

Competence creates confidence

- Founded 1990
- 25 Employees
- Commercial space 800 m²

Location:

Adiro Automatisierungstechnik
GmbH

Limburgstr. 40

D-73734 Esslingen



Adiro stands for the creation of learning environments and industrial applications covering the whole spectrum of automation technology. Our team is specialized in planning, engineering, production and customer service

Two Divisions

- **Didactic**

Competence Center
Processautomation
for Festo Didactic

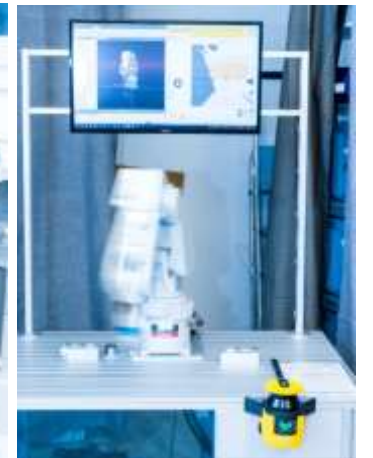
- **Industrial Automation**

Industrial Robotics,
System Partner of
Mitsubishi Electric



Industry and Didactic as a Synergy

Learning and research systems for
Process Technology



Automation, Robotics,
Plant Construction, Laboratory
Automation

**From building blocks to learning and
research factories**

Cross-professional thinking and acting is in
demand!

**„Recognizing the problem leads to
the solution.“**

Albert Einstein

Clever networking offers saving
potentials!

Robotics

System partner of Mitsubishi Electric

Since May 2003 we are authorized system partner for the integration of Mitsubishi robotic systems.

Based on many years of experience we offer specialized knowledge in:

- Customized training
- Feasibility studies
- Integrations
- Software development
- Documentation
- Service



Source: Mitsubishi Electric

Robotics: Industrial, Didactic and Show Applications

Automotive, Medical, Electronics...



Assembly of the Smart Cobot Station from Festo Didactic

Training application for the collaboration between humans and robots based on the UR5 from Universal Robots



Assembly of Battery Management Controller (BMC) for electric cars with ABB robots.



Human robot collaboration with ABB Yumi

Training application for the collaboration between humans and robots



THREEBOTS in Mitsubishi Showroom

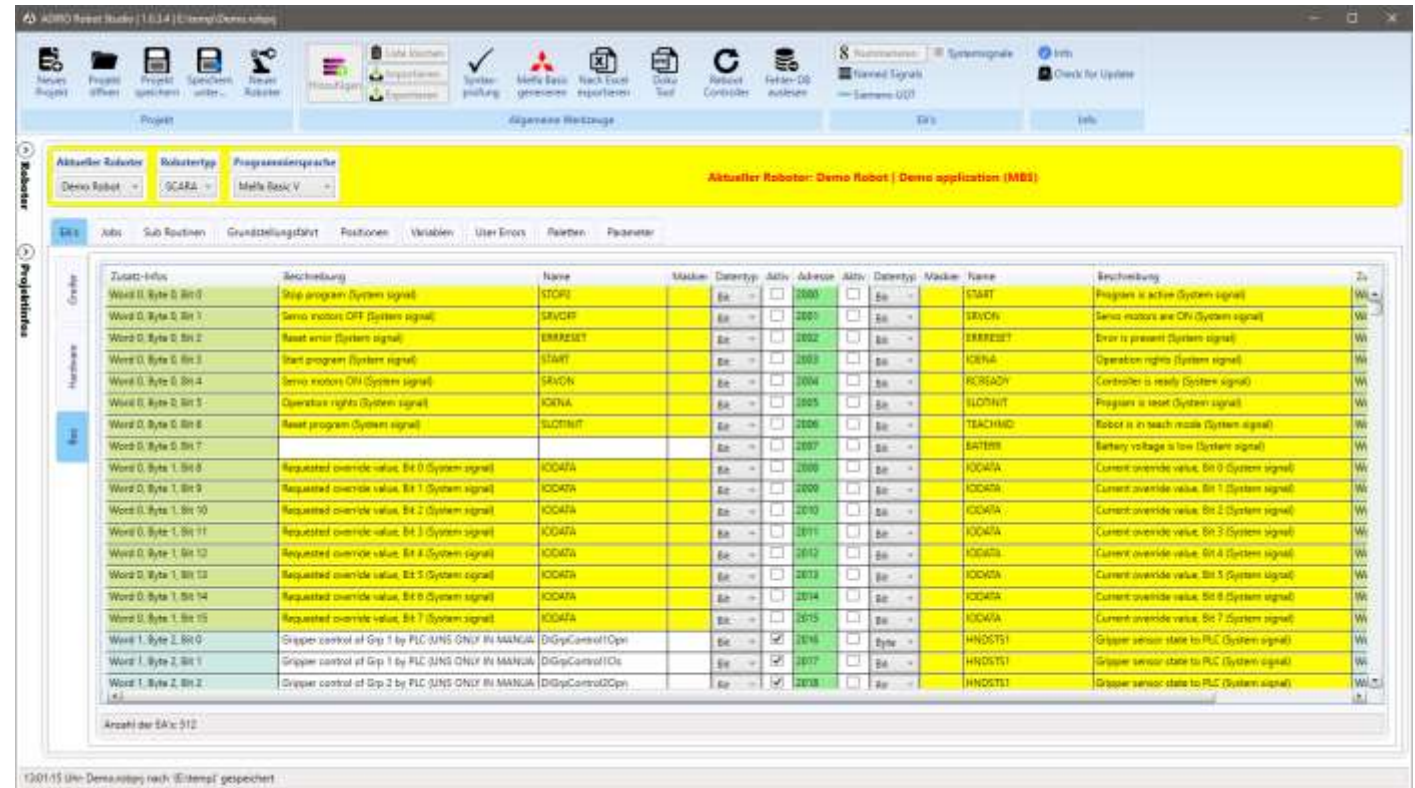
<https://youtu.be/hQhvlkM0dYE>



Robotics: Defining Industrial Robotics Standards

Beyond of just programming robots

By using our own software products we are able to create application code for robots which is set as standard at global acting companies!
(e.g. Forvia, Marquardt...)



Source: ADIRO Automatisierungstechnik GmbH

Robotics: Decades of experience

From clean room to foundry

We look back over more than 20 years of realizing industrial robot projects – hand in hand with our customers and over all branches:
From clean room to foundry

We have experts for

- Mitsubishi
- ABB
- Fanuc
- Yaskawa
- Stäubli
- Denso



Source: ABB



Source: Yaskawa / Motoman



Source: Denso

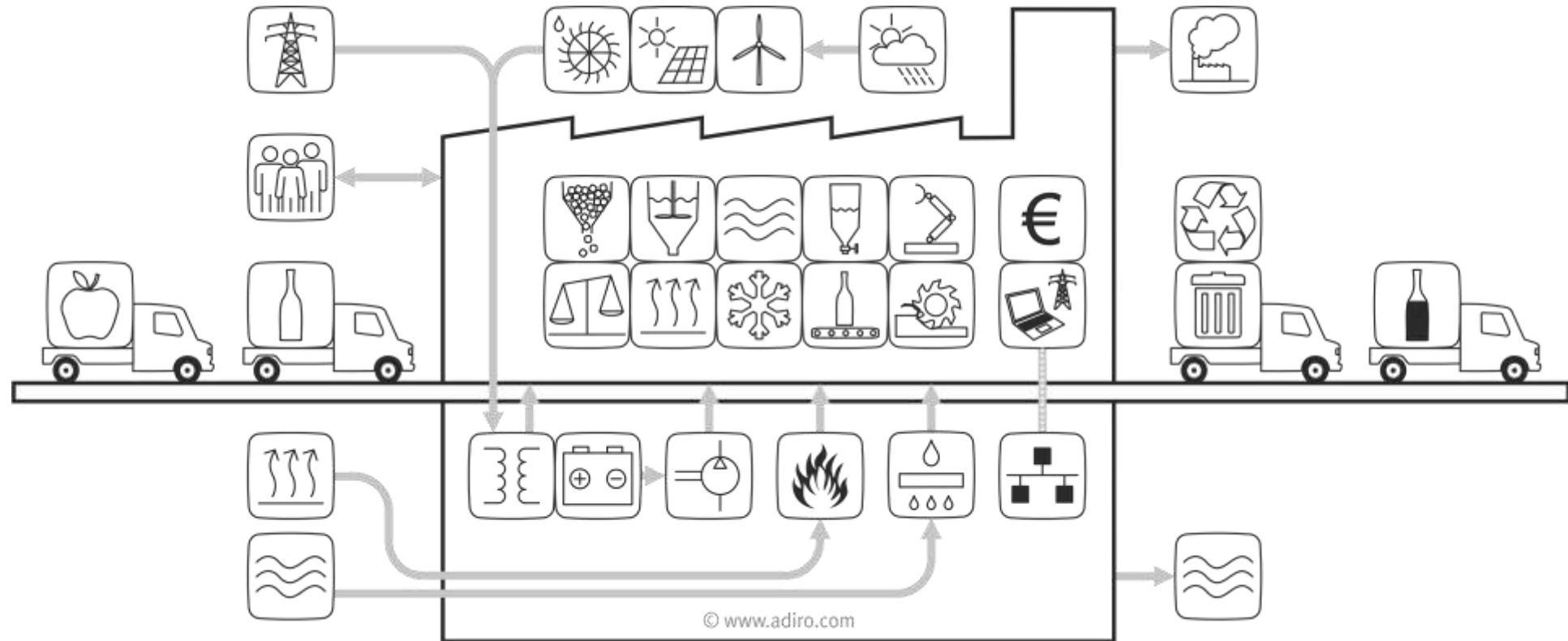


Source: Mitsubishi Electric



Source: Fanuc robotics

Fields of expertise – networked processes



Training equipment for process industry



EduKit PA
Start up



Compact Workstation
closed loop control 4 in 1



Stations: Filtration, Mixing, Reactor, Bottling
closed loop control / process technology

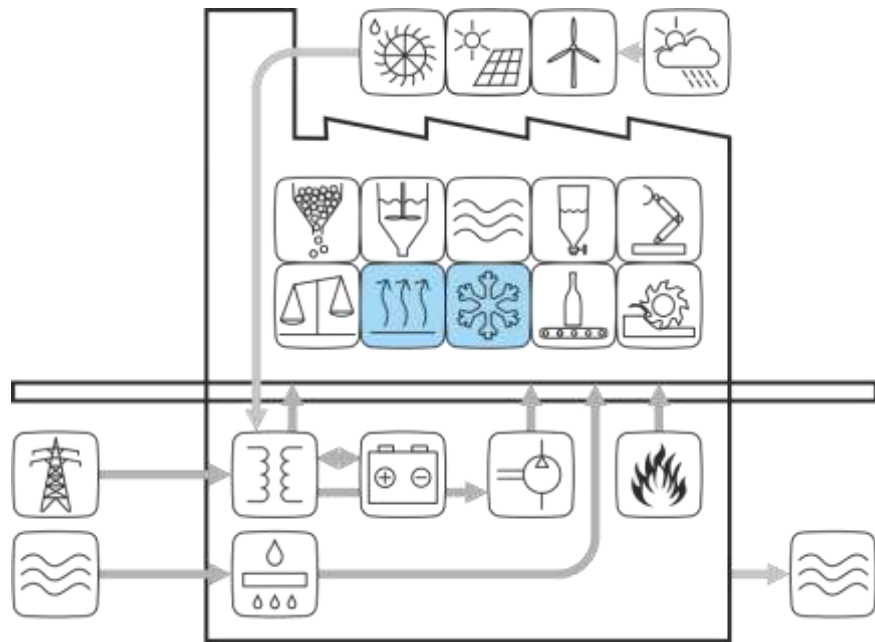


MPS PA 204 complete system
closed loop control / process technology
in systems



AFB Factory
hybrid production

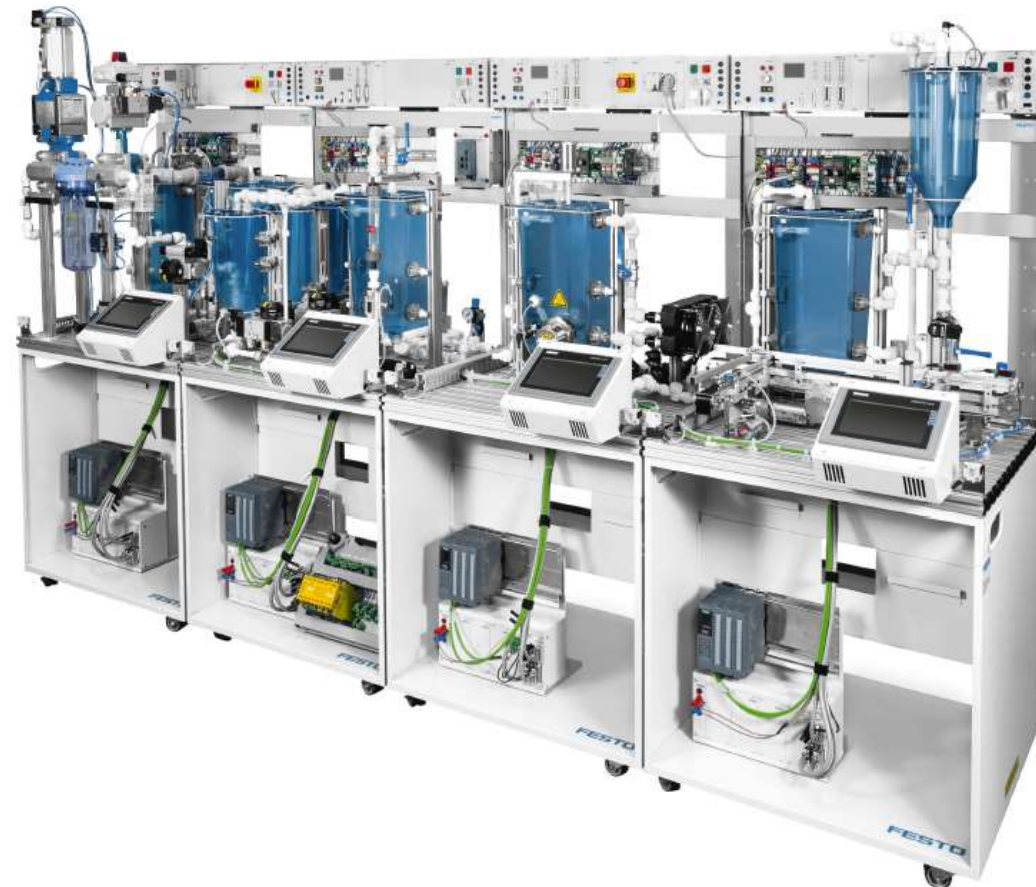
Compact Workstation - closed loop control Level, Pressure, Flow, Temperature







Learning System for Process Automation – MPS PA: Multidisciplinary Platform

Special training items

- Assembly
- Measurement
- Design of documentation
- Process operation
- Component selection
- Defining of PID controllers
- Programming of PLC-programs
- Process operation and monitoring
- Inspection, maintenance and servicing



Filtration

Mixing

Reactor

Bottling


EDS - Environmental Discovery System for Water Management in cooperation with Festo Didactic



EduKit PA
Start up



Stations: Water treatment, Water supply, Wastewater transport, Wastewater treatment, Sand filtration, Membrane filtration Discovering the water circuit



Basic water circuit system: Water treatment, Water supply, Wastewater transport, Wastewater treatment, Water supply tank, accessories

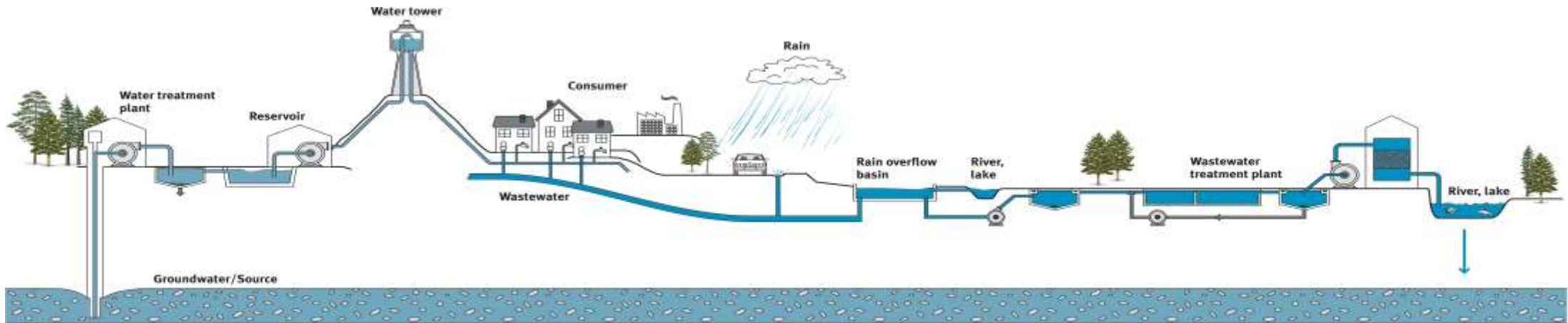


Advanced circuit system:
Basic water circuit with Sand and/or Membrane filtration



Pump station

EDS - Environmental Discovery System for Water Management



The Festo EDS for Water Management simulates the core processes of **water treatment**, **supply** and **sewage disposal**. The circulation of water from the initial source, transport and treatment of wastewater is simulated. Made by Adiro.



Learning system for bulk good in cooperation with Festo Didactic



AFB Factory
hybrid production



MPS PA bulk good system
loop control / process technology



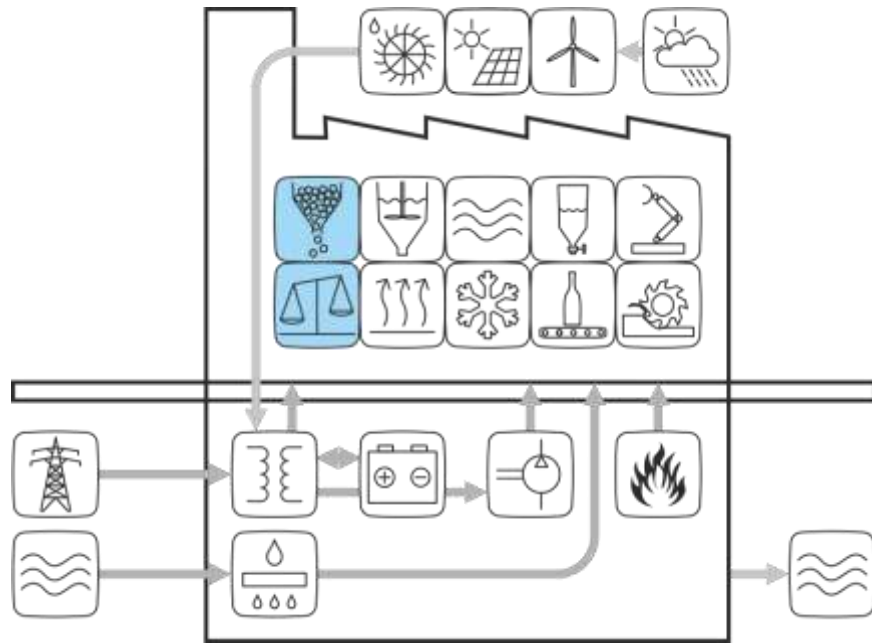
Stations: Quality Sorting, Vibrations conveyor,
Bulk Goods Dosing, Popcorn production,
Packaging weighing
closed loop control / process technology



Dosing weighing unit
Start up



Bulk goods – transport, sort, weigh, fluidized bed



Many different learning areas



Process Control System



Energy monitoring

Electrical



Process



Water analysis

Control possibilities



**Commissioning/testing
Festo simulation box
digital/analog**



**PC control
Festo
EasyPort USB**



**HMI+PLC control
Festo CDPX
Codesys V3.5 incl. I/O**



**PLC control
Siemens S7-300/S7-1500
CPU S7-1512C**



**PLC control
Allen-Bradley
CompactLogix**

Life Sciences focused on LabAutomation





LabAutomation System

Teach and Research Platform made by Adiro for Festo Didactic



LabAutomation System - Video



Hannover Fair HMI 2022
Festo booth - LifeTech

Also you can find the video on YouTube:

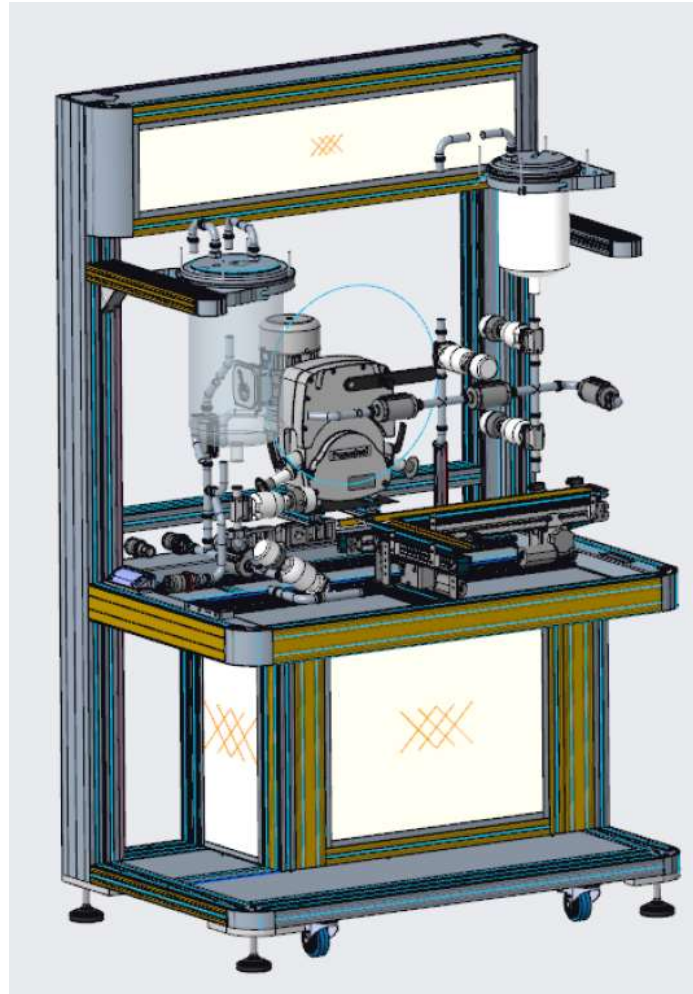
<https://youtu.be/Hp8xT7wdlzs>

A more detailed and longer video is available here:

<https://youtu.be/syLPOJw35CY>



Customized Solutions



Customized Pilot Plants for Education and Research



Innovation driver for competence development: WorldSkills, Skill 55 Water Technology



- Leipzig 2013 (Germany)
- Sao Paulo 2015 (Brazil)
- Abu Dhabi 2017 (UAE)
- Kazan 2019
- Germany 2022



Water for Life, be a
Water Technologist





Thank you for your attention!

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