

# Vacuum Degasser WBG-ConCleanPlus®

Removal / reduction of gases dissolved in feed water





# **Vacuum Degasser** WBG-ConCleanPlus®

## Removal / reduction of gases dissolved in feed water

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. Vacuum degassing is a process without request of additional steam or flushing gas operating on very competitive cost level.

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 efectiveness
- Very large control range
- Low energy consumption
- Very compact design
- Low maintenance

#### **Technical Data**

#### **Operating Data**

Operating Pressure: (*)	0.15 - 0.38	Bar(a)
Operating Temperature: (*)	50 - 70	°C
Oxygen Content Inlet:	< 15	mg/I (ppm)
Oxygen Content after degassing:	< 20	μg/l (ppb)
Heating Medium:		Hot Water
Transportation medium for inert gas:		Steam

(\*) Design also possible to 15°C / 0,023 Bar(a)

#### **Dimensions and capacity (\*\*)**

Dimensions and supasity ( )					
Туре	Diameter mm	Throughput to/h	el. Power (KW)	CW demand (cbm/h) (***)	
1	500	7	< 0.75	< 0.2	
2	600	11	< 0.75	< 0.2	
3	700	15	< 0.75	< 0.2	
4	800	20	< 1.5	< 0.24	
5	900	25	< 1.5	< 0.24	
6	1000	30	< 1.5	< 0.24	
7	1200	45	< 2.4	< 0.28	
8	1400	60	< 2.4	< 0.28	
9	1600	80	< 2.4	< 0.28	
10	1800	100	< 2.4	< 0.28	
11	2000	120	< 2.4	< 0.28	
12	2200	145	< 3.5	< 0.45	
13	2400	175	< 3.5	< 0.45	
14	2600	210	< 3.5	< 0.45	
15	2800	245	< 3.5	< 0.45	

(\*\*) Data to be checked/adapted project specifical

\*\*) CW = Cooling water demand

#### Vacuumdegassing - Description

- Water inlet from the top of degasser is led over distribution system with large mass transfer area to the vessel bottom operating as pump pit.
- Water Inlet temperatur defines the vacuum required fortransport vapour production and produced by vacuum pump (VP).
- The exhaust vapour produced deaerates O<sub>2</sub>, N<sub>2</sub> and Co<sub>2</sub>.
- The WBG ConCleanPlus® SEH Submerged Excess Heater - secures max. contact time and optimizes degassing perfomance.
- The condensation of exhaust vapour in the vet condenser gives a preheating of inlet water and also minimizes equipment size and power demand of vacuum pumping station.



More information on our website





### **WBG**

Wasserbaugesellschaft Anlagenbau mbH **WBG** 

Wartung & Service GmbH

Tiefe Äcker 5 | D-95336 Mainleus

Tel.: +49 9229 97370-0 | E-mail: info@wbg-kulmbach.de

Internet: www.wbg-kulmbach.de

Mehr information on our website



Ask your contact person



