

Safer, More Efficient Steam Production

GESTRA SPECTORconnect





SPECTOR*connect*

Safer, more efficient steam production

Intelligent, global monitoring

An extensive and adjustable data connection enables global system monitoring. Simple graphics, historic data and alarms provide clear information about the steam generation process.

Always state of the art

SPECTOR*connect* satisfies the requirements of the latest standards for safe steam boiler operation.

One unit, several functions

All the important functions necessary for efficient system operation have been integrated in a single unit, saving installation time and cutting costs.

Reliable service interval monitoring

The plant operator is informed when components require a service or the system is going outside its normal operating range.

Constantly low energy consumption – Reduced process costs

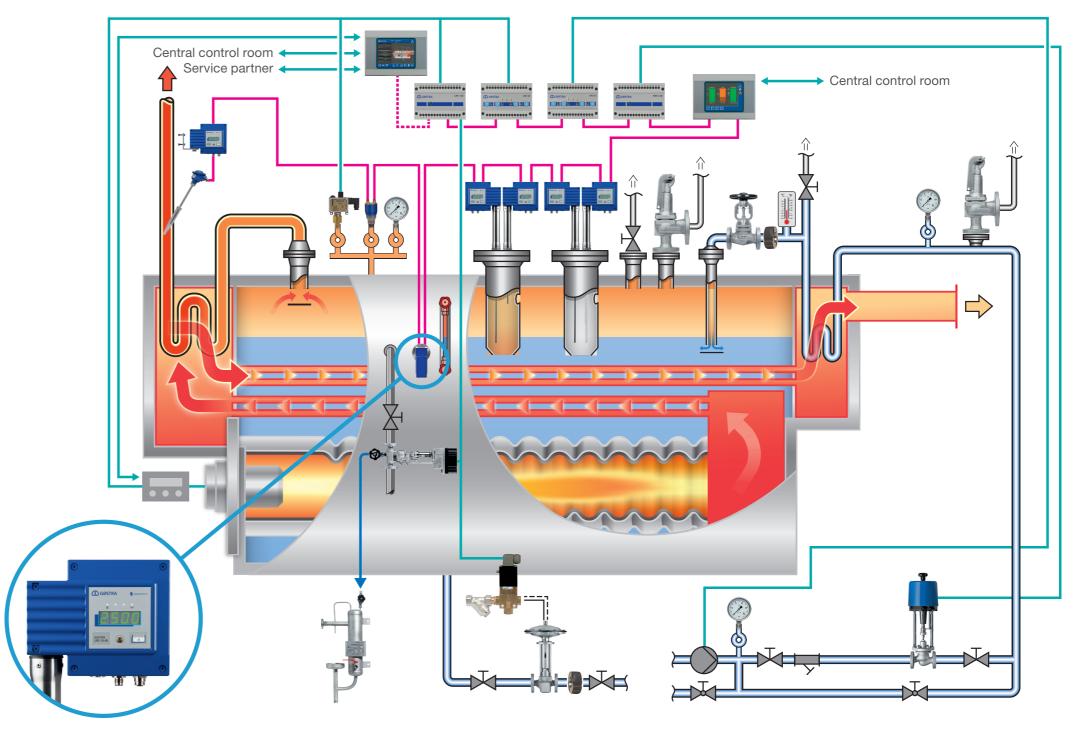
Temperature-compensated measurement and control of conductivity in the steam drum itself reduces the blowdown volume to an absolute minimum.

Market and usage

The SPECTOR*connect* system is used for steam and hot water boiler systems to TRD 604, EN 12952 and EN 12953.

Development has consistently focused on safety, enabling a SIL 2/3 rating to be achieved for conductivity limiting as well.

The URB 60 display unit functions as a data interface and supports various data protocols.



Conductivity sensor LRG 16-60

Technical data

SPECTORconnect system overview

- Largely compatible with old systems
- SPECTORconnect uses the same bus protocol as predecessor systems
- Universal 24V DC power supply
- Automatic sensitivity adjustment up to 0.5 µS/cm
- Sensors with local display and setting options
- Conductivity and level controller with PI characteristic
- Option of three-component controller with actual value input for steam and water volume
- Simple, logical operation using common symbols and icons
- Separate display and operator terminal with interface function
- Available as a continuous or three-component controller
- Limiter systems with SIL 2/3 certification
- Conductivity limiter to VdTÜV WÜ 100 (bulletin on water monitoring facilities) and SIL 2

Universal safety switch URS 60/61 (SIL 2/3)

- The new universal safety switch is certified to SIL 3 in accordance with EN 12952/53.
- The switch is self-monitoring, performs periodic self-tests and has two channels.
- Data can be processed from up to four safety-oriented
 - Two low water level electrodes NRG 16-60
 - ----> High water level electrode NRG 16-60
 - ----> Temperature transmitter TRV 5-60
 - --- Conductivity sensor LRG 16-60
- The adjustable conductivity limit value is set on the display or on the sensor.

Safety water level limiter NRG 16-60 (SIL 3)

- The safety water level limiter is self-monitoring, performs periodic self-testing and has two channels.
- Status signals can be retrieved and equipment settings undertaken on the integrated display.
- There is no need to open the housing.
- Connection via a pre-assembled cable with M12 connectors.

Safety temperature transmitter TRV 5-60 (SIL 3)

- The new safety temperature transmitter has a SIL 3 rating in accordance with EN 12952/53.
- The system is self-monitoring, performs periodic self-tests and has two channels.
- The equipment works in conjunction with a Pt 100 temperature sensor.
- The actual temperature is displayed continuously and the target temperature at the touch of a button.

Safety conductivity sensor LRG 16-60 (SIL 2)

- The conductivity sensor can be used for control and for safely cutting off the heating.
- When combined with the URS 60/61 safety switch, the sensor also becomes a limiter.
- The actual value is continuously shown on the integrated
- Status messages can be retrieved and equipment settings undertaken.
- There is no need to open the housing.
- Connection via a pre-assembled cable with M12 connectors.

Capacitance level controllers NRR 2-60 / 2-61

- The controllers of this series work in conjunction with the NRG 26-60 capacitance sensor.
- The series also offers a continuous control output for pneumatic values or speed-controlled pumps (NRR 2-61).
- The unit is optionally available as a three-component cont-
- Simple, menu-guided operation is via a separate touch panel (URB 60).
- In addition to set points and actual values, trend values, error messages and limit values are also displayed.
- 100% measuring range adjustment is possible from a water level of just 25%.
- The system already incorporates an actual value current output for remotely displaying the level.

Conductivity controller LRR 1-60

- The LRR 1-60 controller works in conjunction with an LRG 16-60 or LRG 16-61 conductivity electrode, depending on the measuring range.
- The controllers have been optimised for operation with continuous blowdown valves from the BAE 46/47 or 210
- All units feature an actual value current output as standard, and come with a blowdown timer and standby input.
- As with the level controller, operation is via a separate touch panel (URB 60).
- In addition to set points and actual values, trend values, error messages and limit values are also displayed.
- What's more, the URB 60 offers various data transfer protocols for communication with higher-level systems.

