



ConCleanPlus®
Steam Degasser



*Removal / reduction
of gases dissolved in feed water*



Product Information
Thermal Degassing

WASSER BAU GESELLSCHAFT



WBG - ConCleanPlus®

Thermal Degassers

After elimination of ionogenic substances in the water, another treatment step may be required viz. extensive reduction of the gases nitrogen, oxygen and carbonic acid. Degassing by heating is the most frequently applied procedure.

WBG ConCleanPlus® degassers are used wherever corrosion to equipment and pipelines has to be minimized. For example in the treatment of service waters such as boiler feed water, industrial water cycles or heating and turbine condensates.

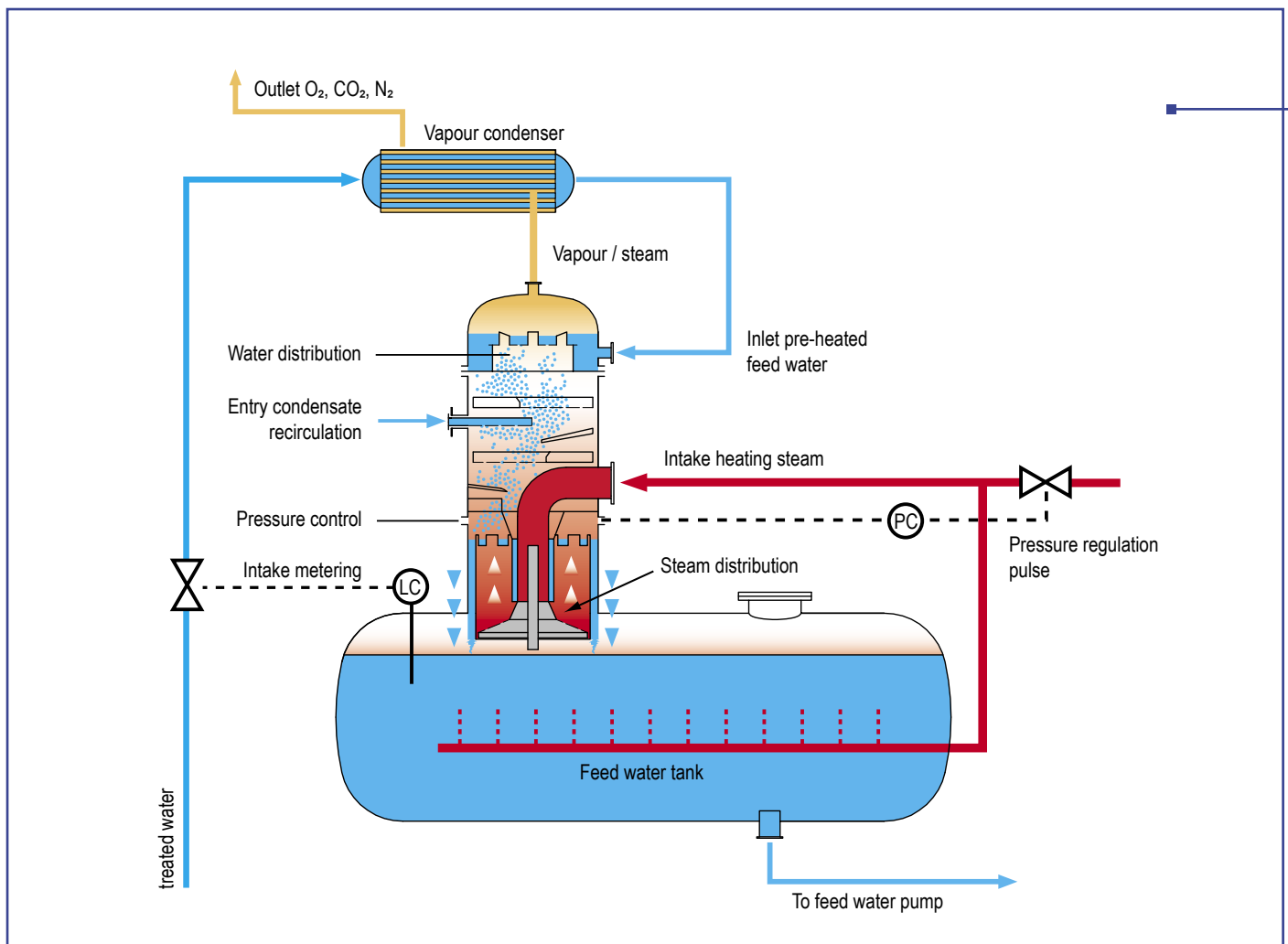
For the individual requirement profiles with the water qualities as required WBG are offering customized dimensioning, supply, installation and commissioning of appropriate plants.

Fields of application:

- Reduction of dissolved gases from service water (nitrogen, oxygen, carbonic acid)
- Treatment of boiler feed water, industrial water or heating and turbine condensates
- Large-scale power plants, semi-conductor and food-stuffs industry, pharmaceutical and chemical industry

Advantages:

- High efficiency and high degree of effectiveness
- Very large control range
- Low energy consumption
- Very compact design
- Low maintenance



Technische Daten

WBG - ConCleanPlus® - Thermal Degasser

Operating Data

Operating overpressure	approx. 0.2 - (*) bar
Operating temperature	105 - 110°C
Oxygen contents in inlet	< 15 mg/l
Oxygen contents after degassing	< 10 µg/l
Capacity	< 500 m³/h
Trickling steps depending on Δt water (inlet – outlet)	2 - 3
Heating medium	steam
Transportation medium for inert gas	steam

Fixed pressure degasser = controlled steam pressure

(*) Slide pressure degasser = variable steam pressure from system

Dimensions and capacity

Type	Diameter	max. flow in to/h at water inlet temperature			
		mm	< 50°C	50 - 90°C	> 90°C
1	200		0.5	0.6	0.6
2	300		1.4	1.75	1.75
3	400		3	3.75	3.75
4	500		5.5	7	7
5	600		8	10	10
6	700		12	15	15
7	800		16	20	20
8	900		20	25	25
9	1000		30	36	36
10	1200		40	50	50
11	1400		60	75	75
12	1600		80	100	100
13	1800		110	140	140
14	2000		135	170	170
15	2200		175	220	220
16	2400		210	270	270

Heating steam degassing (see picture)

- A degassing steam dome is flanged on the peak of the feed water tank.
- Feed water and condensate recirculation will be led on distributing plates and will run into the feed water tank over degasser plates.
- The steam fed in from below will flow to the top of the degasser and heat the water introduced. During this procedure, the bound gases will be released and will rise with the steam.
- The rising vapours will exhaust at the top of the degasser.
- The thermal energy of the vapour will be used in the vapour condenser in counter-current with the treated water. The water will be heated and the steam will be condensed as vapour. The dissolved unwanted gases will be exhausted.
- The feed water tank will be heated by means of a steam lance in the water chamber for mixing of the liquid and by dosing of steam in the gas chamber.

Individual fabrication of degassers acc. to customer specification





Contact

WBG
WasserBauGesellschaft International mbH
Von-Linde-Straße 8
D-95326 Kulmbach

Phone: +49 9221.690394-0
Fax: +49 9221.690394-11

E-Mail: info@wbg-kulmbach.de
Internet: www.wbg-kulmbach.de

WBG
WasserBauGesellschaft Kulmbach mbH
Von-Linde-Straße 8
D-95326 Kulmbach

Phone: +49 9221.690394-0
Fax: +49 9221.690394-11

E-Mail: info@wbg-kulmbach.de
Internet: www.wbg-kulmbach.de

WBG
WasserBauGesellschaft Service mbH
Von-Linde-Straße 8
D-95326 Kulmbach

Phone: +49 9221.690394-0
Fax: +49 9221.690394-12

E-Mail: info@wbg-kulmbach.de
Internet: www.wbg-kulmbach.de