



# LexCon GmbH

YOUR PARTNER FOR PROCESS AUTOMATION

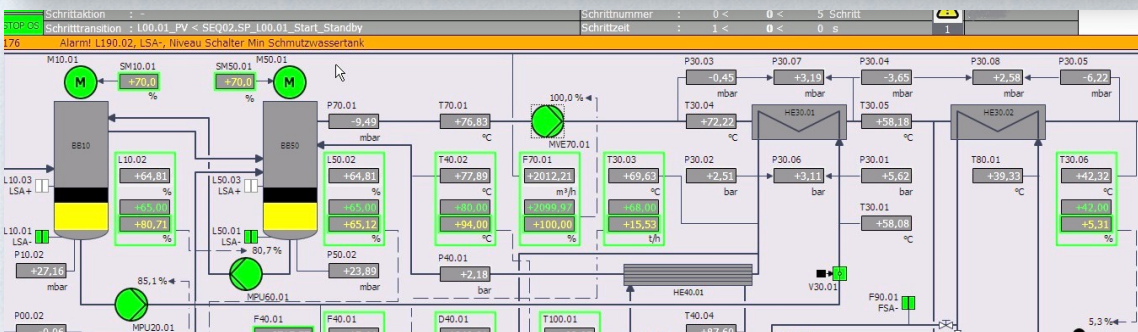
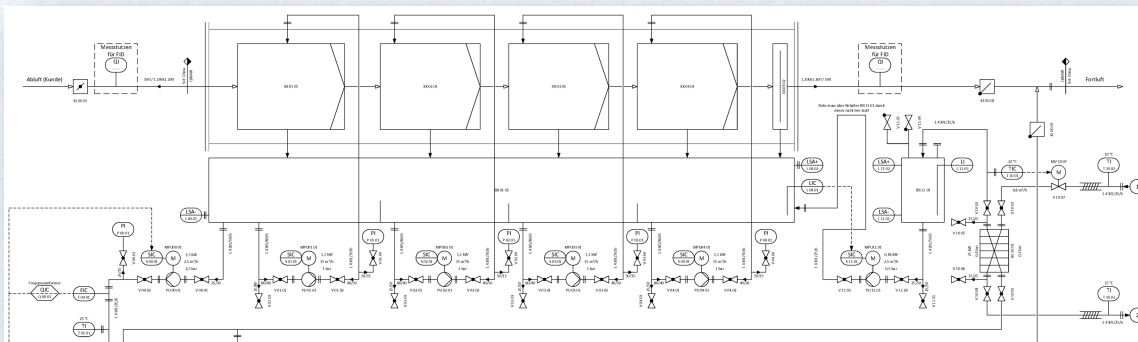
# OUR COMPETENCIES

## Industrial sectors

- ❖ **CHEMISTRY**
  - ✓ Ethanol
  - ✓ Acids / Caustic
- ❖ **FOOD**
  - ✓ Whey
  - ✓ Gelatin
  - ✓ Sugar
- ❖ **BEVERAGES**
  - ✓ Beer
  - ✓ Juices
  - ✓ Milk
- ❖ **PHARMACEUTICAL**
- ❖ **SEWAGE**
  - ✓ Wood
  - ✓ Manufacturing processes (Öl)

## Process technology plants

- ❖ **EVAPORATION**
  - ✓ Falling film evaporator
  - ✓ Thin film evaporator
  - ✓ Forced circulation evaporators
  - ✓ mechanical (MVR) / thermal vapour recompression (TVR)
- ❖ **DESTILLATION**
  - ✓ Single and multi-stage
  - ✓ with and without vacuum
- ❖ **MEMBRANE FILTRATION**
  - ✓ Reverse Osmosis
  - ✓ Nano / ultra / microfiltration
- ❖ **GAS WASHING**
  - ✓ Absorption
  - ✓ Multi-stage gas scrubbing systems
- ❖ **EVAPORATION**
  - ✓ Wastewater treatment
  - ✓ Air purification
  - ✓ Mechanically assisted evaporation
- ❖ **LABORATORY and PILOT SYSTEMS** with extended evaluation options

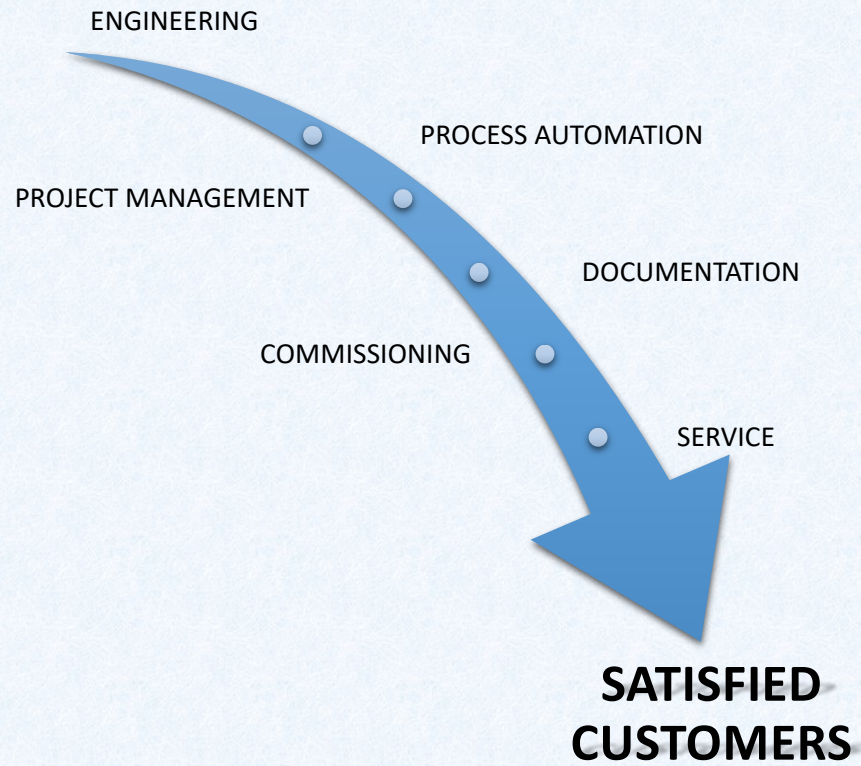


## WE BRING YOUR FLOW DIAGRAMS TO LIFE

Here we take the following route:

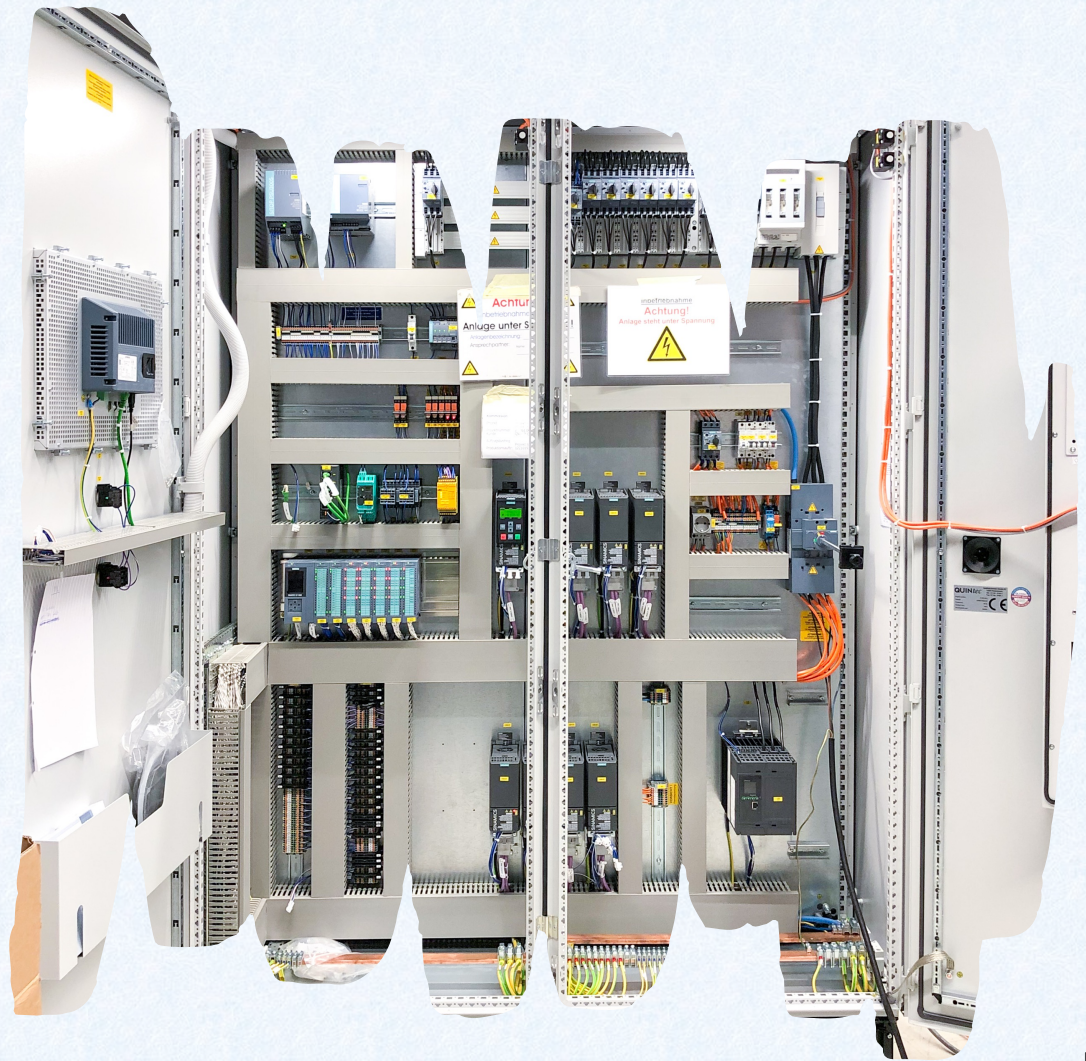
- ❖ Analysis of the flow diagrams (P&ID)
- ❖ Acquisition of elec. signals, preparation of detailed specifications for the procurement of corresponding control cabinets.
- ❖ Creation of circuit documents with EPLAN P8
- ❖ Elaboration of detailed program descriptions
- ❖ Software development including visualization with TIA Portal
- ❖ Approval of the switchgear at the supplier
- ❖ Project communication and coordination
- ❖ Field check, loop check, parameterization and functional testing of the process systems at site
- ❖ Commissioning of the systems at the installation site
- ❖ Creation of documentation (also multilingual)
- ❖ Recipe design to expand the functional or procedural possibilities of the system
- ❖ Implementation and testing of remote maintenance
- ❖ Adjustment of the software through remote action

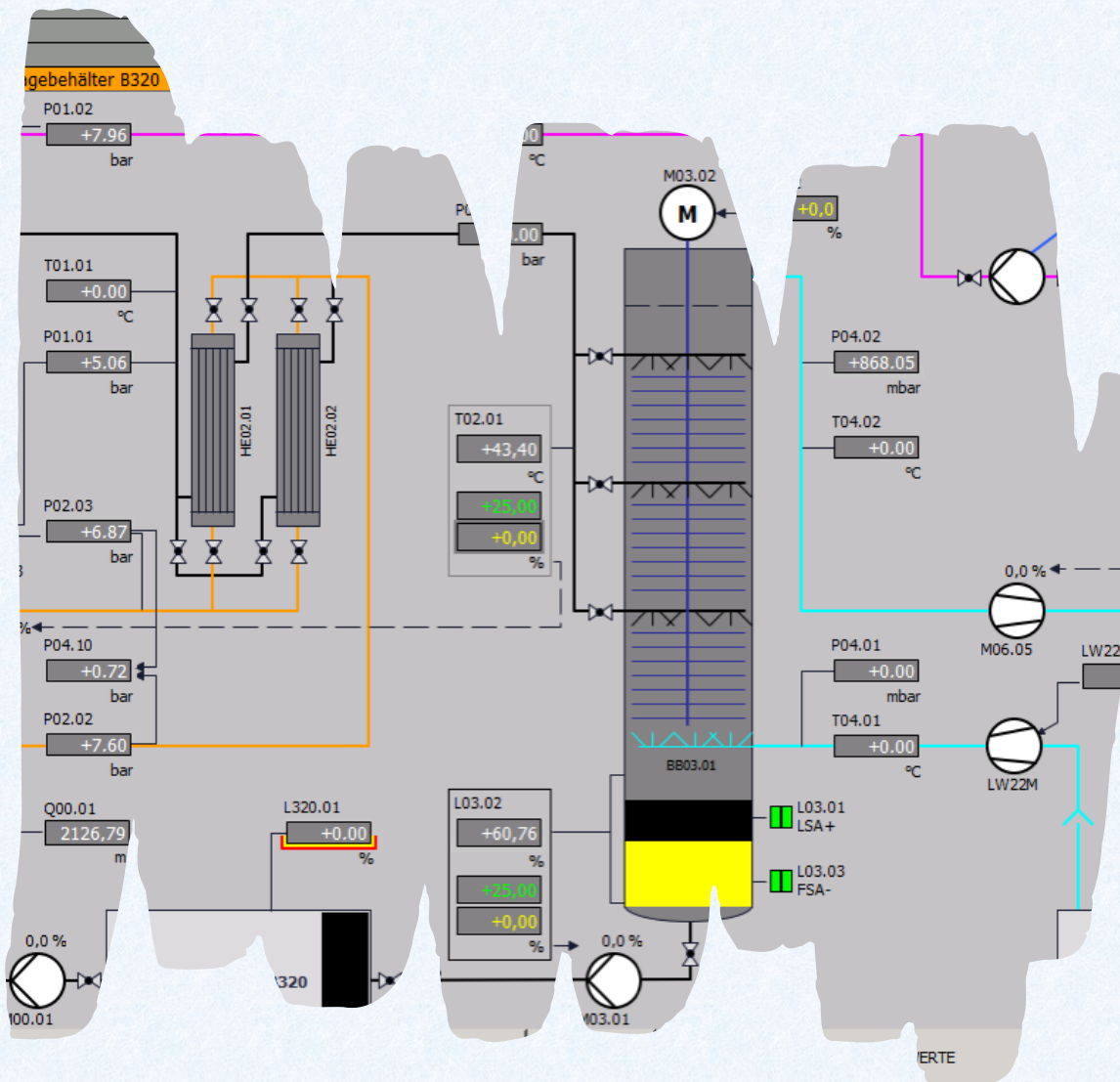
# OUR STRENGTH



# ENGINEERING

- Review or preparation of process flow diagrams (P&ID)
- Development of EMSR control concepts
- Transformation of the concepts as detailed programme descriptions
- Creation of signal lists
- Preparation of project-specific specifications for control cabinets
- Creation of circuit documents with EPLAN P8
- Examination and change monitoring of external circuit documents
- Specification of measuring instruments and actuators
- Participation in safety studies (HAZOP), also for potentially explosive areas (ATEX)
- Risk assessment and SIL analysis





## PROCESS AUTOMATION

- PLC programming (S7-300, S7-400, S7-1500)
- HMI programming (PC, touch panels) with Siemens TIA portal
- Creation of detailed program descriptions
- Sequence control for fully automatic systems
- Recipes for a wide range of applications
- Archiving, presentation and analysis of process values
- Remote maintenance concepts

# PROJECT MANAGEMENT

- Project handling from concept phases to commissioning
- Deadline, cost and quality monitoring
- Checking and comparing the supplier offers
- Communication and coordination of teams and trades



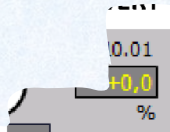


Bild 7.14 Stellwert, Symbol- Nicht angesteuert



Bild 7.15 Stellwert, Symbol-

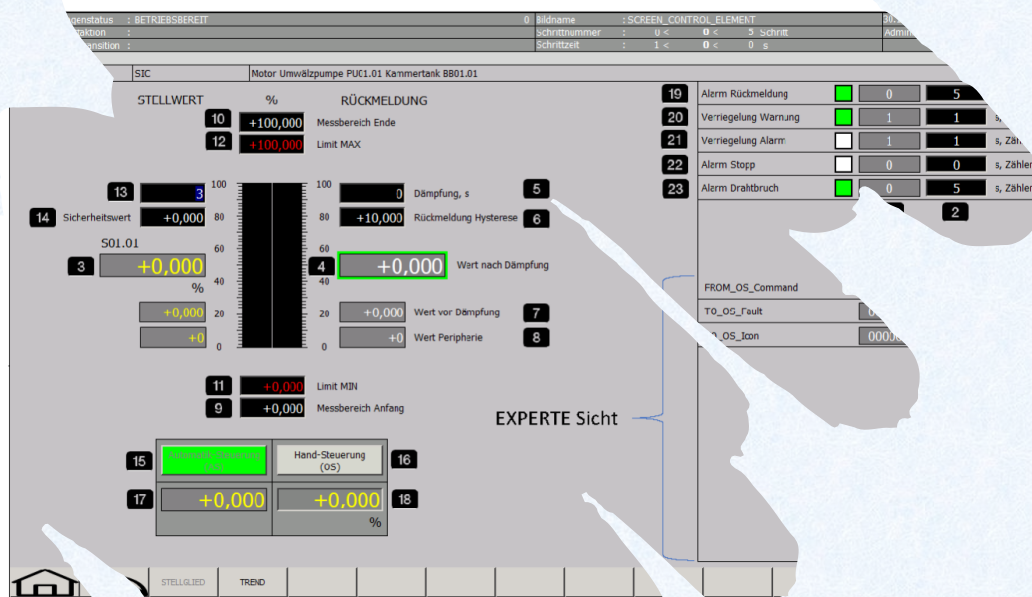


Bild 7.16 SCRL CONTROL\_ELEMENT, Stellwert - Bedienung und Einstellungen

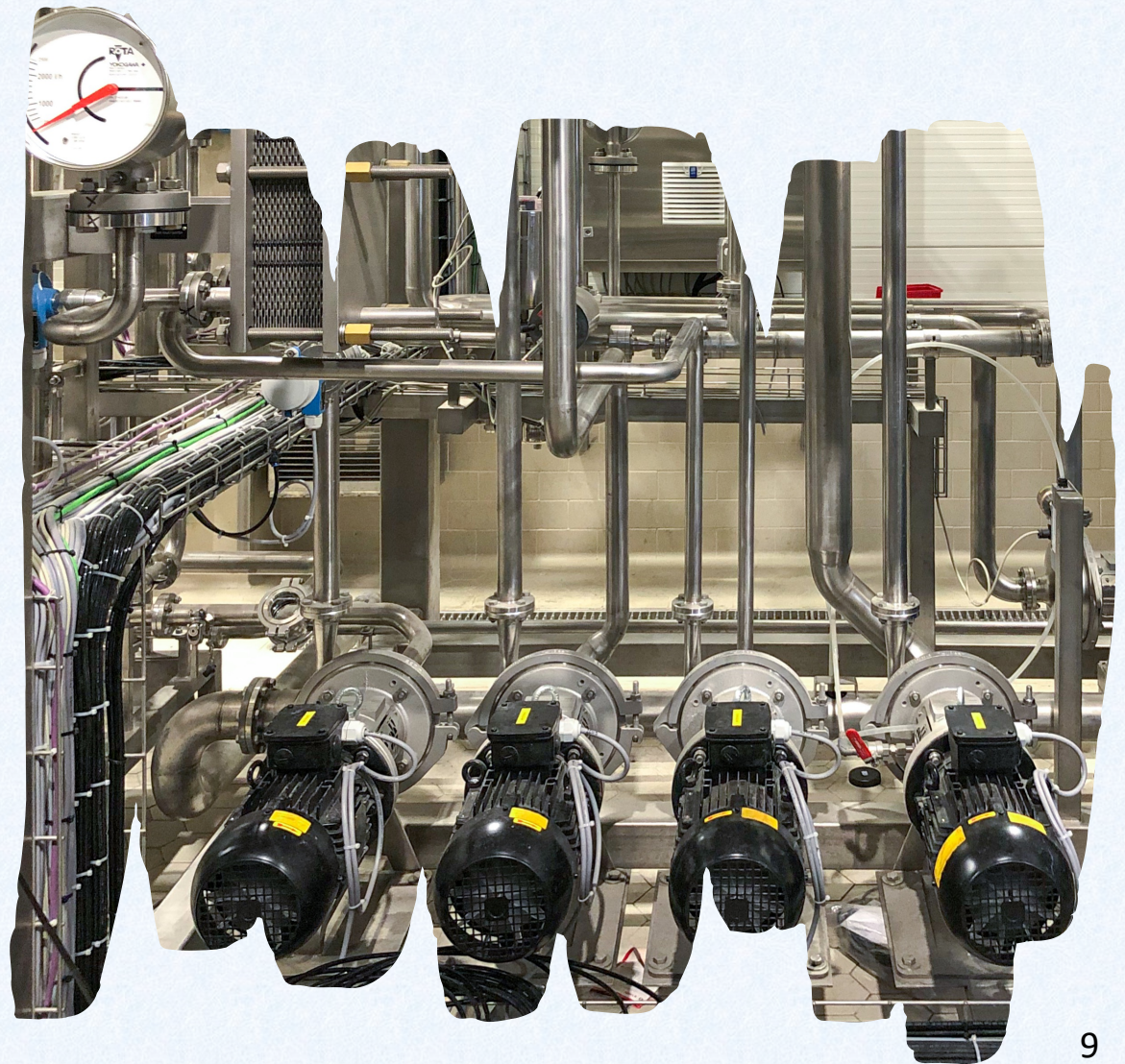
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## DOCUMENTATION

- Specifications for control cabinets
- Signal and cable lists
- Circuit documentation
- EMSR parts lists and data sheets
- Program descriptions, alarm and lock lists
- Detailed manuals and process descriptions are also possible in several languages
- Proof of intrinsic safety (ATEX)
- SIL calculation
- Creation of the final documentation also according to customer layout

# COMMISSIONING

- Carrying out the FAT (Factory Acceptance Test)
- Carrying out the SAT (Site Acceptance Test)
- Loop check, parameterization and functional test
- Optimization of the step chain control for a fully automatic operation of the systems
- Support quality assurance / quality control (QA / QC)
- Staff training and courses
- Reporting on the commissioning progress
- Assurance of acceptance reports







## SERVICE


- Advice / establishment of remote maintenance / remote action
- Analysis of process and automation issues
- Extension and optimization of the existing software side also via remote maintenance
- Commissioning / on-site service
- Support of the field service technician during commissioning through remote action


# MANY THANKS

Contact us today!

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