EMEC.
SIMPLE AS WATER

We are connected to water by a covenant of respect and pure gratitude. For over 35 years we have been designing and producing reliable, cutting-edge systems for water treatment and dosing of chemicals to make the human-water relationship more harmonious, safe and natural, drawing from a single source of inspiration.

The semplicity.

Flexibility, with three fundamental principles

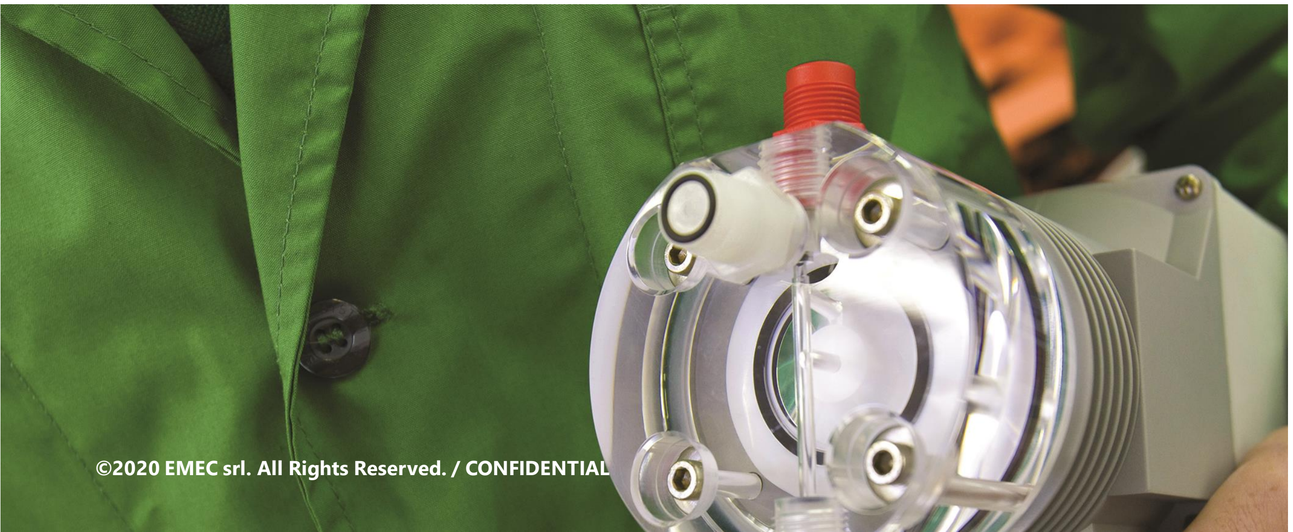
In a world that changes so fast, flexibility and innovation are fundamental to us.
As a company, we are open to change, because we are rooted in three fundamental principles: constant research, extreme precision, healthy relationships.

The difference between consultant and supplier

Business Unit's in-depth knowledge of every step of the production process makes it possible for us to offer focussed consulting, both for the choice and the personalisation of products.

A world of care and attention

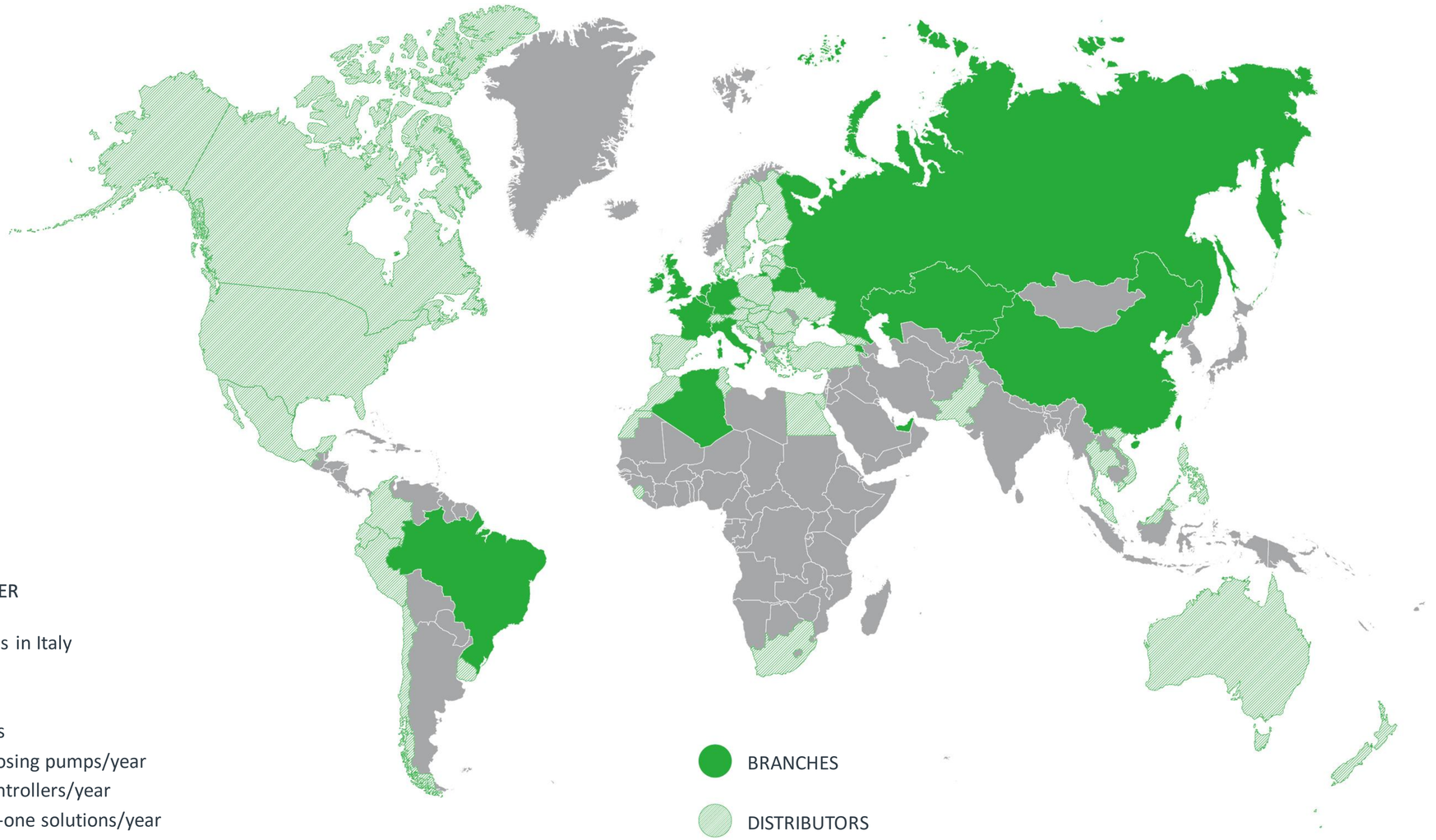
Water is the vital element on which our business is based and to respect this inestimable resource we treat the environment in the best possible way in order to also respect our ethics.



NOTHING IS SIMPLER THAN COMPLEXITY

We are an extremely prolific company, with high-level technical know-how. We manage articulate and complex processes with increasingly sophisticated standards of innovation. And all with the same objective: to make the lives of companies and professionals increasingly simple.

EMEC WORLDWIDE



BRANCHES

DISTRIBUTORS

WARRANTY
5 years warranty for
our dosing pumps
and controllers
Terms and conditions apply

100% MADE IN ITALY
All our products are
100% Made in Italy

OUR CERTIFICATIONS

ISO 9001:2015 No.2000&0
ISO 14001:2015 No.0352&/0
BS OHSAS 18001:2007 No.02032/0

EMEC
SIMPLE AS WATER

188 employees in Italy
54 countries
10 branches
24 distributors
150.000 dosing pumps/year
30.000 controllers/year
5.000 all-in-one solutions/year

www.emecpumps.com

JOHN DOE

Chlorine Dioxide Generators

LOTUS SYSTEMS

The use of chlorine dioxide in the treatment of water has been driven by an increased awareness of biological related health issues. EMEC LOTUS chlorine dioxide generators can be used in a variety of industries for control of micro-organisms in water systems... [MORE]

20/03/2020, Rieti

01

Reliable and Safe

LOTUS chlorine dioxide treated water systems are reliable and safe, being designed so there is no requirement to handle ClO_2 as a gas: two liquid chemicals, Hydrochloric Acid (HCl) and Sodium Chlorite ($NaClO_2$), react together to form the chlorine dioxide required, so there is no ClO_2 gas or concentrated solutions outside of the process application.

MODELS	*ClO_2 MAX CAPACITY*
AIR 10	10 **g/h**
AIR 30	30 **g/h**
AIR 60	60 **g/h**
MINI 8	8 **g/h**
MINI 20	20 **g/h**
EASY 8	8 **g/h**
EASY 20	20 **g/h**
EASY 40	40 **g/h**
EASY 80	80 **g/h**

MODELS	*ClO_2 MAX CAPACITY*
MAXI 80	80 **g/h**
MAXI 160	160 **g/h**
MAXI 240	240 **g/h**
MAXI 400	400 **g/h**
MAXI 600	600 **g/h**
MAXI 800	800 **g/h**
MAXI 1000	1000 **g/h**
ULTRA 1000	1000 **g/h**
ULTRA 2000	2000 **g/h**
ULTRA 3000	3000 **g/h**
ULTRA 4000	4000 **g/h**

AVAILABLE CONFIGURATIONS

MODBUS · ETHERNET · WIFI · 3G/4G · USB PORT

GENERAL FEATURES

ONLINE STATS · CUSTOMIZABLE · ERMES READY

LOTUS

Our Chlorine Dioxide Generator solutions

The use of chlorine dioxide in the treatment of water has been driven by an increased awareness of biological related health issues. EMEC LOTUS chlorine dioxide generators can be used in a variety of industries for control of micro-organisms in water systems and are especially recommended for Legionella removal and prevention in cold and hot water systems.
Micro-organisms are killed in 5 minutes in a safety way.
LOTUS chlorine dioxide treated water systems are reliable and safe, being designed so there is no requirement to handle ClO_2 as a gas: two liquid chemicals, Hydrochloric Acid (HCl) and Sodium Chlorite ($NaClO_2$), react together to form the chlorine dioxide required, so there is no ClO_2 gas or concentrated solutions outside of the process application.
Thanks to EMEC online control system ERMES, you will also be able to monitor and interact with LOTUS systems from everywhere and through a simple but powerful web interface.

02

Applications

The use of chlorine dioxide is advantageous because effective at much lower quantities compared to other compounds and at any pH, as well as resulting not corrosive against pipes and filters.

Applications

Oxidizing and disinfectant action

The use of chlorine dioxide is advantageous because effective at much lower quantities compared to other compounds and at any pH, as well as resulting not corrosive against pipes and filters.

Its oxidizing and disinfectant action, does not produce toxic residues and in addition to effectively eliminating a broad spectrum of bacteria and viruses it also affects the biofilm, thus preventing the reformation of new bacterial colonies and possible blockages within the water system.

- Four times more effective than chlorine;
- Yield greater than 95%;
- It does not form byproducts and chlorine-compounds;
- It is the only biocide capable of breaking the biofilm;
- It is not dependent on pH;
- It is odorless and tasteless;
- It is economically more efficient than chlorine;
- Less use of chemicals.

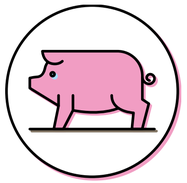
POULTRY

- Improved gut health;
- Drier litter;
- Lower mortality rate;
- Improvement in FCR (Feed Conversion Ratio);
- Reduction in breast burning;
- Increase in average bird weight;
- Non-corrosive to all pipe work and filters.

AGRICULTURE

- Reduction in blocked drippers and overhead sprinklers, allowing free flowing clean water;
- Removes and prevents algae from water systems;
- Reduction in root bourne diseases;
- Biofilm free irrigation lines;
- Helps to reduce / eliminate phytophthora & pythium from the river to end of line;
- Improved filtration and water pressure through the site;
- Leaves no harmful by-products;
- Non-corrosive to all equipment, pipe work and filters;
- Kills all water born bacteria.

FARMING



- Indicated for pig farming;
- Improvement in FCR (Feed Conversion Ratio);
- Lower mortality rate;
- Drier litter;
- Improved gut health;
- Reduction in scour;
- Reduction in days to slaughter;
- Non-corrosive to all pipe work and filters;
- Improvement in batch evenness.

FOOD PROCESSING

- Safe for use on organic produce;
- Reduces / eliminates bio-film;
- Leaves no harmful by-products or residues;
- No need for final rinse;
- Prolongs product shelf-life;
- Treats cross contamination & recycled water;
- Influent and effluent water;
- Non-corrosive to all pipe work and filters.

APPLICATIONS

DRINKING WATER

- Good quality clean water distributed to local towns and households;
- Eliminates and prevents reoccurence of all bio-film;
- Non-corrosive to all equipment, pipe work and filters;
- Neutralises odour;
- Kills all water born bacteria from the source of water.

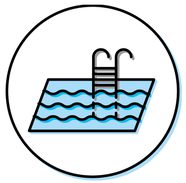
OIL & GAS INDUSTRY

- Extremely powerful oxidizer and bactericide;
- It works in water as a soluble compound;
- Not corrosive;
- Works across ph, turbidity and temperatures;
- Does not react with carbon-based compounds like oil or gas.

GREY WATER RECYCLING

- Less mains water consumption;
- Significantly reduced water costs;
- Reduced environmental impact;
- Daily supply per person roughly equates to demand;
- Storage capacity needed will be less saving both space and cost.

SWIMMING POOL



- Suitable for disinfection of both sanitary and swimming pool water;
- Can also be used in combination with chlorine;
- Effective at low concentrations;
- Reduces the need to use other substances;
- There is no formation of dangerous by-products in contact with organic material.

COOLING TOWERS / HOTELS / SPA

- Effective over a broad pH range;
- Controls bacteria, fungi, viruses, biofilm, protozoa and algae;
- Does not react with ammonia and does not produce toxic compounds in contact with organic materials present in water;
- Effective at considerably lower dose rates than chlorine or bromine;
- Not corrosive to all equipment, pipe work and filters;
- Degrades to harmless inorganic chemicals.

HOSPITAL

- Helps to sterilize medical and laboratory equipment, surfaces, rooms and tools;
- Is safe and effective at eliminating Legionella bacteria in hospital environments.

03

Lotus Systems

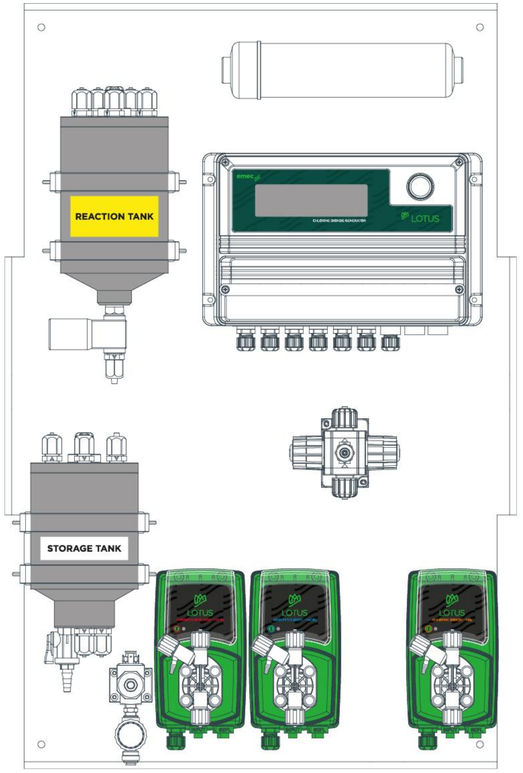
- Lotus Air
- Lotus Mini
- Lotus Maxi
- Lotus Ultra
- Lotus Easy

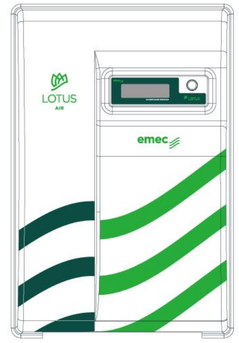
Lotus Air

LOTUS AIR is a pressure-less chlorine dioxide generator useful for those applications in which several injection points are required. Chlorine Dioxide is produced from diluted base chemicals: acid-chlorite process by Hydrochloric Acid (HCl 9%) and Sodium Chlorite ($NaClO_2$ 7,5%).

Chlorine dioxide produced by LOTUS AIR is stocked into a tank and then dosed proportionally to the request. It can also be controlled remotely via the web application ERMES through a 2G/3G modem or a lan adapter, while Modbus is available as option.

Its elegant cover preserves the cleanliness of the inner components and their integrity.





AIR 10

AIR 10

AIR 30/60

AIR 30/60

RANGE: 10-60 g/h

MAX CAPACITY: 1440 g/day

GAS SENSOR OPTION
LOTUS AIR with gas sensor detection.

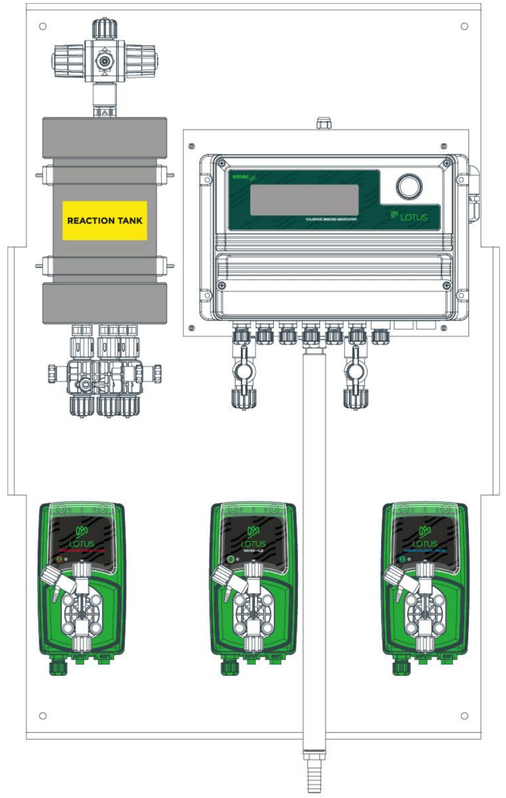
MODELS	*ClO_2 MAX CAPACITY*	*MAX CHEMICALS COMSUMPTION*	*CHEMICALS CONCENTRATION*	*CHEMICAL REACTOR*	*MAX PRESSURE (FEEL WATER)*	*WORK MAX PRESSURE*
AIR 10	10 **g/h**	0,25 **l/h**	9% **HCl** 7,5% **$NaClO_2$**	**PVC**	2 **bar**	8 **bar**
AIR 30	30 **g/h**	0,75 **l/h**			3 **bar**	5 **bar**
AIR 60	60 **g/h**	1,5 **l/h**			3 **bar**	5 **bar**

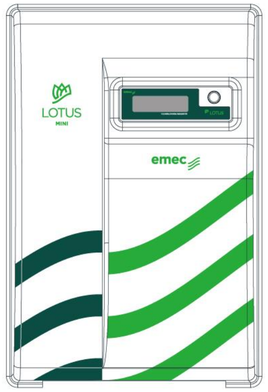
Lotus Mini

LOTUS MINI is an all-round solution for all your need for water disinfection. It is safe and solid and can also be controlled remotely via the web application ERMES through a 2G/3G modem or a lan adapter, while Modbus is available as option.

Its elegant cover preserves the cleanliness of the inner components and their integrity. Chlorine dioxide produced by LOTUS MINI can be proportional to the circulating water flow or based on a measured setpoint.

There is no storage of chlorine dioxide therefore there is no chlorine dioxide gas or concentrated solutions outside of the process application.





MINI 8/20

MINI 8/20

RANGE: 8-20 g/h

MAX CAPACITY: 480 g/day

GAS SENSOR OPTION
LOTUS MINI with gas sensor detection.

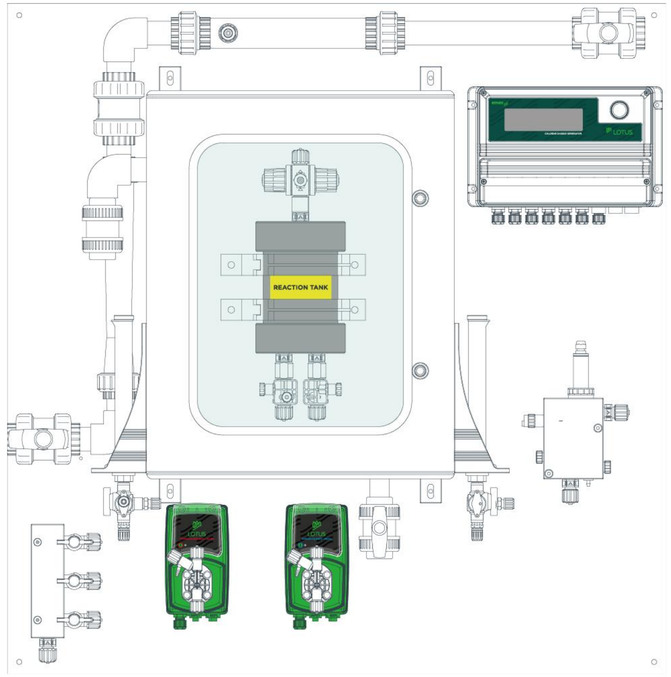
MODELS	*ClO_2 MAX CAPACITY*	*MAX CHEMICALS COMSUMPTION*	*CHEMICALS CONCENTRATION*	*CHEMICAL REACTOR*	*MAX PRESSURE (FEEL WATER)*	*WORK MAX PRESSURE*
MINI 8	8 **g/h**	0,2 **l/h**	9% **HCl** 7,5% **$NaClO_2$**	**PVC**	5 **bar**	8 **bar**
MINI 20	20 **g/h**	0,5 **l/h**			5 **bar**	8 **bar**

Lotus Maxi

OTUS MAXI is one of the largest product among EMEC Chlorine Dioxide generators and is used in all those cases in which there is need of a big production, such as large water treatment plants.

Chlorine dioxide produced by LOTUS MAXI is set to be proportional to the circulating water flow or based on a setpoint, it is then dosed into the water flow.

It can also be controlled remotely via the web application ERMES through a 2G/3G modem or a lan adapter, while Modbus is available as option.



RANGE: 80-1000 g/h

MAX CAPACITY: 24000 g/day

GAS SENSOR OPTION
LOTUS MAXI with gas sensor detection.

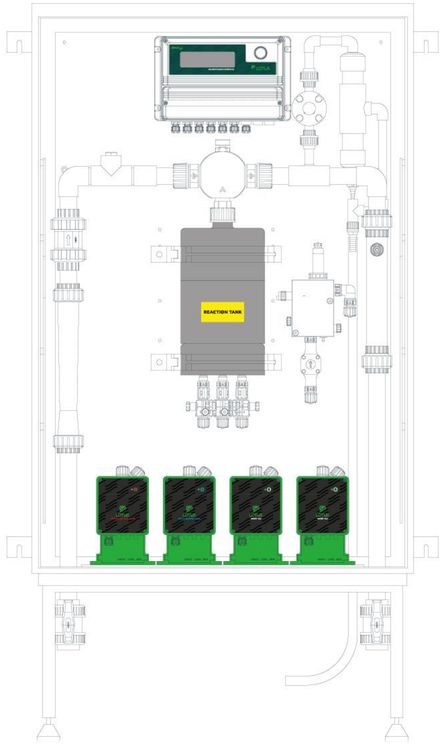
MODELS	*ClO_2 MAX CAPACITY*	*MAX CHEMICALS COMSUMPTION*	*CHEMICALS CONCENTRATION*	*CHEMICAL REACTOR WORK MAX PRESSURE*
MAXI 80	80 **g/h**	2 **l/h**	9% **HCl** 7,5% **$NaClO_2$**	**PVC**	8 **bar**
MAXI 160	160 **g/h**	4 **l/h**			8 **bar**
MAXI 240	240 **g/h**	6 **l/h**			8 **bar**
MAXI 400	400 **g/h**	10 **l/h**			8 **bar**
MAXI 600	600 **g/h**	15 **l/h**			8 **bar**
MAXI 800	800 **g/h**	20 **l/h**			5 **bar**
MAXI 1000	1000 **g/h**	25 **l/h**			3 **bar**

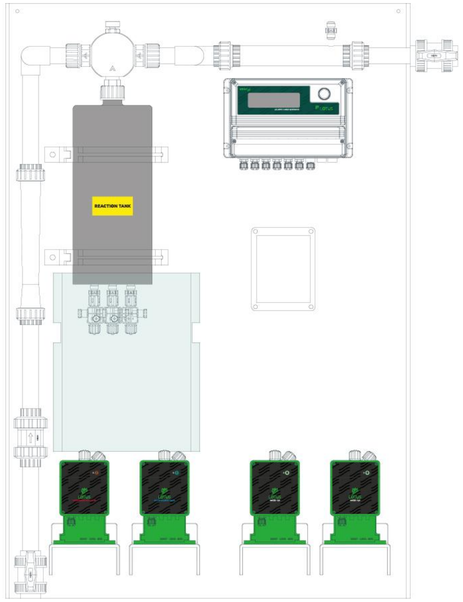
Lotus Ultra

LOTUS ULTRA is the largest product among EMEC Chlorine Dioxide generators and is used in all those cases in which there is need of a big production, such as large water treatment plants.

Chlorine Dioxide is produced from concentrated base chemicals: acidchlorite process by Hydrochloric Acid (HCl 33%) and Sodium Chlorite ($NaClO_2$ 27%).

Chlorine dioxide produced by LOTUS ULTRA is set to be proportional to the circulating water flow or based on a setpoint, it is then dosed into the water flow.





RANGE: 1000-4000 g/h

MAX CAPACITY: 96000 g/day

GAS SENSOR OPTION
LOTUS ULTRA with gas sensor detection.

MODELS	*ClO_2 MAX CAPACITY*	*MAX CHEMICALS COMSUMPTION*	*CHEMICALS CONCENTRATION*	*CHEMICAL REACTOR WORK MAX PRESSURE*
ULTRA 1000	1000 **g/h**	6,1 **l/h**	33% **HCl** 25% **$NaClO_2$**	**PVDF**	5 **bar**
ULTRA 2000	2000 **g/h**	12,2 **l/h**			5 **bar**
ULTRA 3000	3000 **g/h**	18,3 **l/h**			3 **bar**
ULTRA 4000	4000 **g/h**	24,4 **l/h**			2 **bar**

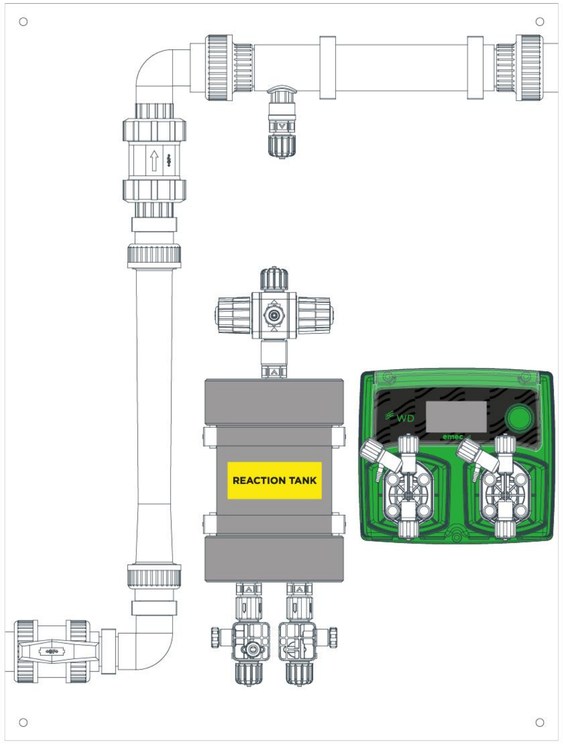
Lotus Easy

LOTUS EASY is the best solution if you want a simple but professional way to produce chlorine dioxide, thanks to an integrated All-in-One Controller eqipped with two metering pumps.

Chlorine dioxide produced by LOTUS EASY can be proportional to the circulating water flow.

There is no storage of chlorine dioxide therefore there is no chlorine dioxide gas or concentrated solutions outside of the process application.

LOTUS EASY is designed so that the reaction to produce chlorine dioxide takes place in a reaction chamber. Multi function valves on injection points ensure security of the reaction chamber.



RANGE: 8-80 g/h

MAX CAPACITY: 1920 g/day

MODELS	*ClO_2 MAX CAPACITY*	*MAX CHEMICALS COMSUMPTION*	*CHEMICALS CONCENTRATION*	*CHEMICAL REACTOR WORK MAX PRESSURE*
EASY 8	8 **g/h**	0,2 **l/h**	9% **HCl** 7,5% **$NaClO_2$**	**PVC** 8 **bar**
EASY 20	20 **g/h**	0,5 **l/h**		8 **bar**
EASY 40	40 **g/h**	1 **l/h**		8 **bar**
EASY 80	80 **g/h**	2 **l/h**		8 **bar**

EMEC srl

Thanks for the availability and attention given to this meeting.

We are available to answer Your questions.

20/03/2020, Rieti