## DI4TEX

Fostering the digital transformation in the textile industry



www.di4tex.eu

The textiles and clothing manufacturing sector in Europe is facing several challenges; owing to the financial crisis, the competition from emerging markets, the environmental demands, etc., and the crisis generated by COVID-19.

The sector, one of the largest and most important in Europe, needs to reassess its position by assuming the two drivers of competitiveness: green transition and digital transformation.

The main objective of DI4TEX is to foster the digital transformation of the textile industry by providing its employees with the required skills to face the current challenges of the sector.









# Topic 05: Smart Maintenance and Smart Industrial Control Systems

## DI4FEX



#### Disclaimer

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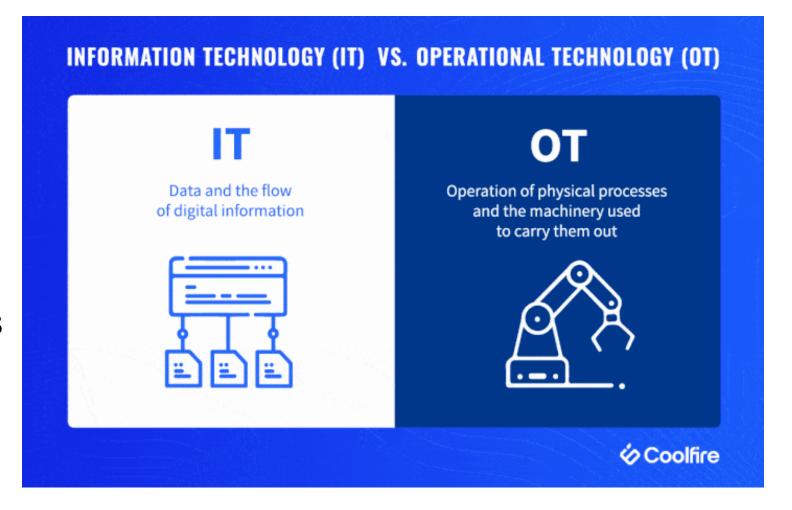


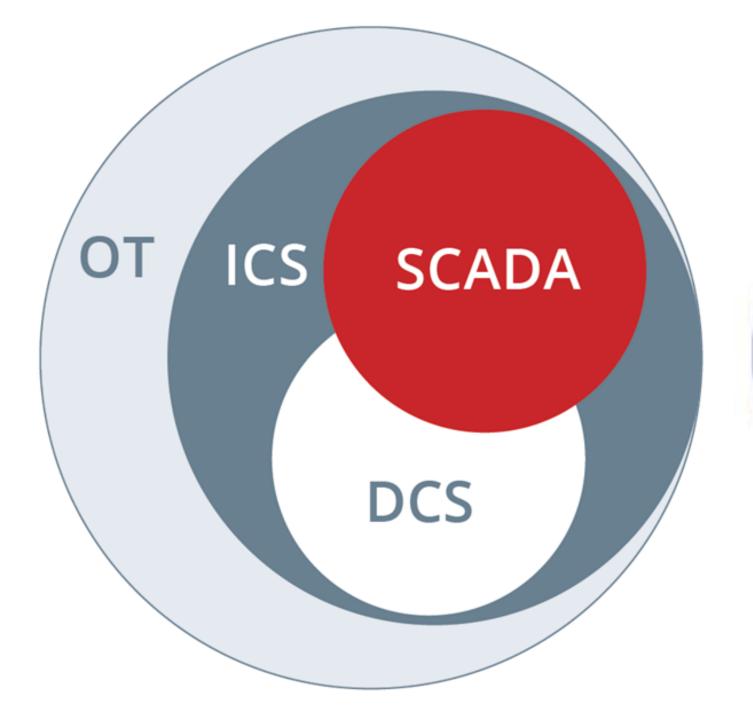


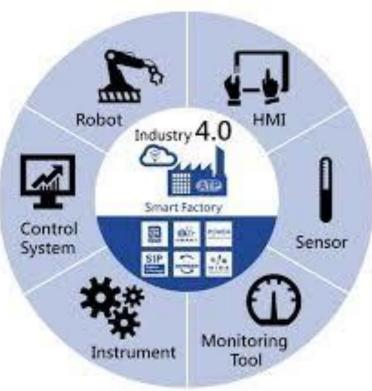


#### IT v OT

Information technology (IT) refers to anything related to computer technology, including hardware and software. ... The main difference between OT and IT devices is that **OT devices** control the physical world, while IT systems manage data.







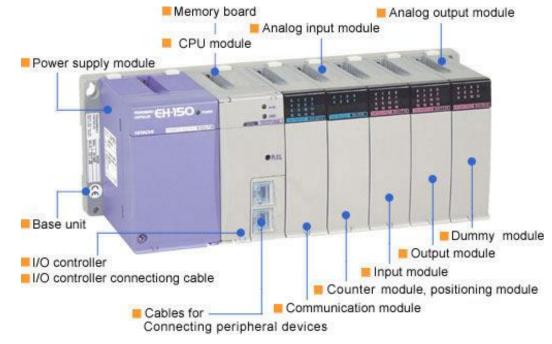
#### Programmable Logic Controllers (PLCs)

#### **Leaders**

- Siemens
- Rockwell /AllenBradley
- Mitsubishi

- ....



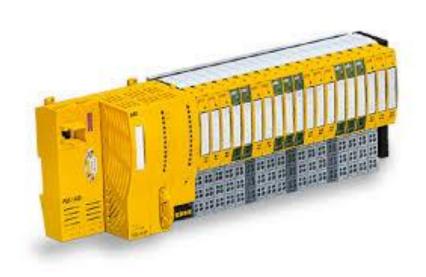






### Specialist PLCs

- Safety
- Energy
- Drives

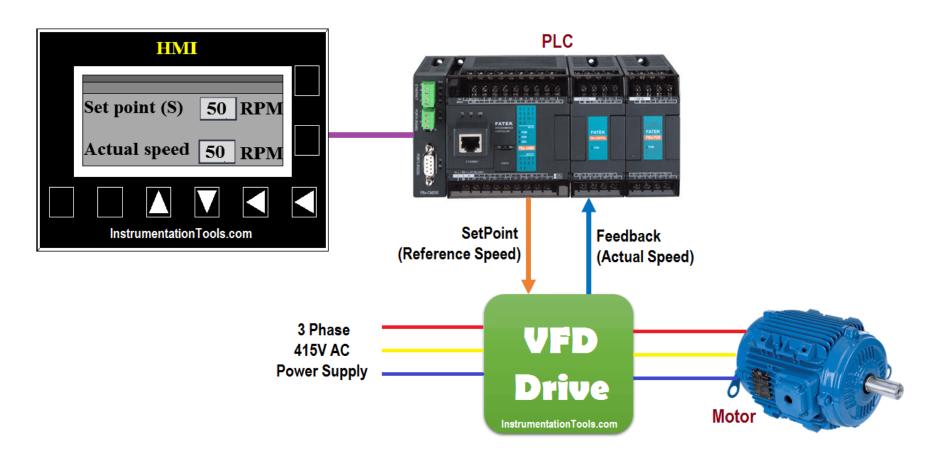






#### **Motor Controllers**

PLC Program to Control Motor Speed using VFD Drive







#### **Drive Controllers**

CNC/Mill Machines

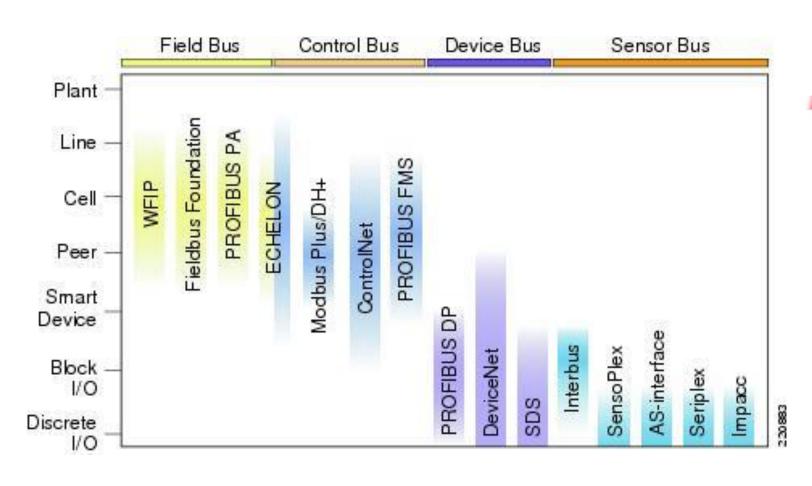


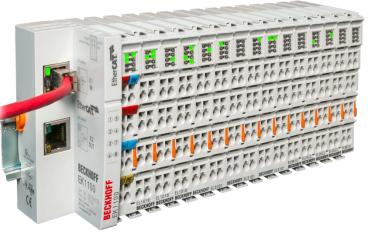


F1 F2 F3 F4 F5 F6 F7 F8



#### **Industrial Networks**

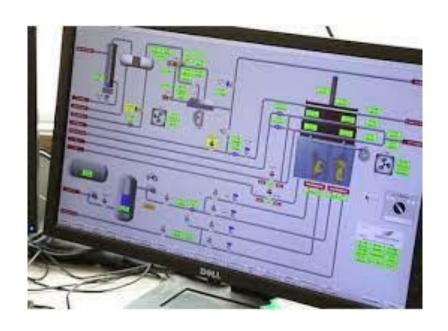


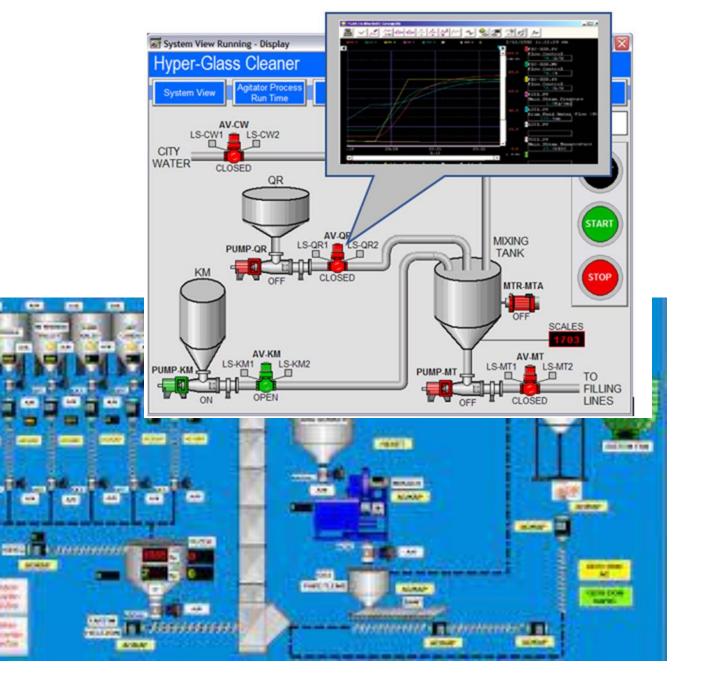




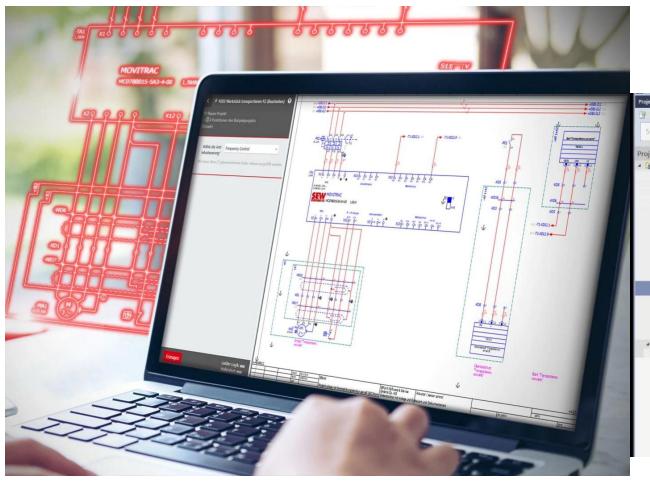
#### **SCADA**

 Supervisory Control and Data Acquisition

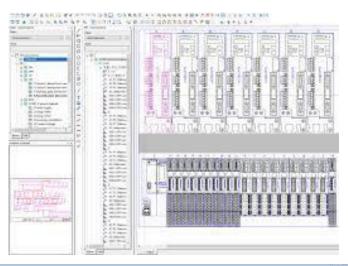


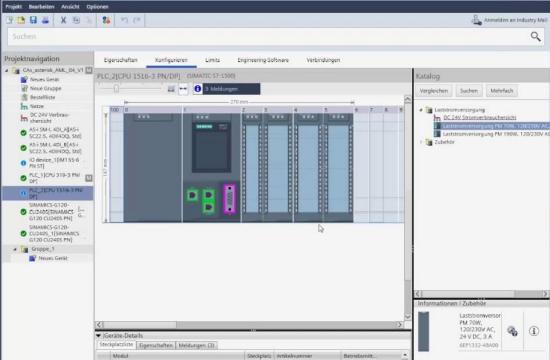


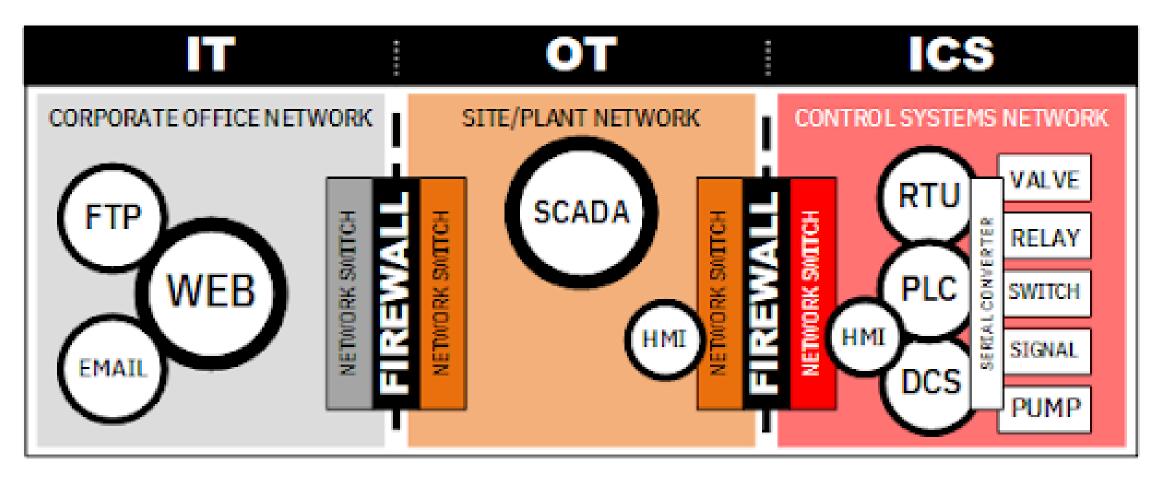
### Electrical Design



• EPlan

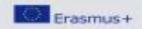






INFORMATION PROCESSING INFORMATION FOR PROCESS CONTROL PHYSICAL PROCESSING





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# Topic 05: Smart Maintenance and Smart Industrial Control Systems

## DIACEX.







