

CHLORINE DIOXIDE GENERATORS





INNOVATIVE EXPERIENCE

EMEC

THIRTY YEARS OF LEADERSHIP

EMEC ranks among Italy's top, consolidated industrial actors in the field of electronic control systems for fluids metering and management applications. Our products are designed and manufactured for both industrial and small-scale applications.

We are an all-Italian business entity with a clear strategic outlook, right from the outset, striving to merge design innovation with a long-term industrial footing. Our high-precision, hi-reliability products are entirely designed and assembled at our Rieti facilities.

EMEC's reputation as a market leader is expanding both in Italy and internationally, boosting demand for our quality, Italian designer products.

QUALITY FIRST

Our products are supported by passion and a solid industrial background. At EMEC, we have always sought to identify and seize investment opportunities, committing our resources to technology and human resources.

That key to our success - and what sets us apart from market competitors - is our complete control of the production cycle, reliant on specialist business set-ups and resources. Our approach feeds into all aspect ahead of end product delivery: systems design, component production and assembly, software programming and final testing. In line with total quality commitments, we provide installation and maintenance specialists with up-to-date training for both our household and industrial products.

Our retail and commercial units operate with a technical mindset, encompassing a firm grounding in all aspects of design and production; as such, they stimulate product innovation and enhancements based on Customer requirements, feedback and field experience. That approach makes us ideal partners when it comes to delivering targeted solutions to specific requirements. Our claims are anything but overstated: complete control, to us, is the only viable approach to ensuring total product quality and effective service delivery.

A CONSTANLY EVOLVING WORLD

Our 30-year industrial footing has bred constant improvements in all our products, expanding range and functions. Our range of products is currently implemented in a broad range of settings:

- Pools
- Saunas
- Industrial water treatment
- Drinking water treatment
- Irrigation
- Chemical industry
- Processing industry
- Cooling towers
- Refineries
- Car wash



100% MADE IN ITALY

All our products are manufactured in our factory in Italy.

SUSTAINABILITY

Respecting and safeguarding the environment are the core values underpinning our business. In keeping with that commitment we engage in and promote all actions designed to curb the environmental impact of our processes, products and raw materials, on a life-cycle basis. Our company implements an Environmental Management System compliant with UNI ENI ISO 14001 standards, subject to ongoing updates.

Our goal is to curb atmospheric emissions, rationalise water consumption and enact appropriate waste management policies. Environmental impact assessments cover new products, process innovations and public tenders.

We are committed to providing our employees and staff with appropriate information and training concerning our company policy and its implementation with respect to both the workplace and our products.

CERTIFIED SKILLS AND VALUES

EMEC's values and reliability are the result of a long-standing commitment to quality and detail. We testify to that commitment through ongoing human resources training, rigorous abidance by production benchmarks, and concerted efforts to curb all employee health hazards.

Our pledge is a firm one and is backed by our policy implementation and investment goals. Our global quality approach matches our market standing and is certified by the world's leading certification institutes.



EMEC WORLDWIDE



WARRANTY

All our solenoid pump membrane have 5 years warranty.



PRODUCT DESIGN

Design underpins the production process, driving each and every aspect of our work at EMEC. Our every effort is geared towards delivering a timely, accurate and effective response to our customers' requirements. The resources allocated to our design and development division reflect that: close to 10% of our company's human capital. Our in-house engineers and technicians design and develop software and hardware, as well as test hydraulic and mechanical components.

OUTSTANDING PROFESSIONALS

Our in-house professionals carry unparalleled qualifications, gained through years of experience and dedication. Our team boasts years of hand-on experience and regularly takes part in ongoing professional training, allowing us to be on top of chemical handling and industry developments. EMEC offers its clients highly trained, skilled professionals, whose proven credentials and wealth of experience are nothing less than leading-edge.

PRODUCTION

The high standards to which we deliver, on a daily basis, both our services and products, comes from our uncompromising dedication to quality. Total quality is our industrial hallmark, and quality is what sets our products apart from the broader market.

WORKSHOP

With on-site manufacturing facilities we are a notch above the competition. At EMEC we take pride in ensuring full internal control over all aspects of production. As much as it implies an onus, product reliability is our foremost pledge, one that cannot be delivered by outsourcing the production of key product components.

Our workshop's capabilities are also crucial to the design stage, ensuring full control over product and systems development and customisation, offering customers a complete solution to their requirements.

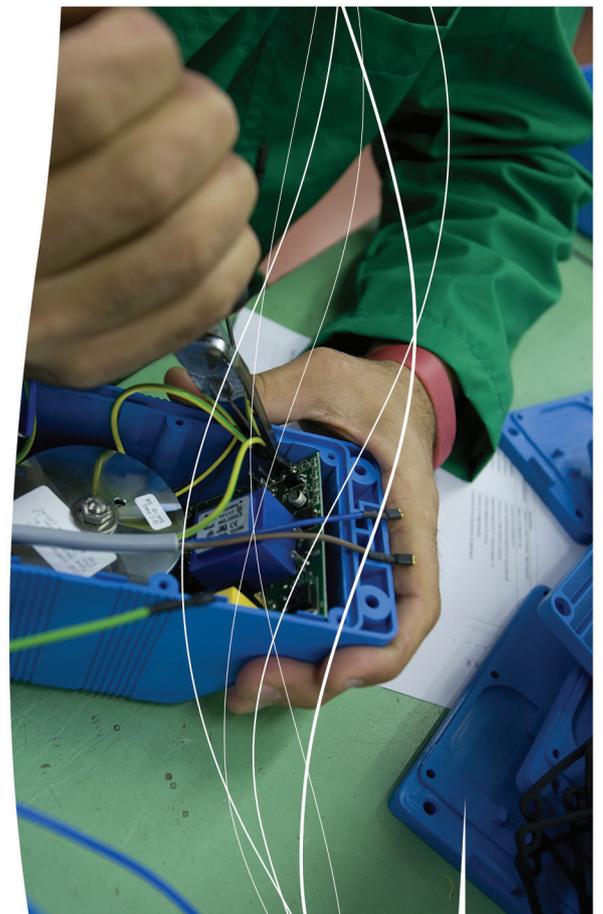
ASSEMBLY

Our unparalleled experience and professional know-how also come to bear during the delicate assembly stage, where high quality components come together to form top-of-the-range products. Our components list features as many as 40,000 items: a figure which, on its own, testifies to the scale of our commitment to resources and standards.

TEST CENTER

Low quality isn't an option for us. Substandard products defy efforts to secure a market standing, generate the added burden of production recalls and inevitably compromise subsequent product placement.

Our efforts to apply rigorous self-assessment standards are reflected in the quality of our products. Each and every component is subject to rigorous internal testing, with three layers of testing contributing to assembled product reliability. Such stringent standards ensure significantly inferior damage probability, heightened lifetime and optimal operation of our products.





SALES

Our solid customer base is proof of our ongoing commitment to delivering reliable products to high price-quality standards. On top of that, our clients can rely on our constant support leading up to and after product purchase. Pre- and post-sales services address all of our customers' product requirements and potential customisation needs.

CUSTOMISATION

Total control over production allows us to offer clients a broad set of customisation options, ranging from individual branding and product component options, to substantial hardware and software departures from standard product specifications.

SALES NETWORK

As sales network partners you are part of the broader EMEC project, you're not just sales agents. Our sales managers boast a firm technical grounding and in-depth knowledge of the production cycle, offering client focused, practical insights into our product range. Our every effort is geared towards offering customer-led solutions, establishing full-fledged partnerships with our clients. At EMEC we exceed our role as suppliers, focusing on solving as well as preventing product issues.

SALES DESK

Our sales department's back office ensures that every aspect of product supply, from order through to delivery, runs smoothly. Any issues or problems arising during the course of supply are dealt with in timely fashion, cutting any potential delays to a minimum. Our sales desk's efficient handling of client enquiries translates into 40% of orders being adapted during the first contact stage. EMEC has a close to zero customer-loss record.

POST-SALES ASSISTANCE

Following delivery we provide ongoing support for our products, ensuring onsite maintenance and inspection services, as well as remote support. Our Max5 system, for instance, allows us to provide Sydney-based clients with immediate software updates direct from our Rieti office via remote PC applications. We provide real-time, multi-language customer assistance during out-of-office hours.

TRAINING

At EMEC we fully understand the complexity of each industry's ever-changing challenges and that the products we develop need to be handled by qualified, trained personnel. That understanding inspired the establishment of the EMEC Training Program: a scheme built around modules, addressing topics spanning technology and chemistry. Our most senior, expert sales account managers are entrusted with providing the training. At EMEC we believe that experienced account managers can exceed their sales role and deliver value-added service to our customers.

TRAINING WITH A PURPOSE

Anyone who has taken part in our Program knows that the scope of training goes well beyond providing static learning requirements. EMEC training courses seek to target issues of practical consequence, providing insights into the workings of our products, building solution-oriented approaches.







LOTUS

CHLORINE DIOXIDE GENERATOR

M I N I

Pressurized system
capacities up to 20gr/h

A I R

Pressure-less system for
multi-point injection up to 8gr/h

M A X I

Pressurized system
capacities up to 1000gr/h

E A S Y

Compact system with simplified operations
capacities up to 80gr/h



LOTUS MINI is all-round solution for all your need for water disinfection, it is a safe and solid. It can also be controlled remotely via the web application ERMES through a gsm modem or a lan adapter and modbus is available as option. It comes with a nice looking cover that protects from accidental sprays. 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 hence no chlorine dioxide gas or concentrated solutions exist outside of the process application.

RANGE: 8-20 gr/h MAX CAPACITY: 480 gr/day

ADVANTAGES

- > Reaction at controlled pressure
- > High degree of stability of the chlorine dioxide solution
- > No ClO₂ loss due to closed reaction chamber
- > Diluted chemicals

FUNCTIONS

- > Instantaneous ClO₂ production
- > ClO₂ dosing in proportional mode
- > Flow control input (flow alarm)
- > Tank level controls (level alarms)
- > Water meter input
- > Stand-by input
- > Real time production data
- > Pumps and SEFL flow sensors monitoring
- > Permanent data storage with system data log (on Logbook menu)
- > ERMES communication
- > USB data log (option)
- > Ethernet module (option)
- > GSM/GPRS internal modem (option)
- > Service due date



FEATURES

- > ClO₂ concentration: 2 gr/l
- > Flow control input (flow alarms)
- > Tank level control (level alarms)
- > HCl (red), NaClO₂ (blue) and dilution water (grey) metering pumps
- > 3 SEFL pump dosing check
- > MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed valve
- > PVC reaction chamber
- > ASA (Acrylonitrile Styrene Acrylate) enclosure
- > IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- > Wheel control for easy programming
- > Working temperature: 0÷45°C (32÷110°F)

	LOTUS MINI 8	LOTUS MINI 20
ClO ₂ max capacity (gr/h)	8	20
ClO ₂ max capacity (gr/day)*	192	480
Max pressure (bar)	10	10
Max chemicals consumption (l/h)	0.2 0.2	0.5 0.5
Concentration (gr/l)	2-20	
Power supply	230 VAC (190÷265 VAC) 115 VAC (90÷135 VAC)	
Average power consumption (W/h)	60	66

* Max capacity (gr/day) is referred to a 100% capacity / 24h.



LOTUS AIR is a pressure-less chlorine dioxide generator useful for those applications in which several injection points are required. It can also be controlled remotely via the web application ERMES through a GSM modem or a LAN adapter and Modbus is available as an option. It comes with a nice-looking cover that protects from accidental sprays.
RANGE: 8 gr/h MAX CAPACITY: 192 gr/day

ADVANTAGES

- > Reaction at ambient pressure
- > Injection multi-point
- > No emission
- > Diluted chemicals

FUNCTIONS

- > BATCH chlorine dioxide production
- > ClO₂ dosing in proportional mode
- > Alarms: products, water, emptying
- > Water meter input
- > Stand-by input
- > Real time production data
- > Pumps and SEFL flow sensors monitoring
- > Service due date
- > ERMES communication
- > ClO₂ concentration in water measurement and control



FEATURES

- > ClO₂ concentration: 2 gr/l (2%)
- > HCl (red), NaClO₂ (blue) and ClO₂ (grey) metering pumps
- > MFKT/V multifunction valve as pressure, safety, anti-siphon and bleed
- > Double chamber: reaction and storage
- > ASA (Acrylonitrile Styrene Acrylate) enclosure
- > IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- > Wheel control for easy programming
- > Working temperature: 0÷45°C (32÷110°F)

	LOTUS AIR
ClO ₂ max capacity (gr/h)	8 gr/h
ClO ₂ max capacity (gr/day)*	192 gr/day
Max chemicals consumption (l/h)	0,192 l/h (HCl) 0,156 l/h (NaClO ₂)
Concentration (gr/l)	2
Power supply	230 VAC (190÷265 VAC) 115 VAC (90÷135 VAC)
Average power consumption (W/h)	60

* Max capacity (gr/day) is referred to a 100% capacity / 24h.



LOTUS MAXI is the largest product of our family of generators of chlorine dioxide, 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.

RANGE: 80-1000 gr/h MAX CAPACITY: 24000 gr/day

ADVANTAGES

- > Reaction at controlled pressure
- > Large-scale applications
- > High degree of stability of the chlorine dioxide solution
- > No ClO₂ loss due to closed reaction chamber
- > Diluted chemicals

FUNCTIONS

- > Instantaneous ClO₂ production
- > ClO₂ dosing in proportional mode
- > Flow control input (flow alarm)
- > Tank level controls (level alarms)
- > Water meter input
- > Stand-by input
- > Real time production data
- > Pumps and SEFL flow sensors monitoring
- > Permanent data storage with system data log (on Logbook menu)
- > ERMES communication
- > USB data log (option)
- > Ethernet module (option)
- > GSM/GPRS internal modem (option)
- > Service due date



FEATURES

- > ClO₂ concentration: 20 gr/l
- > Flow control input (flow alarms)
- > Tank level control (level alarms)
- > HCl (red) and NaClO₂ (blue) metering pumps
- > 3 SEFL flow sensors as security
- > MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed
- > PVC reaction chamber
- > ASA (Acrylonitrile Styrene Acrylate) enclosure
- > IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- > Wheel control for easy programming
- > Working temperature: 0÷45°C (32÷110°F)

	LOTUS MAXI 80	LOTUS MAXI 160	LOTUS MAXI 240	LOTUS MAXI 400	LOTUS MAXI 600	LOTUS MAXI 800	LOTUS MAXI 1000
ClO ₂ max capacity (gr/h)	80	160	240	400	600	800	1000
ClO ₂ max capacity (gr/day)*	1920	3840	5760	9600	14400	19200	24000
Max pressure (bar)	8	8	7	8	8	4	4
Max chemicals consumption (l/h)	2.0 2.0	4.0 4.0	6.0 6.0	10.0 10.0	15.0 15.0	20.0 20.0	25.0 25.0
Concentration (gr/l)	2-20						
Power supply	230 VAC (190÷265 VAC) 115 VAC (90÷135 VAC)						
Average power consumption (W/h)	44	44	44	56	96	96	96

* Max capacity (gr/day) is referred to a 100% capacity / 24h.



LOTUS EASY is the best solution if you want a simple but professional way to produce chlorine dioxide, an integrated All-in-One, Controller with two metering pumps. Chlorine dioxide produced by LOTUS EASY can be proportional to the circulating water flow or based on a measured setpoint, it is then dosed into the water flow. LOTUS EASY is designed so that the reaction to produce chlorine dioxide takes place in a reaction chamber.

RANGE: 8-80 gr/h MAX CAPACITY: 1920 gr/day

ADVANTAGES

- › Reaction at controlled pressure
- › High degree of stability of the chlorine dioxide solution
- › No ClO₂ loss due to closed reaction chamber
- › Diluted chemicals

FUNCTIONS

- › Instantaneous ClO₂ production
- › ClO₂ dosing in proportional mode
- › Level alarms
- › Water meter input
- › Stand-by input
- › Real time production data
- › Pumps and SEFL flow sensors monitoring
- › Service due date
- › By-pass flow detection
- › mA (0-20mA) input

FEATURES

- › ClO₂ concentration: 20 gr/h
- › Level alarms
- › 2 flow sensors
- › MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed
- › Static mixer
- › PVC reaction chamber
- › Working temperature: 0÷45°C (32÷110°F)
- › 600 x 800 mm panel mounting
- › By-pass diameter: DN 40



	LOTUS EASY 8	LOTUS EASY 20	LOTUS EASY 40	LOTUS EASY 80
ClO ₂ (gr/h) max capacity	8	20	40	80
ClO ₂ (gr/day)* max capacity	192	480	960	1920
Max chemical consumption (l/h)	0.2 0.2	0.5 0.5	1.0 1.0	2.0 2.0
Concentration (gr/l)	20			
Power supply	230 VAC (190÷265 VAC) 115 VAC (90÷135 VAC)			

* Max capacity (gr/day) is referred to a 100% capacity / 24h.



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