

Product Data Sheet

PlasmaConnect 10

Non-Thermal Plasma for Water- and Waste Water Treatment

DESCRIPTION **PlasmaConnect** is an innovative and future-oriented technology for advanced oxidation based on ionized air – known as non-thermal plasma (NTP). Due to its high efficiency, easy integration, and broad effectiveness against a wide range of pollutants, **C-ION™** technology sets new standards in modern water treatment. It removes even difficult-to-degrade organic substances such as drug residues, hormones, pesticides, and herbicides, and oxidizes inorganic substances such as metals (iron, manganese, and arsenic). In addition, the process has a disinfecting and decolorizing effect and contributes to a lasting improvement in the microbiological quality of water. **PlasmaConnect** is used in numerous areas – from wastewater and drinking water treatment to water reuse.

C-ION™ PLASMA UNIT

Plasma generation:	Dielectric barrier discharge (DBE)
Plasma type:	Non-thermal (cold) plasma
Dimension:	700 x 180 x 125 mm
Weight:	5.5 kg
Connections:	Air inlet: DN40 Plasma outlet: DN40

PRODUCT SPECIFICATION

Number of plasma units:	10
Piping:	PVC-U / Stainless steel 304/304L
Frame:	Stainless steel 304/304L
Dimension:	1150 x 800 x 1959 mm
Weight:	approx. 250 kg
Connections:	Plasma outlet: DN40

FEED REQUIREMENTS

Temperature range:	4 – 40°C
Air-Humidity:	< 70%

OPERATION INFORMATION

Blower:	48 m ³ /h; 250 mbar
Power supply:	400V / 50Hz (3-phasic)
Power:	2.5 kW
max. Diffusor depth:	2 m
max. cleaning capacity:	50 m ³ /h*

*depending on the degree of contamination

Please also note:

- Inlet and outlet at opposite ends of the tank to avoid short circulation
- Keep the plasma hose as short as possible (efficiency reduction)
- Connecting parts must be ozone resistant
- The oxidation tank must be designed as a closed system with exhaust air openings. Ozone enrichment is possible in the oxidation tank.

PRODUCT HIGHLIGHTS

- Ready-to-connect base unit including control panel
- High oxidation potential (2.75 V through the formation of hydroxyl radicals, reaction rate 2.2·10⁷ to 1.8·10¹⁰ M⁻¹s⁻¹)
- Lower energy consumption compared to other oxidation processes, e.g., ozone
- No additional cooling required
- No special explosion or emission containment measures required
- No chemical consumables required
- No supply air treatment required
- Easy retrofitting of existing tanks possible

INCL. AERATION PACKAGE

- 10 Disc diffuser: 12" x 70 mm; 1.35 kg; connection: 1"
- 10 Concrete base plate: 320 x 220 x 70 mm; 9.6 kg; connection: 16 mm

OPTIONAL PACKAGES

- Reaction tank including level control
- System integration into building management



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