

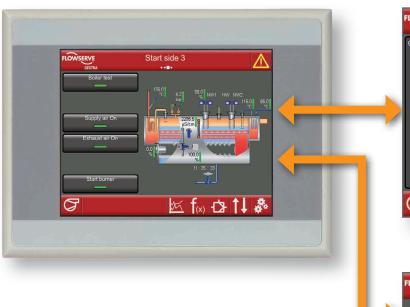


SPECTOR control - the second generation

Now with even more benefits for you.

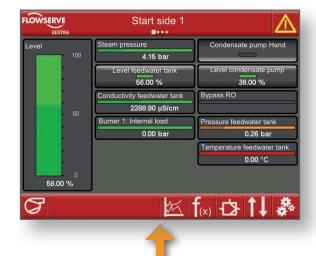
SPECTOR*control* is a control, display and operating panel, which for more than 10 years has rounded off the high end of the SPECTOR*bus* product range and has been used with much success. True to our motto, "*making good things even better*", we have developed the system to reflect the latest state of the art, delivering lots more benefits for your equipment.

The new SPECTOR*control* II series offers you improved graphics, better handling, a broader performance range and an extensive communication platform. Thanks to its numerous freely programmable controls, regulators and logic operations, now more than ever the system is also suitable for use as a multi-regulator unit in combination with conventional sensors.

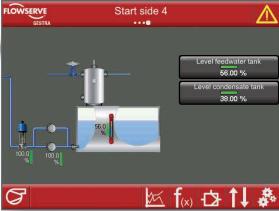


The table below shows some of the main features of the SPECTOR*control* II.

Please turn over









SPECTOR control - the second generation

Functions of the SPECTOR control II	
Display via resistive touchscreen (IP65)	10.4"
Swipe to change screens/use scrolling lists	X
Operating data display for four pages	X
Individual start screens with individual flowcharts	4
Option of individual variable positioning for start screens 3 and 4	22 of each
Switches/set points set directly from start screens	X
Operating data display for burner control via Modbus RTU for Lamtec or Landis & Staefa	X
Operating data display for second burner controls via Modbus RTU	X
Dynamic set point input and fuel switchover	X
Trend logs 5 x 3 (10 days)	Х
Steam flowrate measurements (with pressure and temperature compensation)	5
Flowrate measurements (pulse/analogue)	10
Timer (weekly timer)	5
Maintenance logs (runtime/switching frequency)	5
Calculations (e.g. for set point inputs)	10
Logic operations (e.g. for enabling the regulator)	20
Step sequence (e.g. for burner soft start)	5
Control loops	12
Regulator optimization based on trend (12x4 > actual, set point, positioning value, position)	X
Digital inputs/outputs	40
Analogue inputs/outputs	20
CAN sensors	30
Fault log incl. freely configurable collective fault signal and initial value signal	X
Alarm history	1024
Communication via Modbus TCP, OPC, Profibus	X
SC II mutual data exchange via Modbus TCP master/slave	3
Remote control possible via standard PC, Android or IOS Remote Client	X

Example of controllers:

- Continuous controller
- 2 Continuous pump controller (FU)
- 3 3 position stepping controller
- 4 2 position controller for valves/pumps
- 3 element controller
- Automatic intermittent blowdown control with pulse repetition
- Metering regulator

Depending on the control loop, controllers can feature the following:

- P, PI or PID characteristic
- Dead zone
- Soft start
- Automatic runtime-dependent pump switchover
- Preset operating positions

The system allows the processing of digital and analogue signals, and the setting of alarm and switching thresholds. These signals can be switched directly on the regulator or further processed by the logic and calculation functions, for example. Next, they are transmitted once again via a digital or analogue output (IPO model). A great variety of system-specific tasks can therefore be accomplished with these signals. This reduces the control cabinet layout to a minimum. All logic operations of the inputs and outputs, configurations, actual value displays, assignment of trend data, etc. can be achieved by touch without knowledge of programming.

Advantage:

The simplified configuration and control cabinet layout cuts costs!

Adjustments and upgrades can be achieved

Adjustments and upgrades can be achi quickly and easily.

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