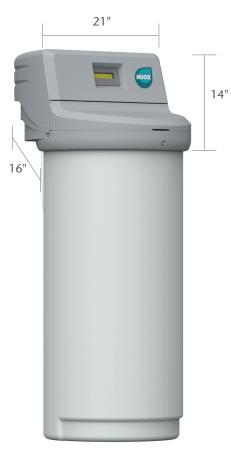


# **MIOX**<sup>®</sup>

2 lb/d (0.9 kg/d)

## **MIOX®** System Overview

The De Nora MIOX® 2 generator is a compact, easy to install and operate system for the on-site generation of up to 2lb/day of mixed oxidant solution.



Similar to the thousands of larger De Nora installations around the world, the MIOX® 2 is designed for minimal maintenance and ultimate simplicity and can be easily retrofitted into existing infrastructures. Just load with salt and let the De Nora MIOX® do the hard work for you.

- Self-cleaning
- Fully automatic flow control
- Remote monitoring capabilities
- NSF/ANSI 61 and CE Markings



MIOX

MIOX® 2

WATER MADE EASY



2 lb/d (0.9 kg/d)

## **Product Specifications**

	MIOX® 2			
Rated FAC Capacity	2.0 lb/day 0.9 kg/day			
Water Treatment Capacity (at 1 ppm FAC)	240,000 gal/day 908 m³/day			
Rated FAC Capacity	2.7 gal/hr 10.2 L/hr			
Self-Cleaning	YES			
FAC Concentration*	4,000 ± 1,000 mg/L			
Water Hardness	0 - 17 mg/L			
Electrical Service Requirement (OSG Only)	110 VAC to 240 VAC, 1 ph, 4A rating 50/60 Hz			
Salt Conversion (SCE)*	3.0 - 3.5 lb Salt/lb FAC 3.0 - 3.5 kg Salt/kg FAC			
Energy Conversion (ECE)*	3.5 kW-hr per lb FAC 7.7 kW-hr per kg FAC			
Salt Quality Required	99.5% NaCl or better			
Hydrogen Venting	REQUIRED			
Air Temperature Required	40°F to 110°F 4°C to 43°C			
Recommended Feed Water Temperature Range	55°F to 80°F 12°C to 27°C			
Feed Water Pressure	1 - 75 psi 6.8 - 517 kPa			
Dimensions (WxDxH)	21" x 16" x 14" 53 cm x 41 cm x 36 cm			
Approx. Weight	25 lbs 11.5 kg			

<sup>\*</sup> Performance may vary depending on salt quality, water quality and water temperature

WATER MADE EASY

MARINE MUNICIPAL INDUSTRIAL



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# MIOX®

4 to 8 lb/d (1.8 to 3.6 kg/d)

#### **MIOX®** Overview

The De Nora MIOX® 4 - 8 systems are simplified automatic units configured for permanent installations producing between 4 and 8 lbs/day (1.8 - 3.6 kg/ day) of mixed oxidants. Available as a skidmounted or stand-alone system, MIOX® systems are ideal for industrial applications



4 - 8 lb/day FAC

and small rural and remote communities. Systems activate based upon a level sensor measuring the volume of oxidant in a storage tank. After connection to water and a power source, the only routine operator service requirements are to load salt into the brine generator

Using just water, salt and power to generate chemicals on site eliminates the storage and handling of hazardous disinfection chemicals while providing chlorine residual.

- Wall mount or free-standing
- Available in 110/220 V 1 ph
- Corrosion-free rotomolded backpanel
- Unique cell design and flow control features for simplified maintenance and operation
- NSF/ANSI 61 Certified



WATER MADE EASY

MUNICIPAL INDUSTRIAL MARINE



4 to 8 lb/d (1.8 to 3.6 kg/d)

## **Product Specifications**

	MIOX® 4	MIOX® 6	MIOX® 8		
Rated FAC Capacity	4 lbs/day 1.8 kg/day	6 lbs/day 2.7 kg/day	8 lbs/day 3.6 kg/day		
Water Treatment Capacity (at 1 ppm FAC)	480,000 gal/day 1817 m³/day	720,000 gal/day 2725 m³/day	960,000 gal/day 3634 m³/day		
Salt Conversion (SCE)*	3.0 lb salt/lb FAC 3.0 kg salt/kg FAC	3.0 lb salt/lb FAC 3.0 kg salt/kg FAC	3.0 lb salt/lb FAC 3.0 kg salt/kg FAC		
Energy Conversion (ECE)*	3.5 kW-hr/lb FAC 7.7 kW-hr/kg FAC	, , , , , , , , , , , , , , , , , , , ,			
FAC Concentration*	3,800 mg/L (± 1,000)	3,800 mg/L (± 1,000)	3,800 mg/L (± 1,000)		
Electrical Service Requirement (OSG only)	110 or 220 VAC, 1 ph, 20A, 50/60 Hz	110 or 220 VAC, 1 ph, 20A, 50/60 Hz	220 VAC, 1 ph, 20A, 50/60 Hz		
Flow Rate (± 15%)	6 gal/hr 22.7 L/hr	9 gal/hr 34 L/hr	9 gal/hr 34 L/hr		
Air Temp. Required	42° to 110° F 6° to 43°C				
Recommended Feed Water Temperature*	55° to 80° F 12° to 27° C				
Feed Water Pressure	25 to 75 psi 172 to 517 kPa				
Water Hardness	0 – 17 mg/L (1 grain/gallon)				
Maximum Silica Limit	20 mg/L				
Approximate Dimensions (WxDxH)	40 x 12.5 x 44 inches 102 x 31.75 x 112 cm				

<sup>\*</sup> Performance may vary depending on salt quality, water quality, and water temperature.

WATER MADE EASY

MARINE ENERGY MUNICIPAL INDUSTRIAL



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DNWT - MIOX® 4 - 8 On-site Chemical Generator - 760.0005.0 - 7/2019



# **MIOX**<sup>®</sup>

15 to 60 lb/day (6.8 - 27.2 kg/day)

#### **MIOX®** Overview

The De Nora MIOX® 15 - 60 systems are designed for high efficiency, low lifecycle cost, durability and reliability. Specialized engineering and design gives the MIOX® systems flexibility to easily expand capacity 4X in the same enclosure.

66.5"

15 - 60 lb/day FAC

Systems range from 15 - 60 lb/day. Using just water, salt and power to generate chemicals on site eliminates the storage and handling of hazardous disinfection chemicals while providing chlorine residual.

- Self-cleaning feature
- Available in 200/240 V 1 ph or 380/530 V 3 ph
- Remote monitoring and communication options available
- Unique cell design and flow control features for simplified maintenance and operation
- NSF/ANSI 61 and CE Markings



WATER MADE EASY



15 to 60 lb/day (6.8 - 27.2 kg/day)

## **Product Specifications**

	MIOX® 15	MIOX® 30	MIOX® 45	MIOX® 60
Rated FAC Capacity	15 lb/day	30 lb/day	45 lb/day	60 lb/day
	6.8 kg/day	13.6 kg/day	20.4 kg/day	27.2 kg/day
12.5% Bleach Equivalent	15 gal/day	30 gal/day	45 gal/day	60 gal/day
	57 L/day	113.5 L/day	170 L/day	227 L/day
Additional cell increments to meet higher capacity	15 lb 6.8 kg	15 lb 6.8 kg	15 lb 6.8 kg	
Water Treatment Capacity	1.8 mgd	3.6 mgd	5.4 mgd	7.2 mgd
(at 1 ppm FAC)	6,813 m³/day	13,626 m³/day	20,439 m³/day	27,252 m³/day
Salt Conversion (SCE)**	3.0 lb salt/lb FAC			
	3.0 kg salt/kg FAC			
Energy Conversion (ECE)**	3.0 kW-hr/lb FAC	3.0 kW-hr/lb FAC	3.0 kW-hr/lb FAC	3.0 kW-hr/lb FAC
	6.6 kW-hr/kg FAC	6.6 kW-hr/kg FAC	6.6 kW-hr/kg FAC	6.6 kW-hr/kg FAC
FAC Concentration**	4,500 mg/L	4,500 mg/L	4,500 mg/L	4,500 mg/L
	± 1,000 mg/L	± 1,000 mg/L	± 1,000 mg/L	± 1,000 mg/L
Electrical Service Requirement (OSG only)	200 - 240 VAC, 1 ph, 30A, 50/60 Hz*	200 - 240 VAC, 1 ph, 60A, 50/60 Hz*	200 - 240 VAC, 1 ph, 90A, 50/60 Hz*	200 - 240 VAC, 1 ph, 120A, 50/60 Hz*
Flow Rate (± 15%)	19 gal/hr	38 gal/hr	57 gal/hr	76 gal/hr
	72 L/hr	144 L/hr	216 L/hr	288 L/hr

<sup>\*</sup>Available in 3 ph, Wye 380 - 530 VAC, 15A, 25A, 35A, 45A, 50/60Hz

WATER MADE EASY

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DNWT - MIOX® 15 - 60 On-site Chemical Generator- 760.0002.1 - 7/2019

 $<sup>\</sup>ensuremath{^{**}}$  Performance may vary depending on salt quality, water quality and water temperature



# **MIOX**<sup>®</sup>

60 to 300 lb/d (27 to 136 kd/d)

#### **MIOX®** Overview

The De Nora MIOX® 60 - 300 systems produce from 60 to 300 lb/day of chemicals for water treatment and are systematically optimized for ease of use, reliability, and performance. The MIOX® systems have a modular design, which means the systems can be easily expanded 5X within the same cabinet and without increasing the footprint, to meet future increase in FAC demand.

61.9" 37.8"

60 - 300 lb/day FAC

Leading the industry in salt and energy conversion, the MIOX® ensures the lowest life-cycle cost for your application. The unit operates with Allen Bradley MicroLogix 1400 controls and is equipped with self-adjusting flow control.

- Self-cleaning feature.
- Remote monitoring and communication options available.
- Unique cell design and flow control features for simplified maintenance and operation.
- NSF/ANSI 61 Certified



WATER MADE EASY



60 to 300 lb/d (27 to 136 kd/d)

## **Product Specifications**

	MIOX® 60	MIOX® 120	MIOX <sup>®</sup> 180	MIOX <sup>®</sup> 240	MIOX® 300	
Rated FAC Capacity	60 lb/day	120 lb/day	180 lb/day	240 lb/day	300 lb/day	
	27 kg/day	54 kg/day	81 kg/day	108 kg/day	136 kg/day	
12.5% Bleach Equivalent	60 gal/day	120 gal/day	180 gal/day	240 gal/day	300 gal/day	
	227 L/day	454 L/day	681 L/day	908 L/day	1,135 L/day	
Additional cell increments to	60 lb	60 lb	60 lb	60 lb		
meet higher capacity	27 kg	27 kg	27 kg	27 kg		
Water Treatment Capacity	7.2 mgd	14.4 mgd	21.6 mgd	28.8 mgd	36 mgd	
(at 1 ppm FAC)	27,255 m³/day	54,510 m³/day	81,765 m³/day	109,020 m³/day	136,275 m³/day	
Salt Conversion (SCE)*	2.5 lb salt/lb FAC 2.5 kg salt/kg FAC	2.5 lb salt/lb FAC 2.5 kg salt/kg FAC	2.5 lb salt/lb FAC 2.5 kg salt/kg FAC 2.5 kg salt/kg FAC 2.5 kg salt/kg FAC		2.5 lb salt/lb FAC 2.5 kg salt/kg FAC	
Energy Conversion (ECE)*	3.5 kW-hr/lb FAC 7.7 kW-hr/kg FAC	3.5 kW-hr/lb FAC 7.7 kW-hr/kg FAC	3.5 kW-hr/lb FAC 7.7 kW-hr/kg FAC 7.7 kW-hr/kg FAC		3.5 kW-hr/lb FAC 7.7 kW-hr/kg FAC	
FAC Concentration*	4,500 mg/L	4,500 mg/L	4,500 mg/L	4,500 mg/L	4,500 mg/L	
	± 1,000 mg/L	± 1,000 mg/L	± 1,000 mg/L	± 1,000 mg/L	± 1,000 mg/L	
Electrical Service Requirement (OSG only)	400 VAC, 3 ph, 125A, 50/60 Hz and 480 VAC, 3 ph, 100A, 50/60 Hz	400 VAC, 3 ph, 125A, 50/60 Hz and 480 VAC, 3 ph, 100A, 50/60 Hz	400 VAC, 3 ph, 125A, 50/60 Hz and 480 VAC, 3 ph, 100A, 50/60 Hz 400 VAC, 3 ph, 125A, 50/60 Hz and 480 VAC, 3 ph, 100A, 50/60 Hz		400 VAC, 3 ph, 125A, 50/60 Hz and 480 VAC, 3 ph, 100A, 50/60 Hz	
Flow Rate ( ± 15%)	75 gal/hr	150 gal/hr	225 gal/hr	300 gal/hr	375 gal/hr	
	284 L/hr	568 L/hr	852 L/hr	1136 L/hr	1420 L/hr	

<sup>\*</sup> Performance may vary depending on salt quality, water quality and water temperature

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DNWT - MIOX® 60 - 300 On-site Chemical Generator - 760.0001.1 - 7/2019



# **MIOX**<sup>®</sup>

300 to 1,200 lb/d (136 to 544 kg/d)

#### **MIOX® Overview**

The De Nora MIOX® 300 - 1200 on-site chemical generators produce from 300 - 1,200 lb/day of chemicals for water treatment and are systematically optimized for ease of use, reliability, and performance. The MIOX® 300 - 1200 systems have a modular design, which means the system can be easily expanded 4X within the same cabinet and without increasing the footprint, to meet future increase in FAC demand.



MIOX® 300 - 1200

Leading the industry in salt and energy conversion, the MIOX® ensures the lowest life-cycle cost for your application. The unit operates with Allen Bradley MicroLogix 1400 controls and is equipped with self-adjusting flow control.

- Self-cleaning feature.
- Remote monitoring and communication options available.
- Transformerless design ensures optimal efficiency, smallest footprint and lowest weight design.
- Unique cell design and flow control features for simplified maintenance and operation.
- NSF/ANSI 61 and CE Marking



MIOX

WATER MADE EASY



300 to 1,200 lb/d (136 to 544 kg/d)

## **Product Specifications**

	MIOX® 300	MIOX® 600	MIOX® 900	MIOX® 1200	MIOX® 250	MIOX® 500	MIOX® 750	MIOX® 1000
lb/day FAC Capacity kg/day FAC Capacity	300 lb/day 136 kg/day	600 lb/day 272 kg/day	900 lb/day 408 kg/day	1,200 lb/day 544 kg/day	250 lb/day 113.5 kg/day	500 lb/day 227 kg/day	750 lb/day 340.5 kg/day	1,000 lb/day 454 kg/day
Salt Conversion (SCE)*	3.0 lb salt/lb FAC 3.0 kg salt/kg FAC				3.0 - 3.5 lb salt/lb FAC 3.0 - 3.5 salt/kg FAC			
Energy Conversion* (ECE)	3.0 kW-hr/lb FAC 6.6 kW-hr/kg FAC							
FAC Concentration*	4,500 mg/L ± 1,000 mg/L							
Electrical Service Requirement (OSG only)	480VAC, 3 ph 100A, 50/60 Hz	480 VAC, 3 ph, 200A, 50/60 Hz	480 VAC, 3 ph, 300A, 50/60 Hz	480 VAC, 3 ph, 400A, 50/60 Hz	400 VAC, 3 ph, 100A, 50/60 Hz	400 VAC, 3 ph, 200A, 50/60 Hz	400 VAC, 3 ph, 300A, 50/60 Hz	400 VAC, 3 ph, 400A, 50/60 Hz
Flow Rate (± 15%)	380 gal/hr 1438 L/hr	760 gal/hr 2,877 L/hr	1,140 gal/hr 4,315 L/hr	1,520 gal/hr 5,754 L/hr	304 gal/hr 1,150 L/hr	608 gal/hr 2,300 L/hr	912 gal/hr 3,450 L/hr	1,216 gal/hr 4,600 L/hr
Air Temp Required	45°F to 110°F 7°C to 43°C							
Recommended Feed Water Temp	55°F to 80°F 12°C to 27°C							
Feed Water Pressure	50 to 100psi 345 to 689kPa							
Maximum Silica Limit	20 mg/L							
Energy Add for Internal Vent	0.5 kW	1 kW	1.5 kW	2 kW	0.5 kW	1 kW	1.5 kW	2 kW

 $<sup>\</sup>mbox{\ensuremath{^{\star}}}$  Performance may vary depending on salt quality, water quality, and water temperature.

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