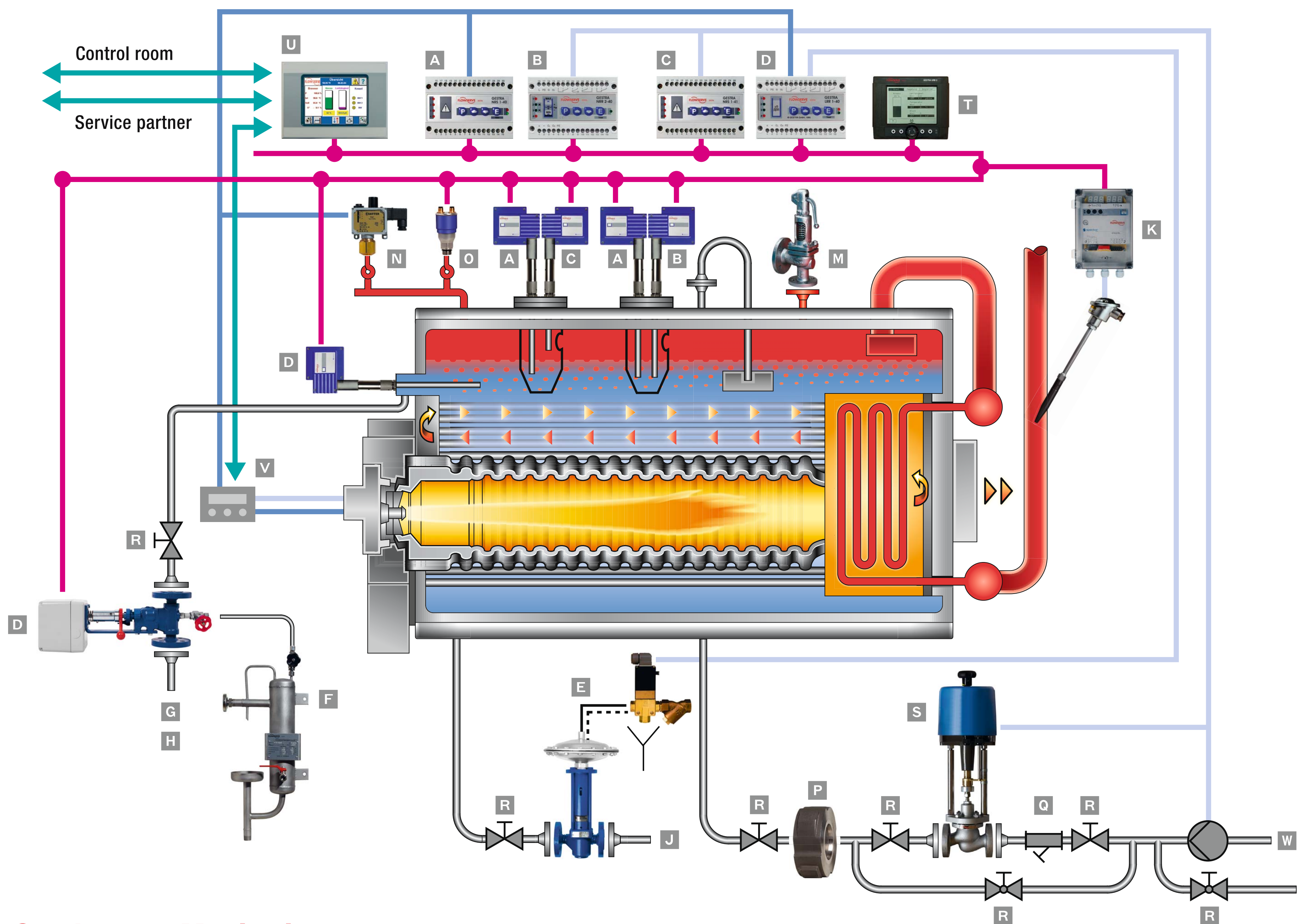


GESTRA Steam Boiler Equipment

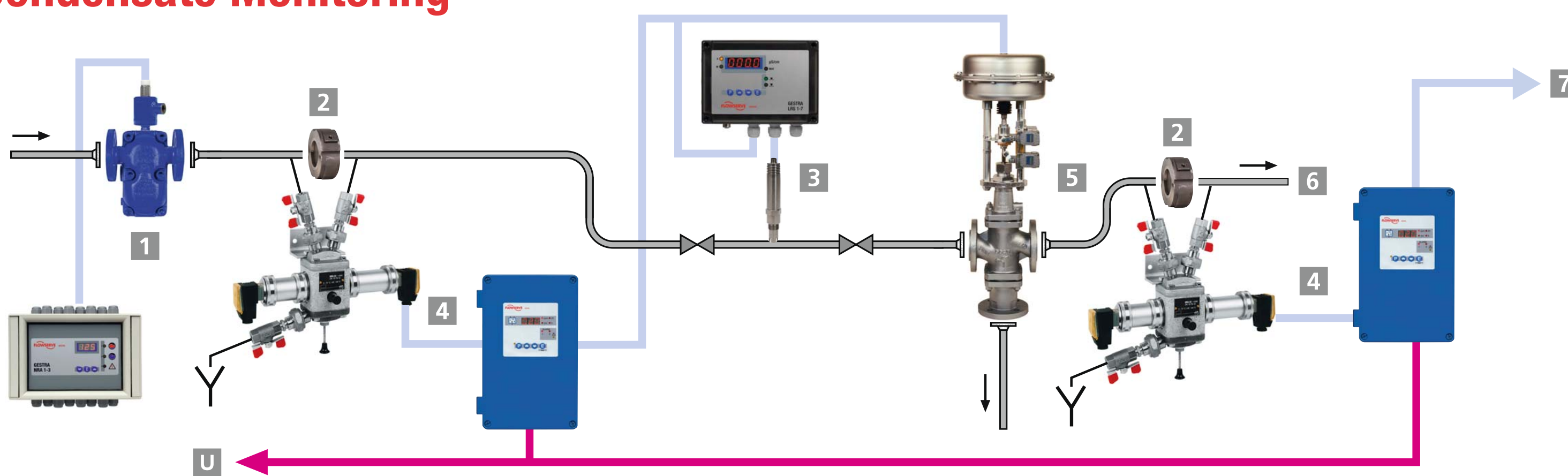
For operation e.g. according to TRD 604 (72 h) or EN 12953 (24 h)

FLOWSERVE

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Condensate Monitoring



Type Approvals:

- EC approval
- TÜV (Germany)
- Swiss TS/SVTI (Switzerland)
- TI (Slovakia)
- ITI TÜV (Czech Republic)
- TMB (Hungary)

Example of a Steam-Boiler Plant Operating without Constant Supervision (72 h)

GESTRA Steam Boiler Equipment

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> A Low-level limiter of "high-integrity design": level electrode NRG 16-40, level switch NRS 1-40.1 B Modulating level controller with integrated 2nd water level and conductivity indicator: level probe NRG 26-40, level controller NRR 2-40 C High-level alarm of "high-integrity design": level electrode NRG 16-41, level switch NRS 1-41 D/E Conductivity measurement and continuous/intermittent blowdown: conductivity electrode LRG 16-41, continuous blowdown controller LRR 1-40, continuous blowdown valve BAE, intermittent blowdown valve MPA, 3/2-way pilot valve, strainer F Sample cooler G Blowdown flash vessel | <ul style="list-style-type: none"> H Residual blowdown cooler J Blowdown receiver K Safety temperature limiter: resistance thermometer TRG 5-65, temperature preamplifier TRV 5-40, level switch NRS 1-40.1 M Safety valve GSV N Pressure limiter O Pressure controller/transmitter P Disco non-return valve RK 86 Q Strainer GSF R Stop valve GAV | <ul style="list-style-type: none"> S Electrical/pneumatic control valve V 725 T Control terminal and display unit URB U Control, regulation, operating and process data acquisition via interfaces such as CAN, MODbus, Ethernet, OPC, modem, Profibus (optional), SPECTORcontrol incl. the control functions B, D, E as well as operating procedures V Burner control via MODbus RTU interface W Monitoring of the fresh water: <ul style="list-style-type: none"> ▶ Demineralization equipment – using conductivity monitoring ▶ Partial demineralization equipment: by monitoring residual hardness (not part of our product range) |
|--|--|---|

Condensate Monitoring

- 1** Steam trap with trap test set, test chamber VKE, electrode NRG 16-19 and test unit NRA 1-3 for max. 16 traps
- 2** 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)
- 3** Monitoring for ingress of acids, blowdown, raw water etc.: conductivity electrode with integrated resistance thermometer LRG 16-9, conductivity switch LRS 1-7
- 4** Monitoring for ingress of oil, grease etc.: oil and turbidity detector OR
- 5** Electrical/pneumatic three-way valve for discharging the contaminated condensate
- 6** Main condensate tank
- 7** Shutdown of the condensate-return system or interruption of the safety chain

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