



W.E.T.oxi  
for the pretreatment of oxygen-poor  
**DRINKING WATER**

Oxidation as a preliminary stage of drinking water treatment.

# W.E.T.oxi

## Drinking water treatment with air cushion oxidizer

With W.E.T.oxi, a process stage was designed for the treatment of reduced ground-water that can be used as a preliminary stage for all further process steps in safe drinking water treatment. By means of air cushion oxidation, interfering substances - such as iron and manganese - are reliably oxidised and the oxygen concentration is raised to an optimal 6 mg/l.

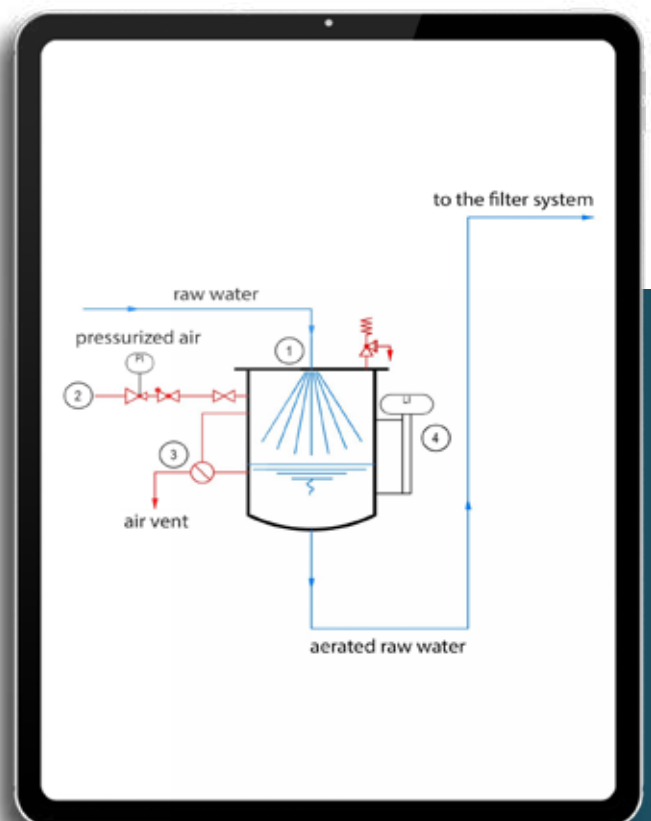


## How water treatment works with W.E.T.oxi – safe, space-saving and low-maintenance!

The raw water is atomised into the air space of the oxidiser by means of a full-cone nozzle (1), thereby creating the required phase interface for mass transfer. The constant counterpressure of the downstream filter system usually causes a system pressure of 1 - 1.5 bar.

At the same time, compressed air is continuously added (2). The compressed air flow is adjusted to the respective conditions via a pressure regulator. It is approx. 10 - 15% of the water flow rate.

An aerator (3) regulates the water level and prevents the water level from dropping in case of excess air. Excess air is discharged. The water level in the oxidiser can be checked by means of the level indicator (4).



## This product incorporates the know-how of more than 20 years of experience

The enrichment with atmospheric oxygen is usually the first step in the reduced groundwater in drinking water supply, enrichment with atmospheric oxygen is usually the first process step in the purification chain. Through this measure, disturbing water constituents such as iron, manganese or ammonium are oxidised with the help of air in order to remove them in downstream filters.

From a corrosion-chemical point of view at the waterworks outlet an oxygen concentration of about 6 mg/l at the waterworks outlet.

### MULTIPLE AREAS OF APPLICATION:

- Public waterworks
- Pretreatment of well water
- Pretreatment of water from ferruginous and manganese-containing waters
- Wherever oxygen input into the water is required



## Your benefits at a glance

- Pressure ventilation without interrupting the water flow
- Low space requirement
- No need for installation parts susceptible to contamination
- No backflushing required
- Low compressed air requirement
- Drawings and planning documents included

# Technical data

W.E.T.oxi		1-500	1-600	1-800	1-1000
Size, Ø nom.	mm	500	600	800	1.000
Volume flow range	l/s	5	10	20	30
Volume flow range	m <sup>3</sup> /h	18	36	72	108
Cylindrical height	mm	1,000	1,350	1,750	2,150

## CORROSION PROTECTION

Pretreatment	inside and outside sandblasting SA 2.5
Interior coating	3 mm Hard rubber coating with KTW approval nach DVGW Leaflet W270
Exterior coating	Zinc dust primer 80 µm
Color	at your option

## CYLINDRICAL PRESSURE VESSEL

Material	S235JR
Pressure loss	0.3 bar (Nominal flow)
Design overpressure	6 bar

### AVAILABLE AS AN OPTION:

- Stainless steel tank
- Oil free compressor

Inlet and outlet pipes as well as a compressed air supply are available at the planned installation site. The connection to the standardised interfaces can be made by the system builder, operator or W.E.T. staff.

The equipment is designed for continuous operation, durability and high serviceability. Hydraulic connections and control-related communications can be designed specifically for the project.

We are also happy to support you with all further stages of the process.

We are happy to advise you!

Information at  
[www.wet-gmbh.com](http://www.wet-gmbh.com)

