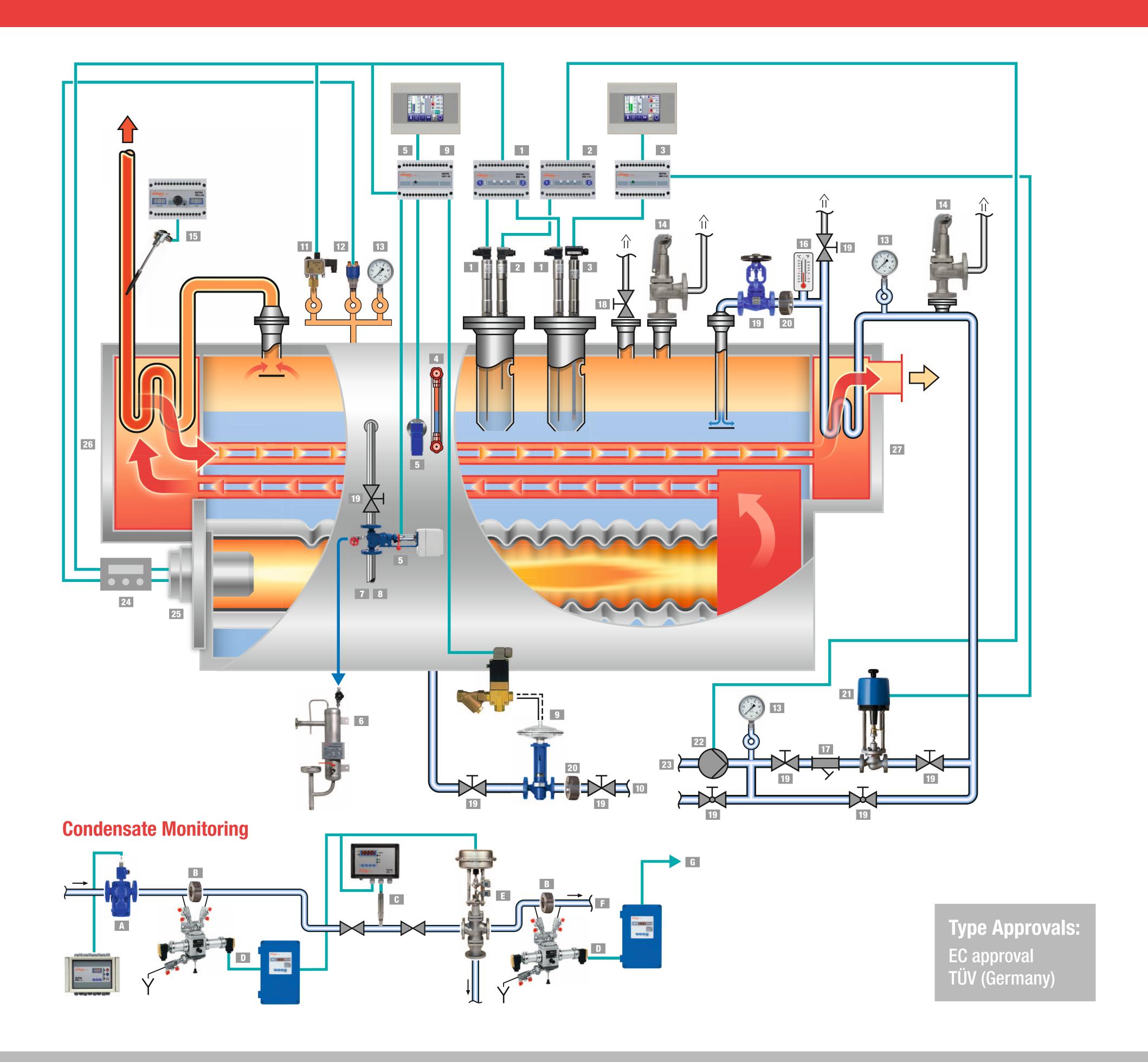
## GESTRA Steam Boiler Equipment

FLOWSERVE GESTRA

SPECTOR*module* – for operation according to EN 12953



## **Example of a Steam Boiler Plant Operating without Continuous Supervision (72h)**

## **GESTRA Steam Boiler Equipment**

- Low-level limiter of "high-integrity design": level electrode NRG 16-50, level switch NRS 1-50,
- Separate high-level alarm of "high-integrity design": level electrode NRG 16-51, level switch NRS 1-51, SIL 3
- Level control with high-level alarm and remote water level indicator: level probe NRG 26-21, level controller NRR 2-52 and control valve V726
- 4 Water level gauge
- Conductivity measurement with indicator, conductivity limit switch and continuous blowdown control: conductivity electrode LRGT 16-2, continuous blowdown controller LRR 1-52, continuous blowdown valve BAE
- 6 Sample cooler

- 7 Blowdown flash vessel
- 8 Residual blowdown cooler
- Automatic intermittent blowdown: intermittent blowdown valve MPA, pilot valve
- 10 Blowdown receiver
- 11 Pressure limiter DSF
- 12 Pressure transmitter DR
- 13 Pressure gauge

14 Safety valve GSV

- Safety temperature monitor (limiter): resistance
- 16 Thermometer

- 17 Strainer
- 18 Vent valve
- 19 Stop valve (also in bypass)
- Non-return valve
- 21 Electrical/pneumatic control valve V 72
- 22 Feedwater pump
- Monitoring of the feedwater / condensate
- 24 Burner control unit
- 5 Burner
- 26 Superheater
- 27 Economize

## **Condensate monitoring**

- Steam trap with trap test set: test chamber VKE, electrode NRG 16-19 and test station NRA 1-3 for max. 16 traps
- Non-return valve RK 86

  Quality control for ingress of foreign matter, using type-approved systems as per VdTÜV bulletin on water monitoring facilities (WÜ 100)
- ring facilities (WÜ 100)

  Monitoring for ingress of acids, blowdown, raw water etc.: conductivity electrode with integrated resistance thermo-
- Monitoring for ingress of oil, grease etc.: oil and turbidity detector OR
- Electrical/pneumatic three-way valve for discharging the contaminated condensate
- E Condensate tank
- G Shutdown of the condensate-return system or interruption