



TESİSLERDE PROSES EMNİYETİ
SEMPOZYUMU



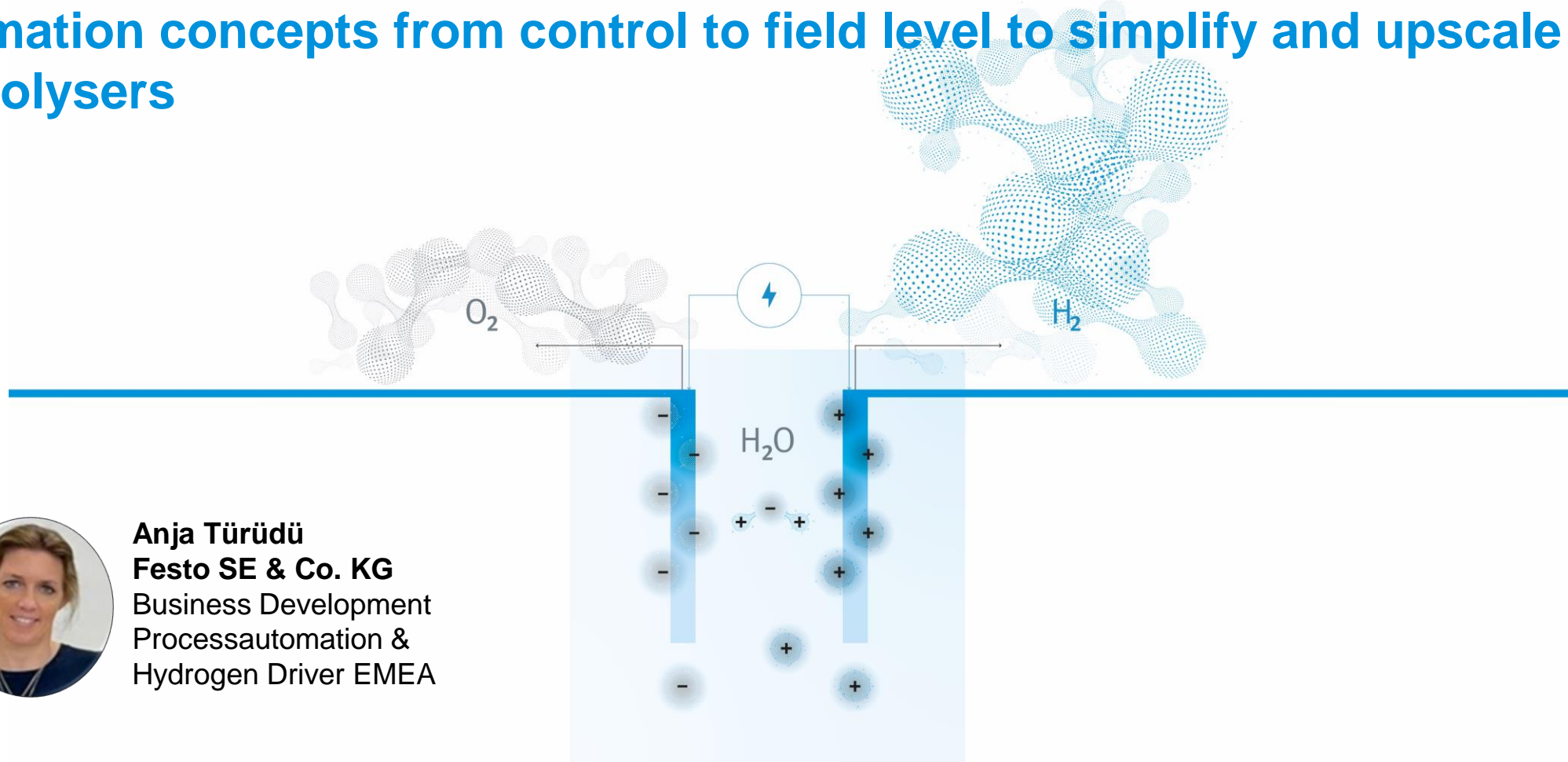
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MAYIS
2024

Festo San.ve Tic.AŞ.

FESTO

Automation concepts from control to field level to simplify and upscale
electrolysers

Automation concepts from control to field level to simplify and upscale electrolyzers



Anja Türüdü
Festo SE & Co. KG
Business Development
Processautomation &
Hydrogen Driver EMEA

Meet us at our
stand

Festo at a glance

Companies in
60 countries

Family
enterprise
founded in
1925

After-sales
Services in
176 countries

R&D share
7%

Over **250**
branch offices

Customers
Automation
> 300,000

Employees
worldwide:
~20.800

Customers
Didactic
> 56,000

Turnover:
3,81 Billion Euro



Our portfolio



**Process
Automation incl.
Hydrogen**



**Customer
Solutions**

> 10.000
individualised
solutions



**Electric
Automation**



**Pneumatic
Automatio
n**

24 h
delivery
service



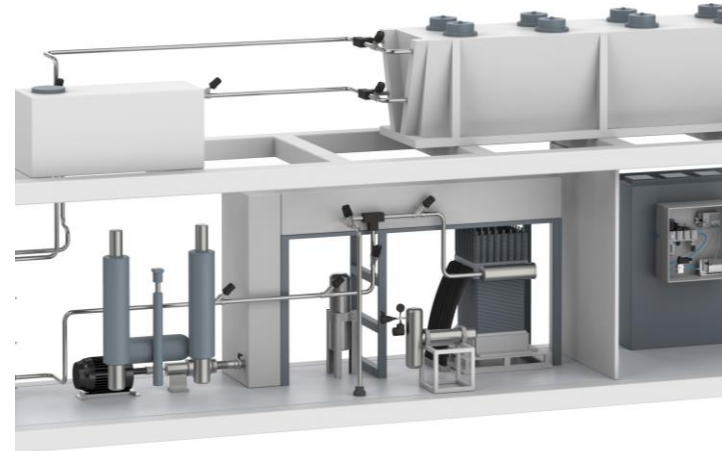
Didactic

36.000
catalogue
products

Is typical plant engineering technology the right approach to automate your equipment?



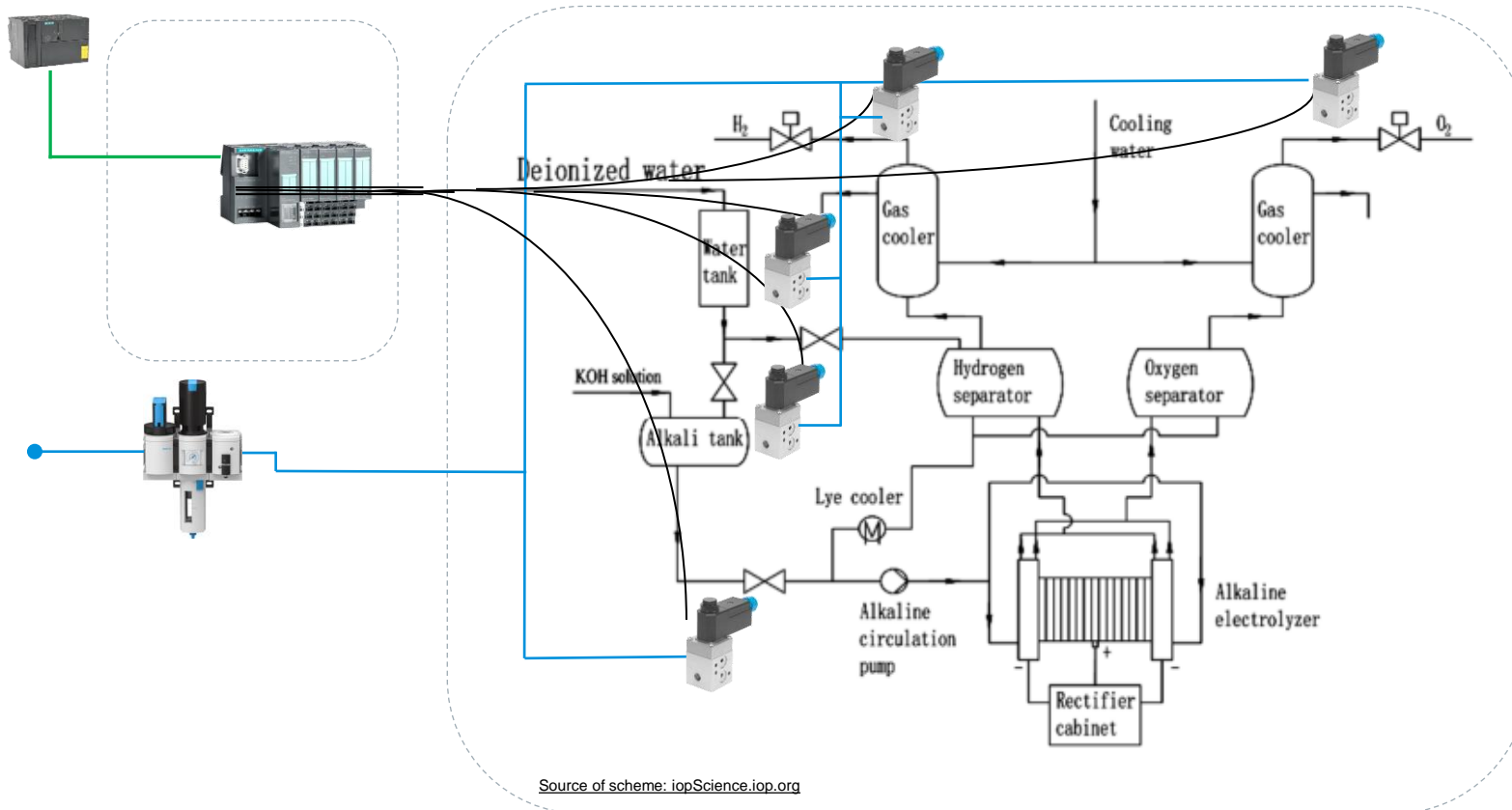
„Extensive“
„Large scale“



„compact skid design“
„modular and scalable“

Is a **different concept** necessary to find the most efficient and cost-effective automation architecture?

Automation of Electrolysers acc. to large plant design with **single pilot valves**



Decentralized control of process valves

- The pilot valves are assembled at the actuator of the process valves
- The pilot valves are controlled from the PLC/DCS or viva output cards on a Remote I/O

When does that kind of installation make sense?

- Especially in extensive plants where the process valves are widely spread, and no modularity is requested

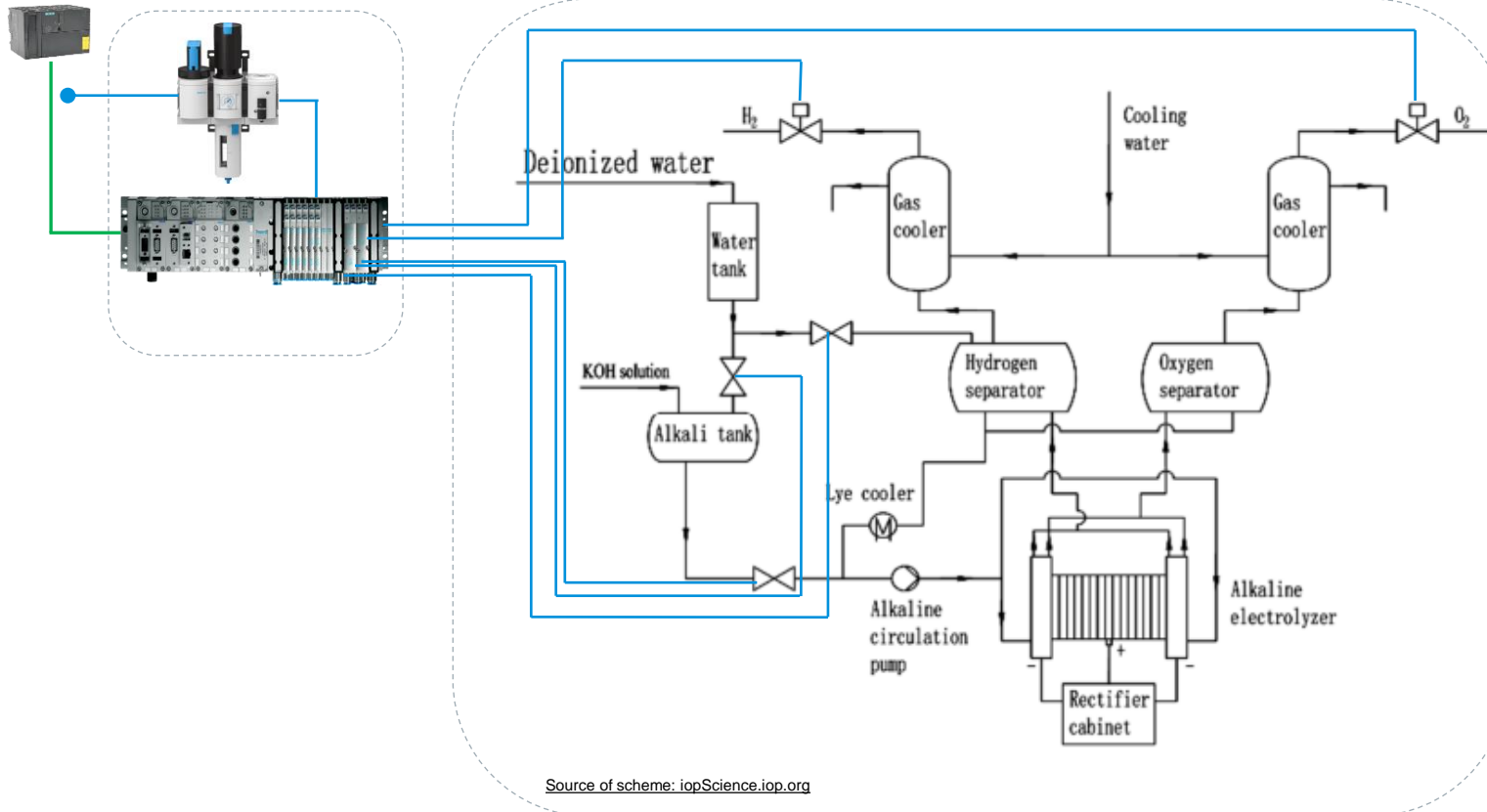
Disadvantages

- **High Capex cost** for wiring of each single valve
- Time consuming installation & commissioning which **increases your time to market**

High Opex cost due to complicated

Automation of Electrolyser I BoP with valve terminal

Our support
Automation architecture



Centralized control of process valves

- Centrally located pilot valves on the valve terminal in the control cabinet
- The valve terminal is connected to the PLC/DCS via fieldbus and can operate as Remote I/O

When does that kind of installation make sense?

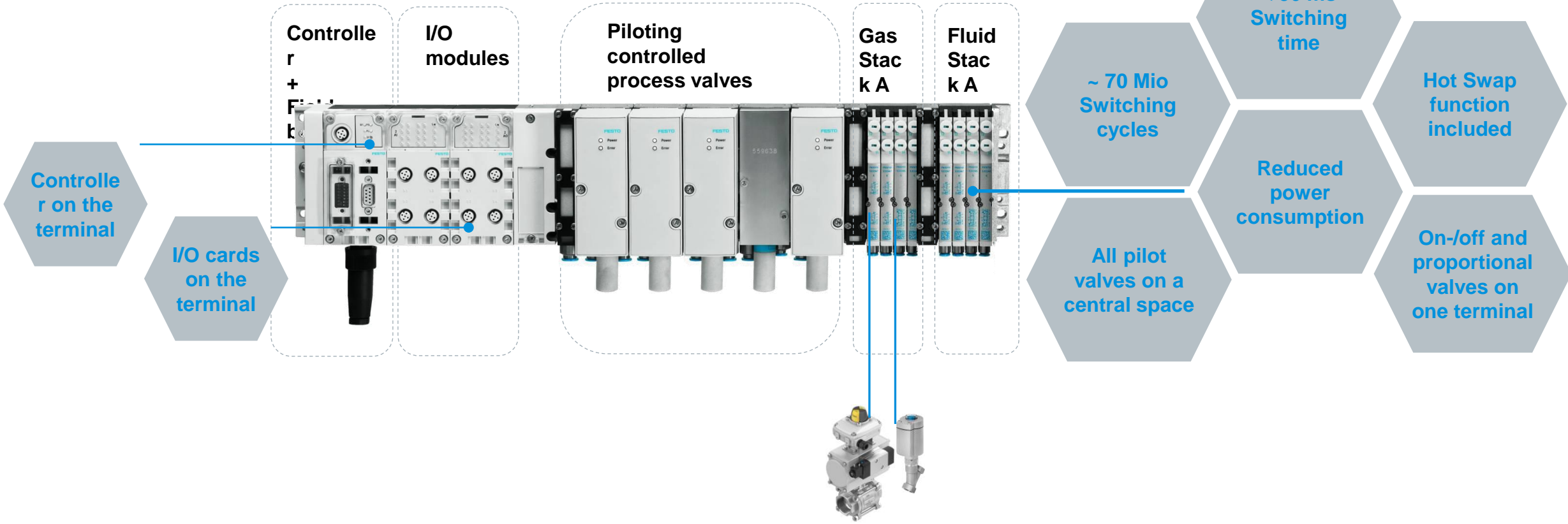
- Especially in skids where you have a high density of process valves

Advantages

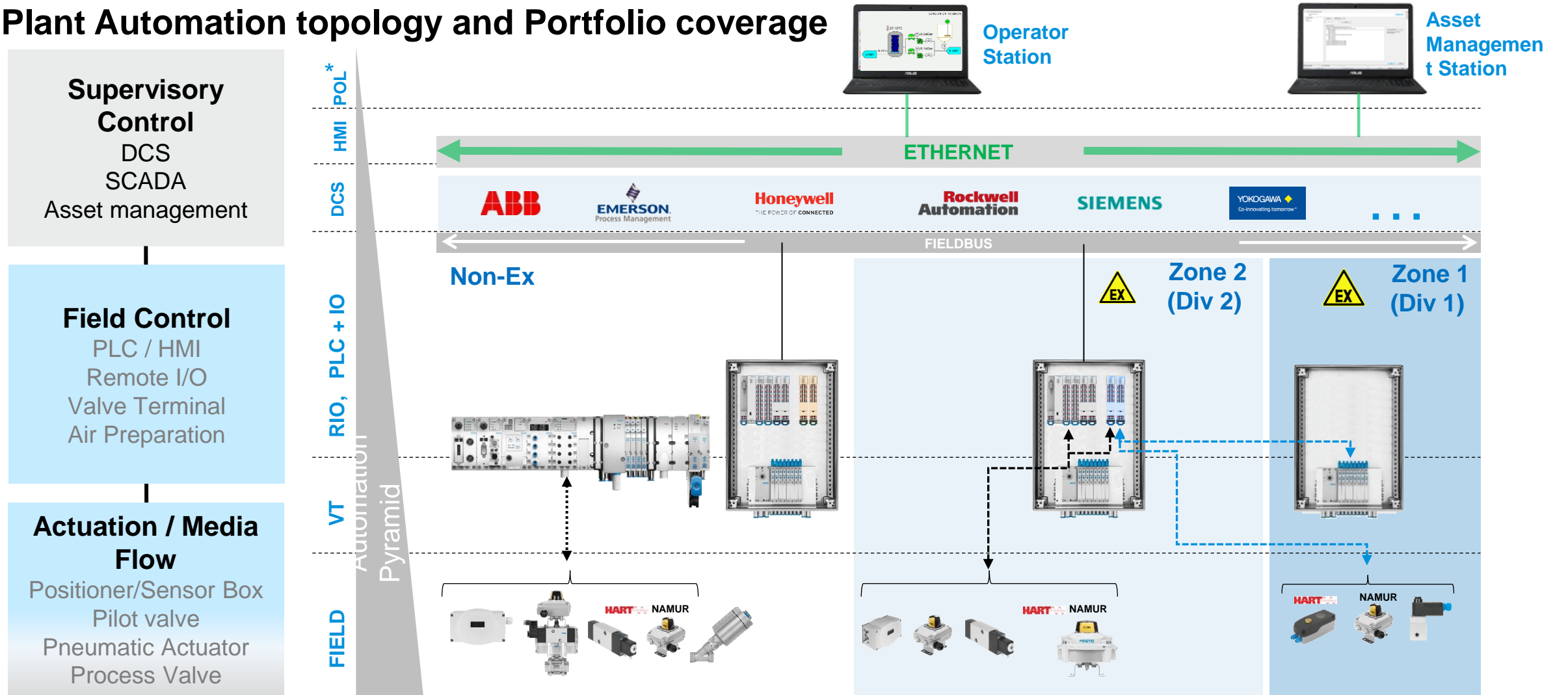
- Simplified Installation **shortens production time as well as commissioning time**
- Centralized cabinet offers **easy maintenance of most components**
- Digitalized solutions offer **optimized process control and ensure stable processes**

Automation of Electrolyser | BoP with valve terminal

Our support simply the right products



Plant Automation topology and Portfolio coverage



Productgroup | Control cabinets



- **Perfect designed cabinets**

According to your needs individually designed, preassembled, tested and delivered

- **Adapted according to your requirements**

available EX-Zone 1/21 or 2/22

up to IP65

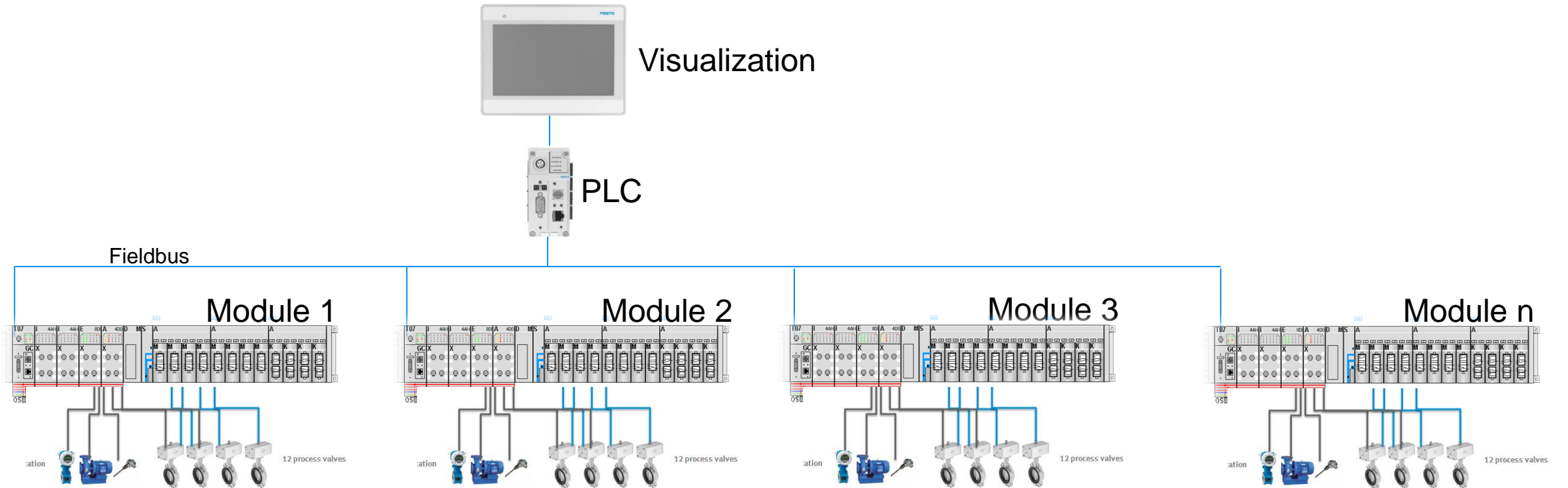
Including realized safety concepts

- **Projectmanagement at Festo**

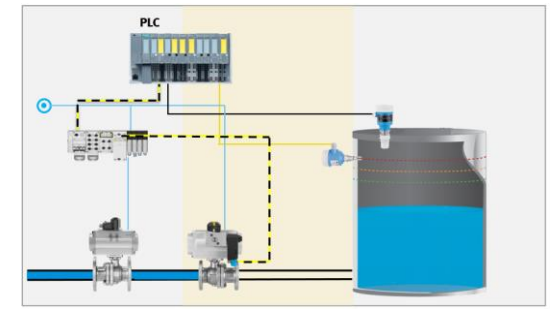
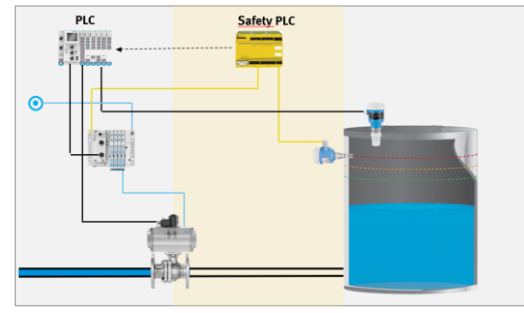
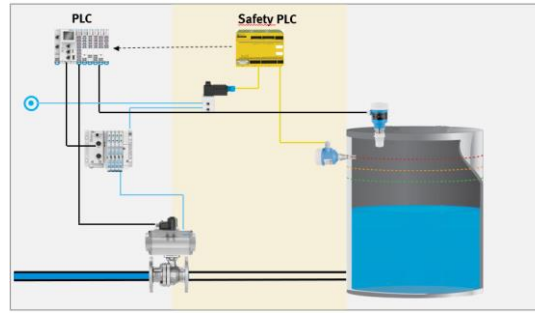
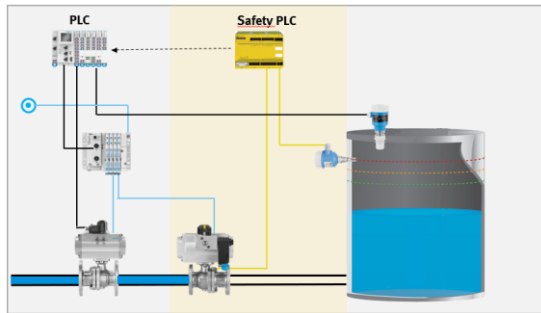
Preassembled Units (**one** Order No.)

Detailed Documentation covering complete system

Festo Modular Concept on a modular system architecture



Functional safety – concepts and products



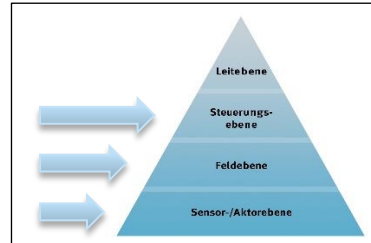
Our support for your SIS (Safety Instrumented System)

- Products with SIL certificates / SIL manufacturer's declarations
- Different concepts for using our valve terminals to increase safety and availability in your safety architecture



SIL certified
according IEC 61508

More than just products ...



Automation concepts from control to field level



Industry segment specific solutions



Global presence



Engineering Tools



The blue path to higher efficiency
Your way to zero emissions

Sustainability in Automation + energy efficiency



SIL applications



Explosion protection

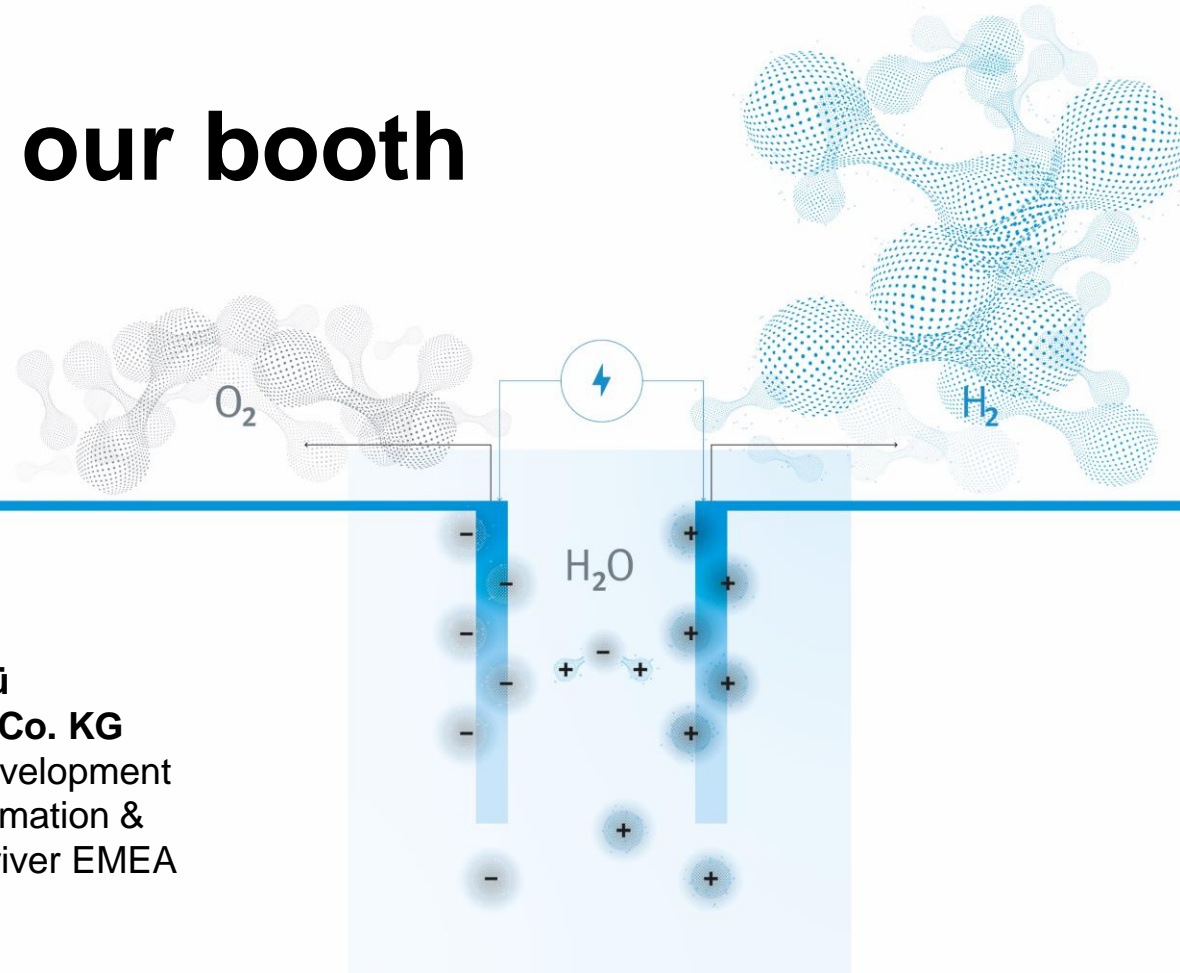


Training & Learning systems

Meet us at our booth



Anja Türüdü
Festo SE & Co. KG
Business Development
Processautomation &
Hydrogen Driver EMEA





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TEŞEKKÜR EDERİZ.