

# OxyFree

## Corrosion protection for central heating installations



Corrosion is generally caused by the presence of oxygen in central heating water, which may cause complete or partial destruction of the central heating system.

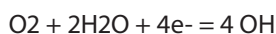
With the installation of an OxyFree protection plant, the optimal binding of oxygen is secured. Within a short period of time, the oxygen concentration of the central heating water will be below the limit where corrosion can be formed.

Along with the oxygen binding, an increase of the pH level takes place, stabilising the corrosion preventing process. A protective layer is formed on all metal parts connected to the central heating system. And rust and pitting corrosion can be avoided in the system.

OxyFree is a process, where Electrolysis is installed in a bypass in the return flow of the system, by means of this, water with a high concentration of oxygen will be treated.

### Function

The presence of oxygen in the protection tank causes a change of the potential between the reference electrode of silver/silver chloride and the side of the tank. In the electronic unit the necessary current is calculated, and a proportional current is connected to the anode of pure aluminium. In this way, the side of the tank is brought up to a certain potential, and consequently, the dissolved oxygen is reduced according to the following chemical reaction:

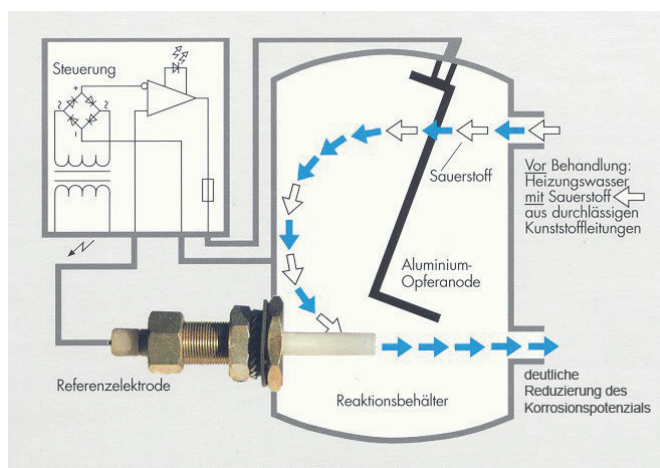


After a weeks in operation you will experience:

- clearly reduction of the corrosion potential
- increase of the pH level
- reduction of the conductivity

### Removal of iron particles and cleaning of the heating circulation

An exceptionally strong magnet in the boiler (400 N) will retain all the iron particles which will be removed during service. A very fine filter will prevent coarse particles from entering the central heating system.



### Application:

Private properties  
Hospitals  
Institutions  
Industry

**Guldager** 

Wise Water Treatment

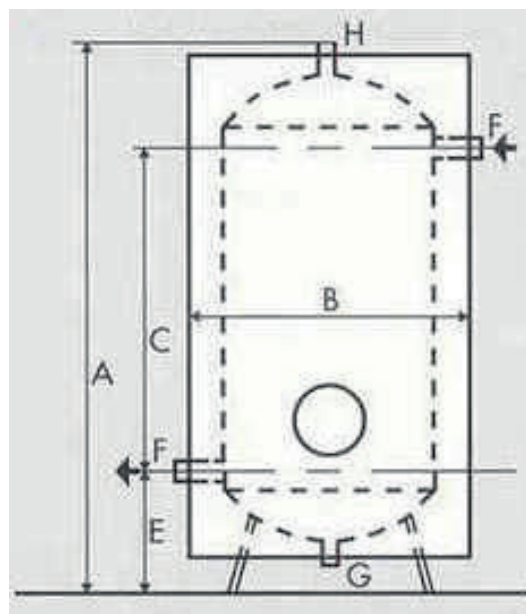
## Technical data

OxyFree Typ		50	200	400	600	1000
Heating flow	m³/h	2.5	10	20	30	50
Operational pressure	bar	5	5	5	5	5
A Height above pipe connection	mm	650	1420	1585	1735	2210
B Diameter incl. isolation	mm	500	660	780	900	830 without Isolati.
C Distance Inlet - Outlet	mm	300	884	1020	1080	1330
E Distance from floor	mm	165	350	350	425	515
F Connections In-Out	Zoll	1	2½	3	4	4
G Discharge, desludge	Zoll	¾ T-Stück Auslauf	1½	2	2	2
H Ventilation	Zoll	¾	½	½	½	½

### Control unit

Type	AD01
Material	Polystyrol
Display	LED for normal application, Alarm, Irregularities
Colour	Grau RAL 7035
Density class	IP 54
Electrical connection	230 V
Deferrization tank	St 37
Anode	Rein-Aluminium
Reference electrode	Silver/Silverchloride Permanent referenceelektrode
Magnet	400 Newton, very strong
Fine filter	0,5 mm
Temperature area	up to 100 °C
Ventilation	automatic Ventilation by return valve
Discharge	Flush- and discharge tap tap-tataperungshahn
Isolation Type 50	Rock wool
Isolation Type 200-600	Foam plastic(FCKW free)
Isolation Type 1000	Construction site
Inspection opening 50	Aluman (isolation)
Inspec. open. 200-600	PVC (isolation)

## Application Examples



## Guldager Service

Our service concept consists of standard and flexible solutions customized for specific needs.

- Surveillance, fast and skilled assistance.
- Advanced equipment and metering procedures.

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