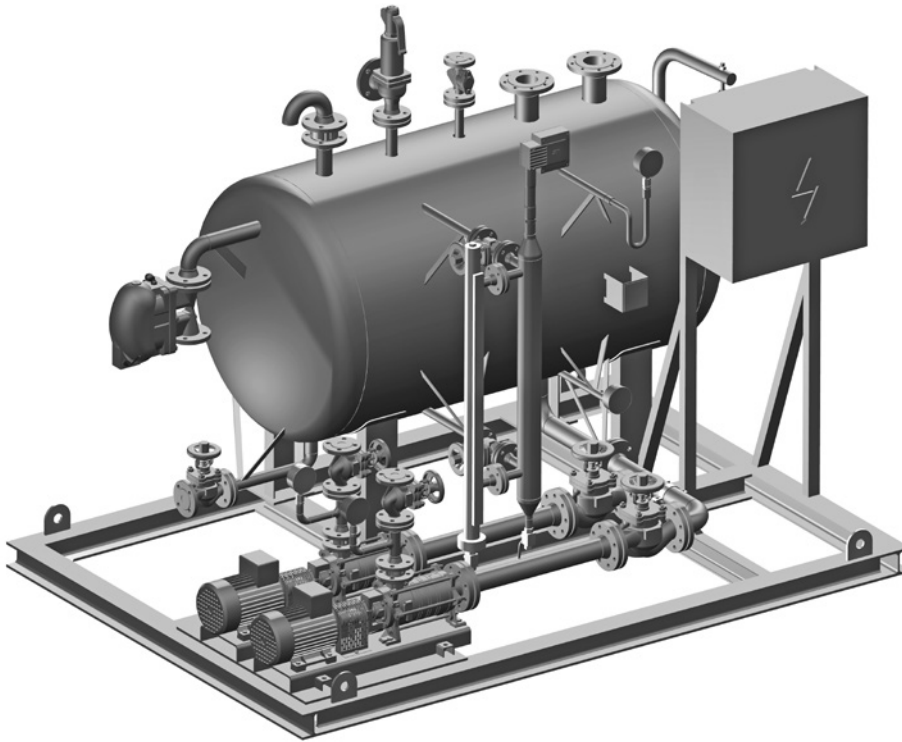




Condensate Recovery and Return Systems SDI / SDs

Use

Condensate tanks collect the condensate coming directly from steam processors or via flash tanks. From the tank, the condensate is returned to the feedwater tank by a level-controlled pump, in most cases via a deaerator. The condensate pump pressure can be adjusted to the pump characteristic with the aid of the shut-off valve and the pressure gauge.

Capacity range

The size of the tank depends on the amount of condensate formed. Our standard range comprises tanks for small flow-rates and tanks up to 14000 litres for maximum condensate flowrates of 60 m³/h (see table). Special versions are available for larger flowrates.

Pressure/temperature ratings

Maximum pressure	barg	0.5	4.0
Service temperature	°C	111	200
Maximum admissible condensate flowrate as per table. Special tanks can be provided for higher pressures, temperatures and flowrates.			

Materials

SDI/SDs 1.0: S235JRG2

SDI/SDs 4.0: P265GH

Design

Cylindrical, horizontal (SDI) or vertical (SDs) design as shown, content of 10 m³ or more is on a support. Anti-rust coating on an untreated substrate.

Stainless steel tanks can be supplied if required.

See the SDR data sheet for a tank with a rectangular design.

GESTRA condensate tank SDI

Horizontal version for a max. condensate flow rate of 60 m³/h and a max. volume of 14.2 m³.

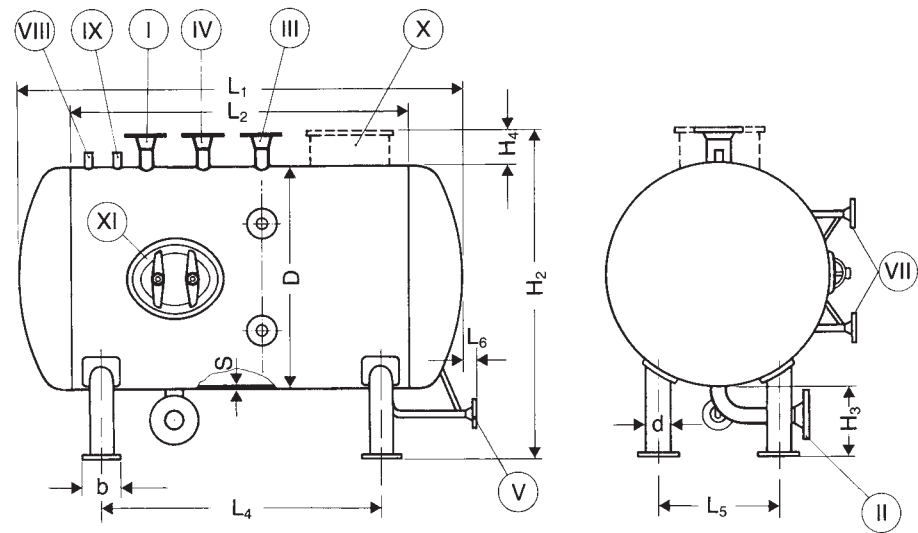
GESTRA condensate tank SDs

Vertical version for a max. condensate flow rate of 16 m³/h and a max. volume of 3.8 m³.

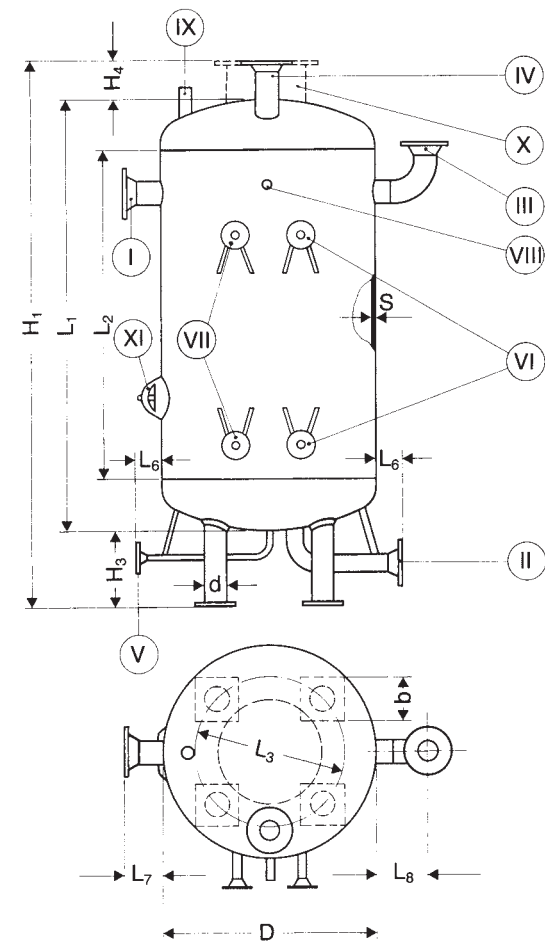
Connections

- I Condensate inlet
- II Condensate outlet or condensate pump connection
- III Safety valve (not applicable to SDI and SDs 1.0, unless the tank is intended for a closed system)
- IV Flash steam outlet
- V Drain
- VI Measuring pot
- VII Fluid level indicator
- VIII Pressure gauge
- IX Connection for multiple electrode (for SDI and SDs 1.0 only)
- X Submersible pump on request only at extra cost (only possible with SDI and SDs 1.0)
- XI Inspection hole or manhole only standard in tanks requiring TÜV inspection in Germany; otherwise on request at extra cost.

GESTRA condensate tank SDI



GESTRA condensate tank SDs



Dimensions and weights

Tank size		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
For max. condensate flowrate [m³/h]		1	2	4	6	9	12	16	20	25	30	35	43	50	60	
Volume [l]		250	390	850	1370	2100	2900	3800	4500	5900	6900	7900	10100	12700	14200	
Dimensions [mm]	D	600	600	800	1000	1200	1400	1400	1400	1600	1600	1600	1800	2000	2000	
	s	5	5	5	5	5	5	5	5	5	5	5	5(6) ⁴⁾	5(6) ⁴⁾	5(6) ⁴⁾	
	b	120	120	140	160	160	180	180	180	200	200	200	220 ¹⁾	220 ¹⁾	220 ¹⁾	
	d	60.3	60.3	88.9	114.3	114.3	139.7	139.7	139.7	168.3	168.3	168.3	–	–	–	
	L1	1000	1500	1894	1970	2050	2124	2628	3128	3214	3714	4214	4294	4374	4872	
	L2	700	1200	1500	1500	1500	1500	2000	2500	2500	3000	3500	3500	3500	4000	
	L3	480	480	640	800	960	1120	1120	–	–	–	–	–	–	–	
	L4	540	1000	1130	1130	1130	1140	1600	2000	2000	2200	2700	2700	2700	3200	
	L5	360	360	480	600	720	840	840	840	960	960	960	1680 ²⁾	1740 ²⁾	1740 ²⁾	
	L6	100	100	100	100	100	120	120	120	120	120	120	150	150	150	
	L7	150	150	150	150	150	150	150	–	–	–	–	–	–	–	
	L8	140	150	160	165	180	190	190	–	–	–	–	–	–	–	
	H1	1400	1900	2344	2420	2500	2674	3178	–	–	–	–	–	–	–	
	H2	1000	1000	1250	1450	1650	1950	1950	1950	2150	2150	2150	2450	2750	2750	
	H3	250	250	300	300	300	400	400	400	400	400	400	500	600	600	
	H4	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
Connection dimensions [DN]	I	32	32	50	50	65	80	100	100	125	125	150	150	150	200	
	II	as suitable for pump connection														
	III	25	32	40	50	80	100	100	125	125	125	150	150	150	200	
	IV	50	65	65	80	100	125	125	150	150	150	200	200	200	250	
	V	25	25	32	32	32	32	32	32	40	40	40	40	40	40	
	VI	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	VII	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	VIII	G ½	G ½	G ½	G ½	G ½	G ½	G ½	G ½	G ½	G ½	G ½	G ½	G ½	G ½	
	IX	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	G 1	
	X	as suitable for pump connection														
	XI 3) (a x b)	100 x 150	100 x 150	2 x 100 x 150	2 x 100 x 150	320 x 420	320 x 420	320 x 420	320 x 420	320 x 420	320 x 420	320 x 420	320 x 420	320 x 420	320 x 420	
Weights	[N]	1030	1073	2453	3335	4120	5396	6278	7161	9123	10202	11282	17266	19620	22073	
	[kg]	105	140	250	340	420	550	640	730	930	1040	1150	1760	2000	2250	

Comments:

- 1) Width of support
- 2) Length of support
- 3) For tanks with plastic inner coating DN 500, PN 6 only.
- 4) For SDI/SDs 4.0 only

Larger tanks on request

Condensate Recovery and Return Systems SDI / SDs

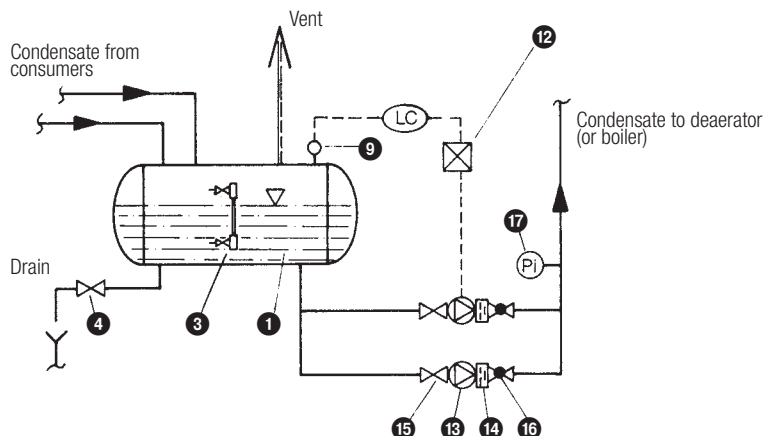
Key

- 2 Pressure gauge assembly
- 3 Water level indicator with valve
- 4 Shut-off valve GAV
- 5 Full-lift spring-loaded safety valve GSV
- 6 Steam trap MK
- 7 DISCO non-return valve RK
- 8 Float trap UNA
- 9 Level electrode NRG/ER
- 10 Measuring pot
- 11 Shut-off valve GAV
- 12 Pump control SR
- 13 Condensate pump
- 14 DISCO non-return valve RK
- 15 Shut-off valve GAV
- 16 Shut-off valve GAV
- 17 Pressure gauge G ½

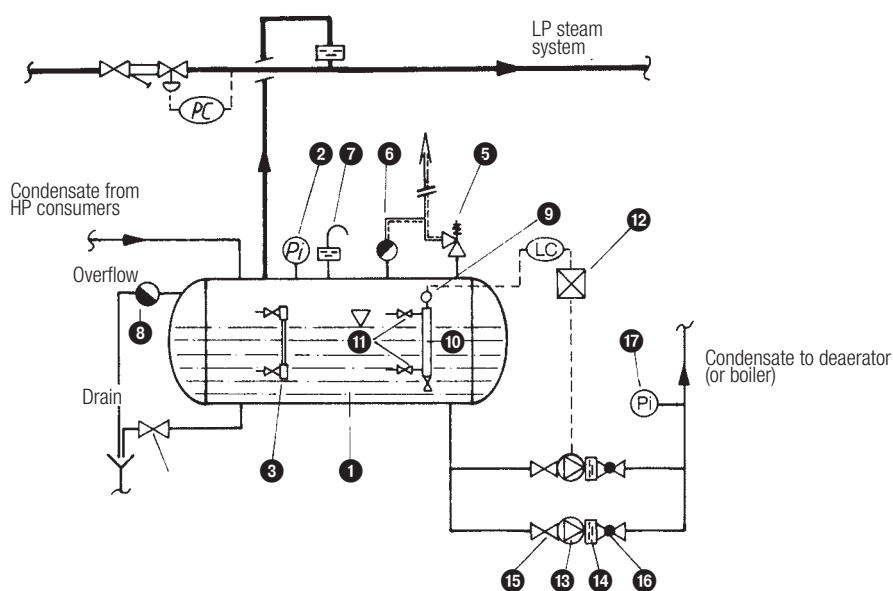
Brief description

GESTRA condensate recovery and return systems consist of a tank with standard equipment, condensate pump(s) with pump equipment and control. Dry run protection for pumps available on request. Time-dependent pump switchover available on request.

Open system



Closed system



When ordering please state

Service pressure and temperature of steam processors.
Type of steam processor, quantity of condensate formed.
Expected back pressure in the pump discharge line.
Electrical connection.

If the equipment must be subject to special test and inspection requirements, please refer to our document entitled "Test and Inspection Charges". Due to regulations, certificates can no longer be issued following delivery.

Please note our terms of sale and delivery.

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