

Distillation Control System [DC/MoS]²

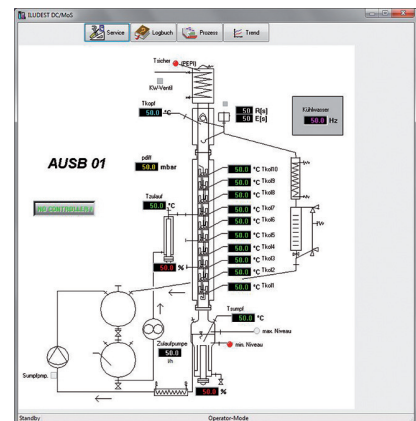
ILUDEST® 's PC-based Control System for Fully Automated Operation

The use of a computer-aided system is well suited for the control and regulation of distillation and rectification plants: the wide range of measurement and regulating tasks, the need for flexibility, ease of operation and a display of the operating parameters make the use of a computer with the relevant software and peripherals appear the ideal solution. Particular attention was paid to the following points when developing the regulating system for distillation plants:

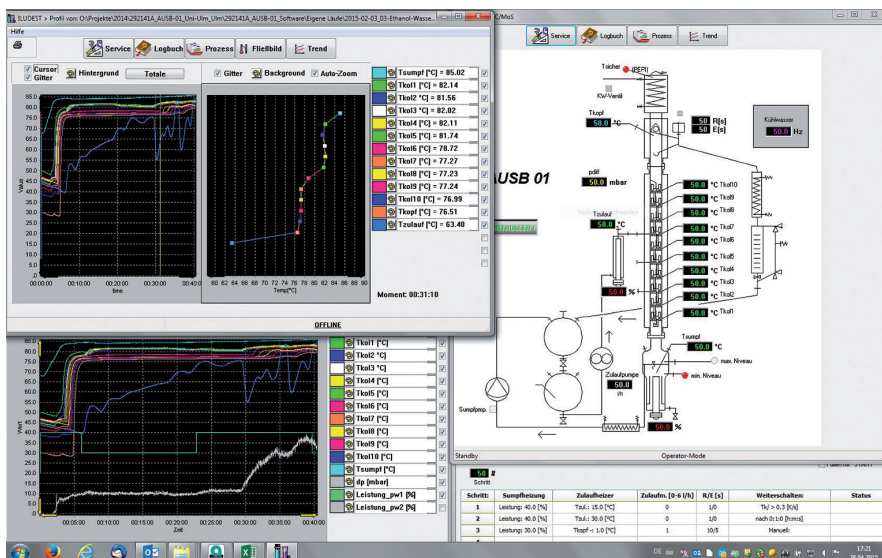
- Optimum separating performance by the individual plant thanks to easy adaptability, including changing distillation tasks
- Simple operation through menu control
- Withdrawal of further cuts into separate receivers
- Intermittent operation for getting an optimum in distillate quality and quantity

Process sequences, regulating concepts and algorithms can be altered via the program without the need to intervene via the hardware. The system for controlling distillation and rectification plants comprises the following components:

- Sensors within the plant: resistance thermometers, pressure probes, level probes etc.
- Actuators in the plant: solenoid valves, heating elements, liquid and vacuum pumps, motorised regulating units etc.
- Personal computer and accessories
- ILUDEST® [DC/MoS]² unit as an interface between distillation plant and PC



Schritt	Sampleneigung	Zulaufheizung	Zulaufdruck [D-4 U]	RUE [s]	Weiterzuschalten	Status
1	Leistung: 40.0 [W]	Tem: 10.0 [°C]	0	10	70 > 0.3 [s]	
2	Leistung: 40.0 [W]	Tem: 20.0 [°C]	0	10	70 > 0.3 [s]	
3	Leistung: 30.0 [W]	Tem: 1.0 [°C]	1	10	Manuell	
4						



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3	Leistung: 30.0 [W]	Tem: 1.0 [°C]	10

- 1x Minimum level sensor input
- 1x Cooling water sensor input
- 1x Optional input

- 1x Head temperature sensor Pt-100
- 1x Flask temperature sensor Pt-100
- 1x Heater temperature sensor Pt-100
- 1x Toption1 Pt-100
- 1x Toption2 Pt-100
- 1x pabs (0...10V)



ILUDEST® Single Case Controllers

Comprehensive range of microprocessor operated units for various control modes/functions.

The indication and modification of all set points and actual values is done via touchscreen LCD.

With optional Ethernet interface for the communication with a PC and CAN-BUS for the connection to other controller types.

[DC/U]³ Distillation Control Unit
 [SU]³ Safety Unit
 [TA]³ Temperature Display
 [VC]³ Vacuum Controller
 [RT]³ Reflux Timer
 [LS]³ Power Controller
 [DP]³ Differential Pressure Controller

