

A photograph of two young men in a laboratory setting. They are leaning over a desk, looking at a laptop. The man on the right is wearing a yellow and blue plaid shirt, and the man on the left is wearing a black sweater. In the background, there is a large, complex robotic structure made of metal frames and red components, possibly a robotic arm or a large-scale assembly. The lab has large windows in the background.

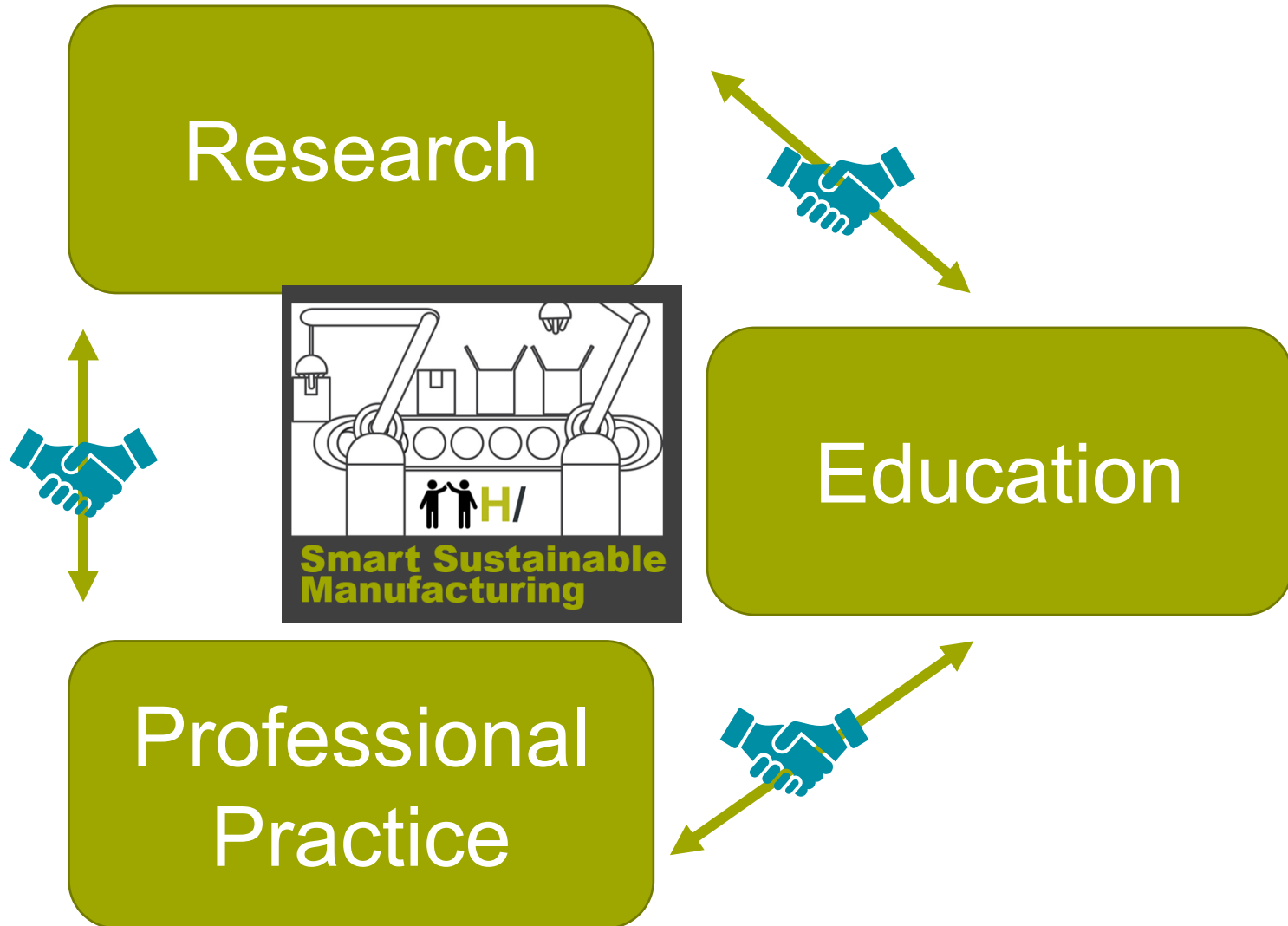
Can we fix it?

RE/manufacturing Lab

Update Semester 2 2024/2025

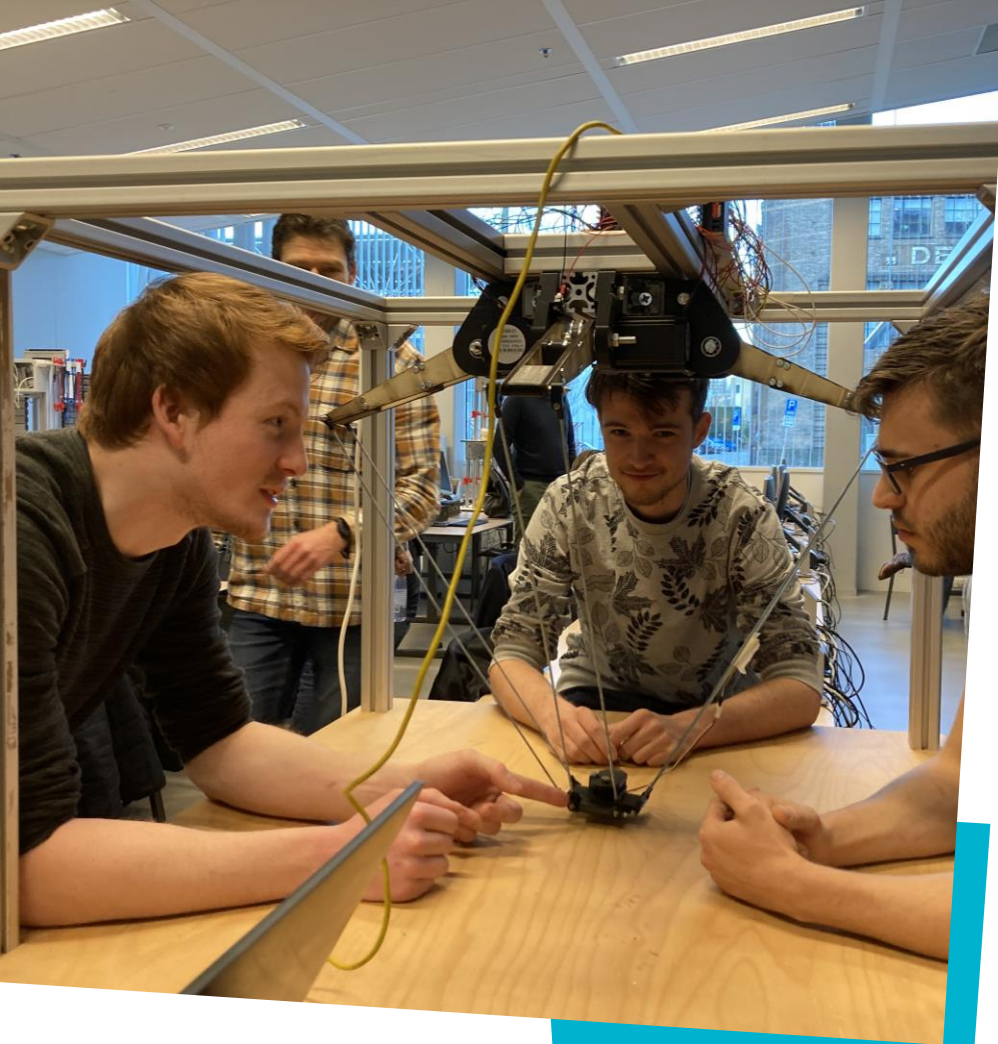
DE HAAGSE
HOGESCHOOL

Societal Challenges



- **Climate:** energy & materials transition
- **Future of Work** (shopfloor, process & employee)
- **Digitization (SMEs)**





Lessons From a Learning Factory

RE/manufacturing Lab (physical)

Efficient 'demanufacturing' work

Reversible assembly

Developing prototypes and exchanging knowledge

RE/manufacturing Lab (data)

Digital data collection

Model the footprint of processes and products across multiple lifecycles

Value for reuse or lifetime extension

Future of Work lab

Low-Cost Digital Shadowing

Employing Worker Assistance Systems (cobots, AI tools)

Suitable Practices for Labour Scarcity

Research Group Smart Sustainable Manufacturing



Multi-disciplinary group (mechanical, industrial, industrial design engineering, mechatronics, applied mathematics, IT); mixed scientific/professional background and ~24 students per semester

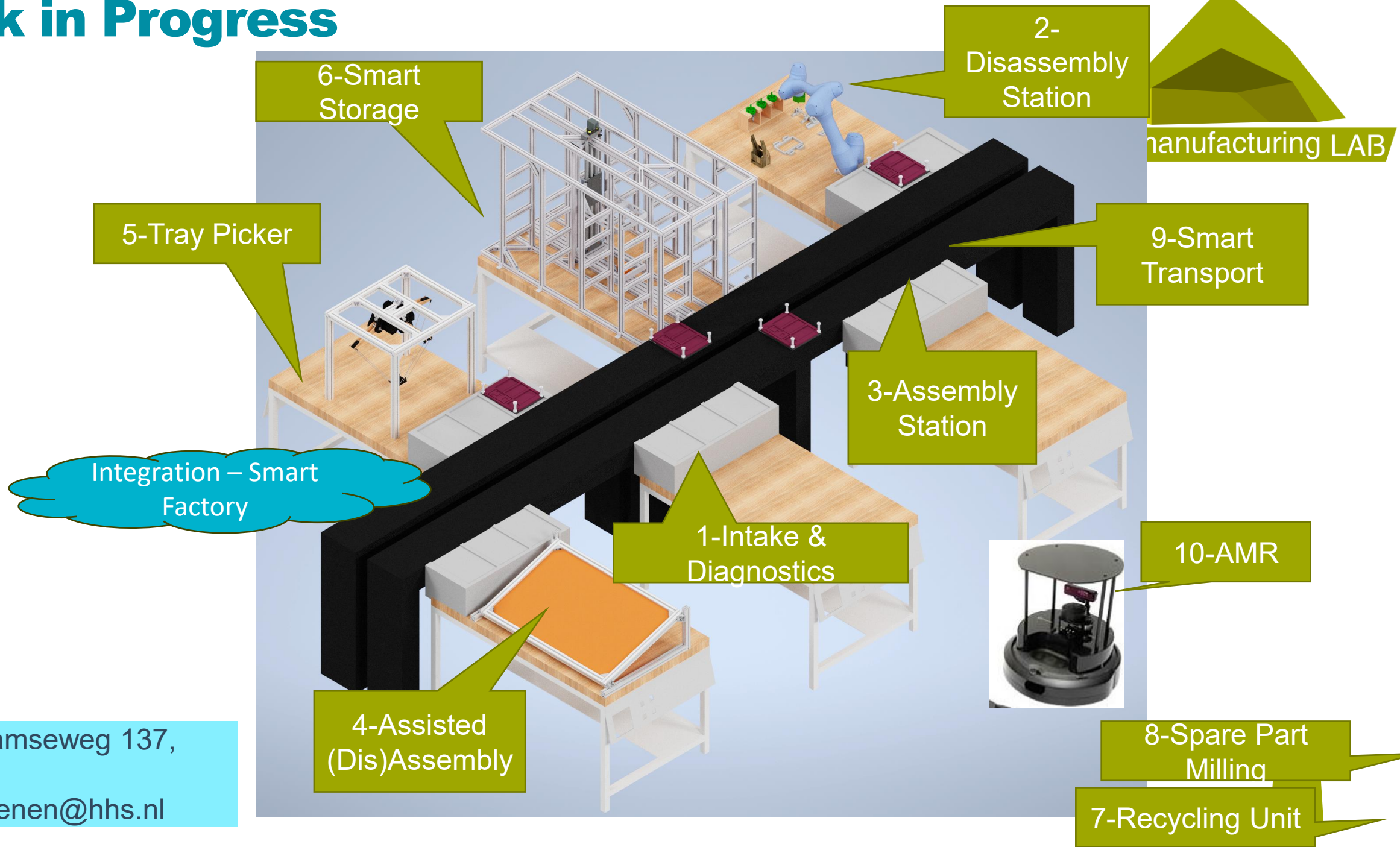
**Research Group
Smart Sustainable Manufacturing**



Work in Progress



manufacturing LAB



Rotterdamseweg 137,
Delft
j.m.g.coenen@hhs.nl



Cost-efficient disassembly

Understanding needed:

- How disassemblability of products differs for manual vs. automatic processes;
- Feasibility of realizing economic value by smart disassembly;
- Impact on Design-for-Disassembly Guidelines?

Results July 2025



RE/man Heroes

Watch the videos

- [Intake Station](#)
- [DiscoBot3](#) (and its history: <https://youtu.be/TOU0UjcVX2w>, <https://youtu.be/0kcUo3hZEIc>, <https://youtu.be/pBsGnsLtyWE>)
- [Localisation Dashboard](#)
- [Assembly](#)
- [Tag Mapping Robot](#)

Some examples...