bachelor's** and **master's theses** in production and logistics related topics





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Contact

How can SMEs contact us with enquiries?

Contact

How can you find us?

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Thank you for your attention!