

Öl-/Gas Fast Stengenerator GDE 80-600
Steampower 80 – 600 Kg/h



Technical specifications

For an overview of the technical data
please see page 2.

Security & Quality

- forced-flow steam generator
- Manufactured according to the European Pressure Equipment Directive (PED) and the German TRD *
- steam generators according to Group III TRD
- Non-monitoring
- Ready for operation
- Functionally tested boiler unit
- high-quality components with sufficient reserves, such as Weishaupt burner, pump & fittings
- TÜV-tested
- CE marking

* According to TRD = technical rules steam generator

Technical specifications										
Typ GDE	Einheit	80	100	150	200	250	300	400	500	600
Steampower	Kg/h	80	100	150	200	250	300	400	500	600
Combustion performance	kW	67	84	126	168	210	252	325	415	444
Heatoutput	kW	60	75	112	112	150	224	295	369	395
Operating pressure max.	Bar	10	10	10	10	10	10	10	10	10
Working pressure adjustable from - to	Bar	3,5 bis 9,5								
Operating pressure max.	Bar	15	15	15	15	15	15	15	15	15
Working pressure adjustable from - to	Bar	5 bis 14								
Content	Liter	9,9	9,9	23	28	34,5	34,5	49	49	49
Stages Oil- or Gas-Weishauptbrenner	Stages	1	1	1	2	2	2	2	2	2
Consumption values approx. according to premises										
Natural gas	m³/h	6,7	8,4	12,6	16,7	20,9	25,1	32,5	40,7	43,6
Heating oil	Kg/h	5,7	7	10,6	14,1	17,5	21,2	28	35	42
Electr. connection	kW	0,6	0,6	0,6	1,1	1,1	1,1	1,6	2,5	2,5
Exhaust gas flow	g/s	28,5	35,8	53,7	71,6	89,5	107,4	141,4	176,8	189,2
Efficiency with exhaust gas heat exchanger	%	92,5	92,5	92,5	92,5	92,5	92,5	92,5	92,5	92,5
Dimensions										
Steam connection	DN	20	20	25	25	25	25	32	32	32
Chimney diameter	mm	160	160	200	200	200	200	200	200	200
Konstruktion type vertical										
Length	mm	1130	1130	1400	1400	1228	1228	1310	1310	1310
Length with exhaust heat exchanger	mm	1730	1730	2050	2050	1828	1828	2050	2050	2050
Width	mm	550	550	800	800	800	800	800	800	800
Height	mm	1325	1325	1795	1995	2250	2250	2600	2600	2600
Construction type horizontal										
Length	mm	-	-	-	-	2300	2300	2600	2600	2600
Width	mm	-	-	-	-	1090	1090	1250	1250	1250
Height	mm	-	-	-	-	1230	1230	1250	1250	1250
Height with exhaust heat exchanger	mm	-	-	-	-	1730	1730	1730	1730	1730
Weight approx.	Kg	350	350	430	530	575	590	750	750	750

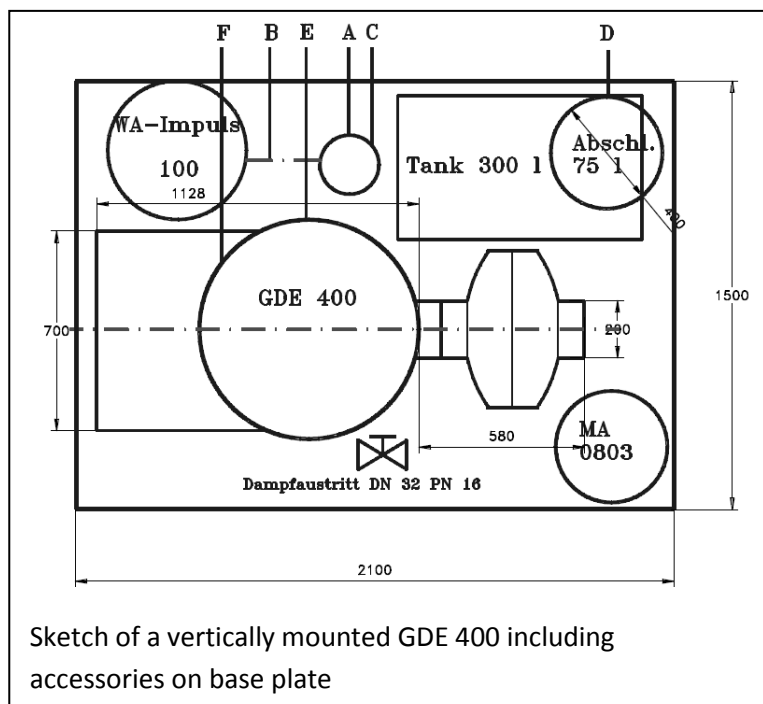
Calculation basis:

- Saturated steam 7 bar
- Feed water temperature 60 ° C
- 10% water overflow

Installation example

In the requested complete system, the desired components are mounted on a base plate, internally piped and wired.
Depending on the available space, steam generators can be supplied and installed in horizontal or vertical design.

Example for complete system & installation example:



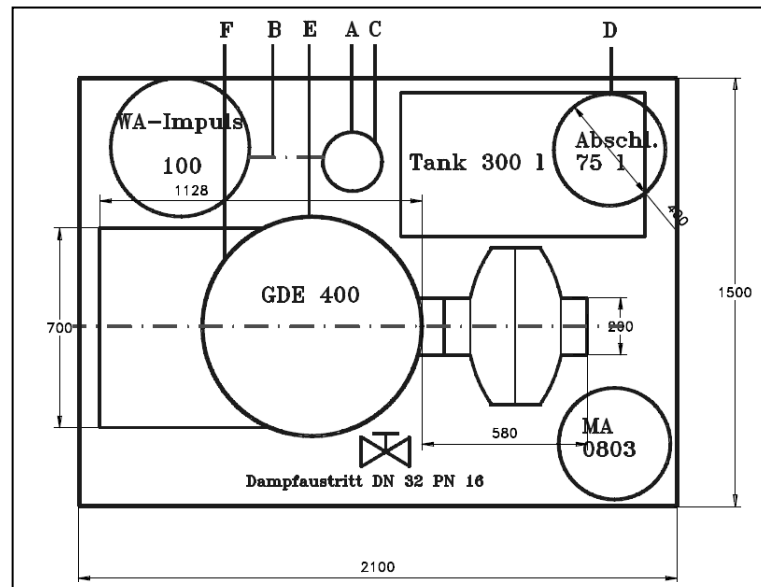
Legende:

- A – Raw water $\frac{3}{4}$ "
- B – Sewage $\varnothing 50\text{mm}$
- C – 230V
- D – Sewage 2" i.
- E – B/P-Gas, 22 mbar, $\frac{3}{4}$ "
- F – 400V, 2,5kW



Type ED80 incl. Feedwater tank, sludge tank & water softening mounted on base plate

Functionality



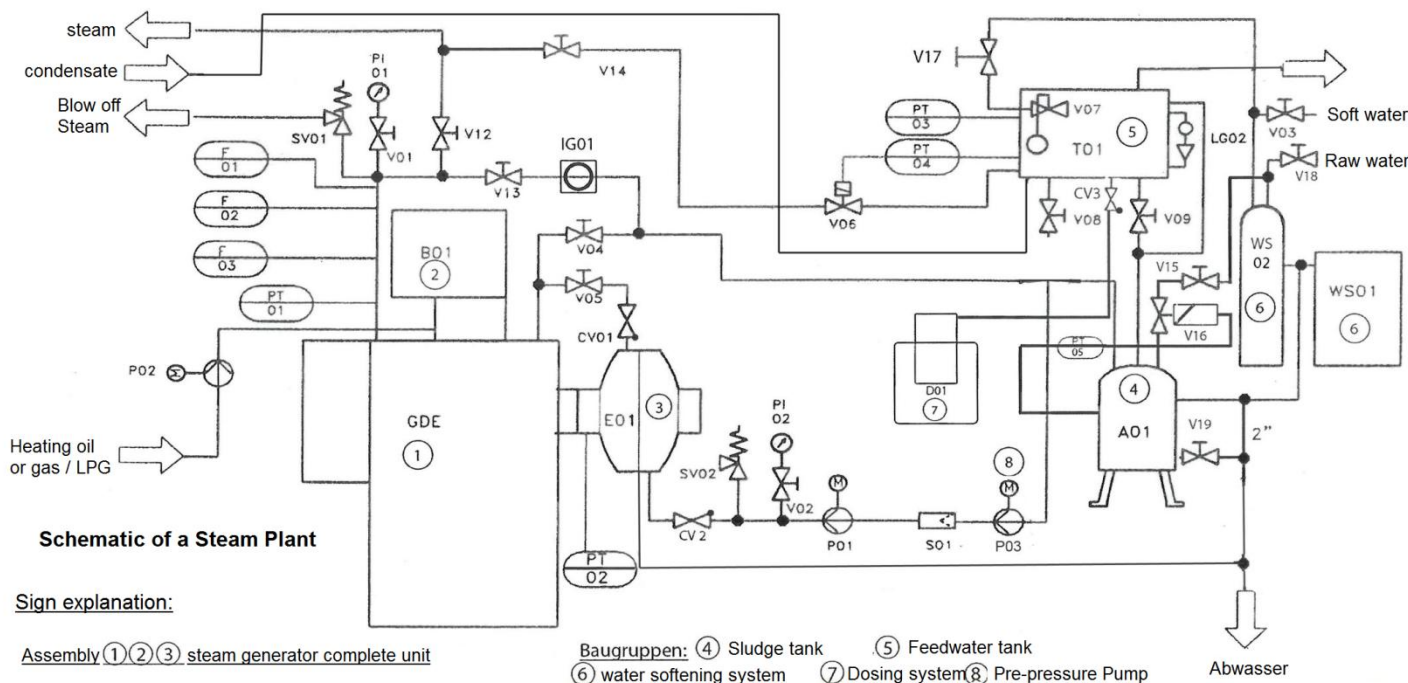
The city water is softened via the water softening system (WA impulse) and then flows into the feed water tank (tank 300 L).

There, the softened water is temporarily stored for use in order to avoid bottlenecks and, if a heater has been ordered, can be pre-heated to 60 ° C in order to increase the efficiency.

From the feedwater tank, the softened water flows into the steam boiler (GDE 400) where it is heated and can then be removed as steam for production.

Residual steam (which is obtained, for example, at the end of production or during the cleaning of the steam generator) can be cooled via the sludge tank and then safely discharged into the sewer.

Flow chart



Schematic of a Steam Plant

Sign explanation:

Assembly ①②③ steam generator complete unit

Baugruppen: (4) Sludge tank (5) Feedwater tank
(6) water softening system (7) Dosing system (8) Pre-pressure Pump

GDE	GDE steam generator
B01	Weishaupt burner
E01	Economizer
F01	Overpressure limiter
PI01	manometer
PT01	Steam temperature limiter and indicator
V05	Valve supply water inlet
P01	Feedwater high pressure pump
V12	Steam outlet main valve
S01	Water filter
CV01	check valve
V04	Shut-off valve

- V01 Valve pressure gauge
- V02 Valve pressure gauge
- C02 check valve
- F02 Pressure monitor Work stage 1
- PI02 pressure gauge
- PT02 Flue gas temperature limiter
- V13 Filling valve
- P02 Fuel oil pump or gas fittings
- F03 Pressure monitor Work stage 2
- IG01 Eyeglass
- SV01 Steam pressure relief valve
- SV02 Supply water overpressure safety valve

4 A01	Sludge tank with cooling option
4 PT05	thermostat
4 V16	magnetic valve
5 T01	Heating water tank with heating option
5 PT03	Thermometer tank
5 PT04	Thermostat tank
5 LG02	Water level fitting
5 V06	Solenoid or motor valve
5 V07	Float valve
5 V08	Supply water outlet
5 V09	Tank emptying

- 6 Brine container
- 6 Cartridge ion exchanger
- 7 Dosing system
- 7 Injection valve
- 8 Pressure pump

Bauseitige Armaturen:

V03 Soft water sampling
V14 Steam valve tank heating
V15 Cooling water inlet
V17 Feedwater inlet
V18 Raw water valve
V19 Emptying faucet