DEG

Atmospheric deaerator

The DEG deaerators are devices at atmospheric pressure designed for the thermophysical degassing of the steam boiler feed water. The degassing process is performed by means of a controlled steam injection inside the storage tank in order to increase the internal water temperature.
This appliance is part of the condition provided by the Art. 3 Par. 3 of the PED Directive 2014/68 / EU.
Provided with:
- steam diffuser pipe inside the tank
- sheet steel support saddles able to ensure unit support
- insulating coating with high density mineral wool and aluminium sheet finish
The deaerator is available in the S235JR steel or AISI 304 stainless steel versions.

Data concerning the **feed water** in the deaerator:
- Inlet water pressure: 1 + 3 bar
- Temperatura dell'acqua in ingresso: 10 + 35 °C

Standard equipment

Thermoregulating unit for temperature maintenance (90°C) in the storage tank including:
- automatic or pneumatic modulating two-way valve
- temperature sensor
- steam filter
- 2 shut-off globe valves
- bypass globe valve

Blowdown unit including:
- bypass globe valve

Make-up feed water unit including:
- water solenoid valve
- water filter
- 2 shut-off ball valves
- bypass ball valve

Automatic conductivity probe level regulator including:
- solenoid valve opening and closing probes
- probe for alarm and low level signalling

Boiler control panel IP55 1/N ~ 230V 50 Hz

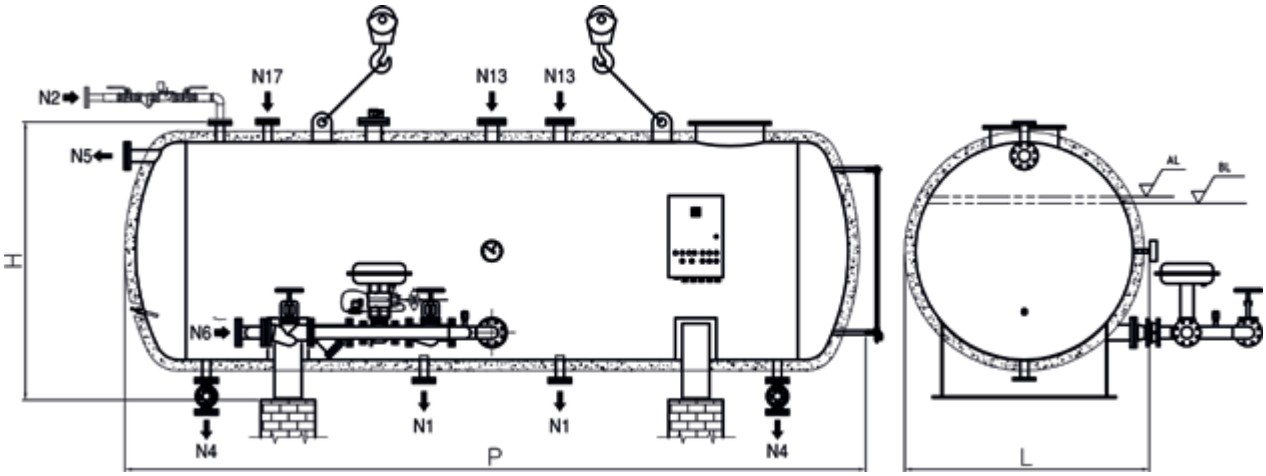
CODES AND MATCHING BOILERS

Model	SIXEN	TReVAPOR	TReVAPOR P	GX
DEG 500	500	-	-	-
DEG 1000	650 - 800 - 1000	800	-	-
DEG 1500	1350 - 1700	1200 - 1500	1200 - 1500	-
DEG 2000	2000	2000	2000	1200
DEG 2500	2500	2500	2500	1500
DEG 3000	3000	3000	3000	1750 - 2000
DEG 4000	3500 - 4000	3500 - 4000	3500 - 4000	2500
DEG 5000	5000	5000	5000	3000
DEG 8000	-	6000	6000 - 6500	3500 - 4000 - 5000
DEG 10000	-	-	-	6000
DEG 12000	-	-	-	7000
DEG 15000	-	-	-	8000 - 9000
DEG 20000	-	-	-	10000 - 12000
DEG 25000	-	-	-	13000 - 15000

TECHNICAL DATA

Model	Total volume H2O	Deaeration capacity	Steam consumption	Empty weight	H	L	P
	lt	l/h	kg/h	kg	mm	mm	mm
DEG 500	500	500	65	280	1100	830	1800
DEG 1000	1000	1000	130	440	1250	1030	2140
DEG 1500	1500	1500	195	500	1250	1030	3040
DEG 2000	2000	2000	260	640	1550	1300	2380
DEG 2500	2500	2500	325	750	1550	1300	2980
DEG 3000	3000	3000	390	850	1800	1480	3060
DEG 4000	4000	4000	520	1050	1950	1630	2940
DEG 5000	5000	5000	650	1100	2150	1830	2880
DEG 8000	8000	8000	1040	1600	2150	1830	4230
DEG 10000	10000	10000	1300	2400	2150	1830	5450
DEG 12000	12000	12000	1560	2600	2377	2130	5028
DEG 15000	15000	15000	1950	3000	2473	2230	5528
DEG 20000	20000	20000	2600	3800	2650	2200	6810
DEG 25000	25000	25000	3250	4200	2550	2100	9050

The values indicated in the table are referred to both DEG and DEG STAINLESS STEEL types



PRODUCT CODES

Model	Code
DEG 500	85500015
DEG 1000	85500012
DEG 1500	85500026
DEG 2000	85500028
DEG 2500	85500025
DEG 3000	85500005
DEG 4000	85500014
DEG 5000	85500016
DEG 8000	85500018
DEG 10000	85500022
DEG 12000	85500031
DEG 15000	85500037
DEG 20000	85500043
DEG 25000	85500021

Model	Code
DEG 500 INOX	85500300
DEG 1000 INOX	85500044
DEG 1500 INOX	85500046
DEG 2000 INOX	85500035
DEG 2500 INOX	85500302
DEG 3000 INOX	85500304
DEG 4000 INOX	85500306
DEG 5000 INOX	85500032
DEG 8000 INOX	85500310
DEG 10000 INOX	85500312
DEG 12000 INOX	85500036
DEG 15000 INOX	85500314
DEG 20000 INOX	85500315
DEG 25000 INOX	85500316

DEG/P

Pressurised deaerator

The DEG P pressurised thermophysical deaerator collects the treated make-up water deliverd by a suitable treatment system.
The make-up water is controlled by a pneumatic, modulating 2-way valve that receives the signal from the level regulator/indicator positioned on the horizontal tank.
The water is atomized at the top of the degassing tower and falls into circular plates suitably perforated through which the heating steam passes.
On the top part of the turret there is also a fitting for possible system condensate returns and a manual oxygen blowdown valve.
This appliance has a design pressure of 0.5 bar and therefore it is not subject to the provisions of the PED Directive 2014/68/EU.
Provided with:
- vertical degassing turret, manufactured from C steel (stainless steel AISI 304 version also available) flanged to the lower reservoir with stainless steel AISI 304 jagged internal plates
- sheet steel support saddles able to ensure unit support
- insulating coating with high density mineral wool and aluminium sheet finish

Data concerning the **feed water** in the deaerator:
- Inlet water pressure: 1 + 3 bar
- Temperatura dell'acqua in ingresso: 10 + 35 °C

Standard equipment

Steam regulation unit to maintain the temperature (105°C) in the storage tank including:
- steam regulation modulating valve of the automatic or pneumatic type
- by-pass and shut-off valves
- steam filter
- appropriate steam injectors
- temperature probe

Steam regulation unit to maintain the correct pressure value (0.2-0.4 bar) in the degassing turret including:
- steam regulation modulating valve of the automatic or pneumatic type
- by-pass and shut-off valves
- steam filter
- appropriate steam injectors
- pressure transducer

Water regulation unit to control the level in the storage tank including:
- feed water solenoid valve
- by-pass and shut-off valves
- water filter
- level regulator with probes
- level indicator
- thermometer
- drain valve
- safety valve
- vacuum relief valve

Boiler control panel IP55 1/N ~ 230V 50 Hz

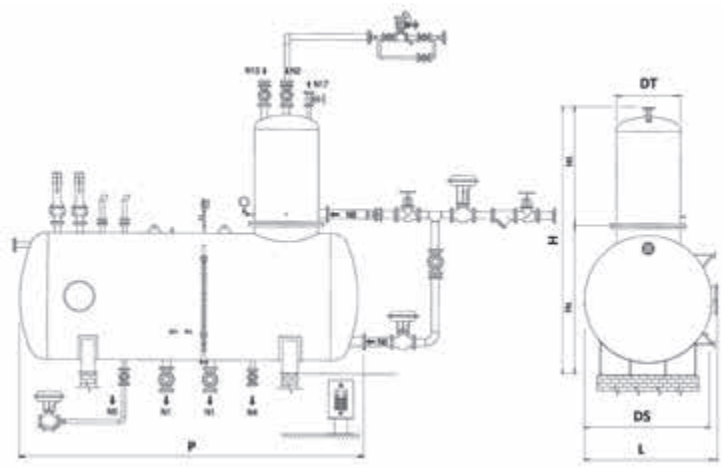
PRODUCT CODES

Model	Code
DEG 1000/P	85500323
DEG 2000/P	85500325
DEG 3000/P	85500320
DEG 5000/P	85500401
DEG 8000/P	85500038
DEG 15000/P	85500039
DEG 25000/P	85500047
DEG 30000/P	85500045
DEG 40000/P	85500048
DEG 50000/P	85500034

Model	Code
DEG 1000/P AISI304	85500319
DEG 2000/P AISI304	85500327
DEG 3000/P AISI304	8500322
DEG 5000/P AISI304	85500402
DEG 8000/P AISI304	85500052
DEG 15000/P AISI304	85500054
DEG 25000/P AISI304	85500056
DEG 30000/P AISI304	85500057
DEG 40000/P AISI304	85500058
DEG 50000/P AISI304	85500059

TECHNICAL DATA

Model	Nominal pressure	Design temperature	Total volume H2O	Deaeration capacity	Steam consumption	Empty weight
	bar	°C	lt	l/h	kg/h	kg
DEG 1000/P	0,5	110	1000	1000	180	450
DEG 2000/P	0,5	110	2000	2000	360	700
DEG 3000/P	0,5	110	3000	4500	810	980
DEG 5000/P	0,5	110	5000	7500	1350	1280
DEG 8000/P	0,5	110	8000	12000	2160	2500
DEG 15000/P	0,5	110	15000	22500	4050	3800
DEG 25000/P	0,5	110	25000	37500	6750	5250
DEG 30000/P	0,5	110	30000	45000	8100	6550
DEG 40000/P	0,5	110	40000	60000	10800	8000
DEG 50000/P	0,5	110	50000	75000	13500	9900



DIMENSIONS

Model	H	HS	Ht	L	DS	Dt	P	N1	N2	N4	N5	N6	N13	N17
	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in	DN/in
DEG 1000/P	2500	1400	1100	1030	950	350	2140	40	25	50	1”1/4	40	40	2”
DEG 2000/P	2800	1550	1250	1300	1100	400	2380	40	25	50	1”1/4	40	40	2”
DEG 3000/P	3050	1550	1500	1600	1460	400	2720	40	25	50	1”1/4	40	40	2”
DEG 5000/P	3350	1590	1760	1410	1250	800	4550	40	32	50	50	50	80	2”
DEG 8000/P	3750	1950	1800	1760	1600	800	4450	80	32	50	50	100	80	50
DEG 15000/P	4250	2350	1900	2160	2000	1000	5400	100	32	50	50	125/100	80	40
DEG 25000/P	5300	2600	2700	2360	2200	1400	7000	100	32	50	100	125	125	65
DEG 30000/P	5550	2750	2800	2500	2340	1600	7250	100	80	50	100	125	125	65
DEG 40000/P	5900	2800	3100	2550	2390	1800	9300	125	100	50	100	150	125	65
DEG 50000/P	6000	2800	3200	2550	2390	2000	11400	125	100	50	100	250	150	65

COV

Distribution header

Distribution headers are designed to allow economic distribution of the media (steam, water, thermal oil) to the individual users.
The Distribution headers are individually designed to match the system requirements using ASTM A 106 Gr.B pipe with dished ends, and a sufficient number of flanged fittings suitably sized to match the customer's requirements.
Steam headers are also provided with a dirt leg.
External paint finish for insulation and coating purposes, undertaken on site by the customer.
Wall fixing brackets or floor support saddles are available upon request.
COV headers are manufactured and tested with procedures approved according to the PED Directive 2014/68/EU.
Diameter, length and connections are designed according to the customer's requirements specified in the enquiry.

Benefits:
- Reduction of installation costs owing to use of prefabricated elements
- Space saving
- PED 2014/68/EU certification included, according to the requested category