### CENTRUM WDRAŻANIA TECHNOLOGII OZONOWANIA W ZAKŁADACH WODOCIAGOWYCH



ul. Rzeźniana 10/1, 33-380 Krynica-Zdrój · wofil@wofil.pl · www.wofil.pl TEL: +48 18 414 00 60 · FAX: +48 18 414 00 70

Krynica Zdrój, 02.04.2020r.

# OFERTA HANDLOWA /RM/2020

# **OWWO (Degassed Highly-Ozonated Water)**

It is the only in 100% ecological disinfectant in the world, produced entirely from electricity, air, and water.

With the use of OWWO, you can disinfect huge areas and infrastructure of cities, vehicles, planes, and trains. It can be produced anywhere, from semi-finished intermediates commonly available, which means that its production is almost unlimited. It is safe for people, human skin, the environment, as well as equipment and infrastructure. It is destructive only to bacteria and viruses.

Acids and alcohols affect bacteria and viruses from the outside, while this method destroys viruses and bacteria from the inside and comes into them through the cell membrane. This technology does not introduce any new elements to the environment, making it safe for the natural environment. It works from a dozen to several hundred times faster on pathogens than other disinfectants. The ability to produce this substance anywhere is a huge advantage, especially when the availability of other disinfectants is limited.

Moreover, OWWO can be used to disinfect hospital wastewater, remove pharmaceuticals from wastewater after the treatment plant, and to disinfect sewage systems and water networks.

System production capacity: from 100 to 500 tons per day.

With the use of snow cannons adapted for disinfection with OWWO, street infrastructure can be disinfected daily up to 500 km.

A 99% level of deactivation of Norovirus Murine can be achieved using the product values  $Ct = 0.7 \text{ mg} \times \text{min}$  dm-3 at pH = 7 and 20 °C water temperature or half at 5 °C (Lim et al., 2010). Thurston-Enriquez et al. (2005) report similar results for the inactivation of adenovirus and calicivirus with ozone. For H1N1 and H5N1 influenza virus, the inactivation level corresponding to 4 log decades (99.99%) can be achieved with residual ozone concentrations in water of 0.4-0.5 mg / dm3 and a contact time of 10 min (Lénés et al., 2010).

OWWO has a concentration of 3 ppm which allows inactivation of viruses in about 1 minute.



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In non-pandemic conditions, you can use the system to disinfect water and sewage installations, remove the effects of contamination after floods and disasters, and disinfect hospital wastewater.

What is more, systems are used to remove pharmaceuticals from wastewater. The first two pilot plants were commissioned in Jaworzno and Warsaw in sewage treatment plant Czajka (see the photos below).

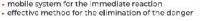
The system can be used for many other applications.





## DISINFECTION AFTER CONTAMINATION AND FLOODS

· mobile system for the immediate reaction













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SPID for production of degassed highly-ozonated water 20  ${
m m}^3/{
m h}$ 





High-pressure unit for disinfection

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# **OPTION 1**



S P I D Red Ser ies\_ RS6\_20/8.400

Capacity 20 m<sup>3</sup>/h (max 500 tons of disinfective solution daily)

# QUOTATION

System for mounting in a container - capacity  $20 \, \text{m}^3/\text{h}$ 

SPID System\_ RS6\_20/8.400

incl uding high-pressure unit for disinfection

240 000, 00 EUR net

# **OPTION 2**



SPID Red Series RS4\_10/8.150

Capacity 10 m<sup>3</sup>/h (max 250 tons of disinfective solution daily)

## QUOTATION

System for mounting in a container - capacity  $10 \, m^3/h$ 

SPID System\_RS4\_10/8.150

incl uding high-pressure unit for disinfection

150 000, 00 EUR net

# $NOTE: \ \ Quotation \ excludes \ the purchase of container \ and mounting \ costs$

## Accessories - option

Accessories -option		
Container accompanying facilities	40 000, 00 EUR net	
Connections for disinfection with the gas ozone	9 500, 00 EUR net	
System of introducing OWWO to hospital wastewater	10 400, 00 EUR net	



## CENTRUM WDRAŻANIA TECHNOLOGII OZONOWANIA W ZAKŁADACH WODOCIĄGOWYCH

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Ambient air monitor	3 500, 00 EUR net
Unit for spraying OWWO for huge distances – FOR THE PURPOSE OF INFRASTRUCTURE DISINFECTION CAPACITY: since 4 up to 10 m²/h. With a complete set of accessor ies	80 000, 00 EUR net
Remote access to the system, router, antenna, software	10 000, 00 EUR net
DEPOLOX 5 UNIT a utomatic ozone measur ement in water	8 000, 00 EUR net

OWWO technology is used, among others, by waterworks in Warsaw, Skawina, Jaworzno, Gliwice, Katowice, Zabrze, Opoczno, Tczew.

LICENCE FOR TECHNOLOGY	CONTACT DIRECTLY
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3 years of technological warranty for the complete system

# PAYMENT TERMS

The system is made to order

I payment of 50% - on the day of order II payment of 50% - week before planned delivery

## TIME OF DELIVERY

To be agreed

# Prepared by,

# DR INZ. ROBERT MUSZAŃSKI

Właściciel · Owner

+48 604 565 065 - r.muszanski@wofil.pl



## WOFIL Robert Muszański

ul. Rzeźniana 10/1, 33-380 Krynica-Zdrój · wofil@wofil.pl · www.wofil.pl TEL: +48 18 414 00 60 · FAX: +48 18 414 00 70 · NIP: 734-139-83-03