# **CAPITAL CONTROLS<sup>®</sup>** DTPF Systems – Ozone Generators

## Up to 113 kg/h (Up to 6000 lb/d)

## Introduction

The CAPITAL CONTROLS® DTPF range is the largest range of ozone generators from De Nora. Eleven different models produce up to 113 kg/h (up to 6000 lb/d) of ozone in concentrations between 2% wt and 15% wt. Flexible systems offer a range of features to ensure simple maintenance, maximum uptime and cost effectiveness.

De Nora has been delivering ozone generators across a host of applications since 1970 and supports customers through the process from understanding the requirements through to delivery and aftersales support – all you need is a supply of air, water and electricity and we'll do the rest.

## **Features**

## Flexibility

- Systems produce up to 113 kg/h (up to 6000 lb/d) of ozone covering the majority of applications
- Ozone concentrations between 2% wt and 15% wt
- Air, PSA, and Liquid Oxygen (LOX) feed gas options all optimized to minimize power consumption requirements
- Options include full systems, including air dryers and filters (for air feed gas systems) or single components
- Fused and/or electronic control options delivers greater control and cost advantages.

## Ease of use and operation

- Plug and play/fully automated system -Simple start up and ease of use
- Touch screen operation easy to operate
- Standard inverter makes obtaining spare parts easier

## Effective and efficient operation

- Complete process instrumentation to ensure reliable ozone production
- Profibus-Modbus-Ethernet extensions available improved monitoring and control.

## Secure and safe

- System instrumentation for safe operation
- IP54 ingress protection compliant ensures protection and long life of your equipment
- Fully tested and certificated
- Robust dielectric offers improved reliability over other designs

## Easy installation

• Compact designs are skid mounted up to 18 kg/h, including the air feed gas drying system for ozone production from air – ease of integration, installation and management with your existing facility.





DTPF	Ozone Performance		Cooling Water Demand		Weight		Dimension (depth x width x height)		
	kg/hr	lb/day	m³/h	gpm (US)	kg	lbs	mm	inch	
91	up to 18.2	up to 100	16.3	71.8	Separate arrangement for generator and PSU				
127	up to 25.4	up to 1350	22.8	100.4					
182	up to 36.4	up to 2000	32.7	144.0					
240	up to 48.0	up to 2500	43.2	190.2					
271	up to 54.2	up to 2900	48.76	214.7					
308	up to 61.6	up to 3250	55.4	243.9					
336	up to 67.2	up to 3550	60.5	266.4					
374	up to 74.8	up to 4000	67.3	296.3					
440	up to 88.0	up to 4650	79.2	348.7					
550	up to 113	up to 6000	99	435.9					

Cooling Water Demand at design conditions: Cooling water at 15°C (59°F) - flow rate is according to the specific ozone production and concentration.

Ozone generators are available stand-alone or as complete systems including ozone contact system, ozone monitors and vent ozone destruction systems etc. High technology combined with high quality materials and components form reliable ozone systems that operate even under different environmental conditions.

## **Ancillary Equipment Options**

## Feed Gas Supply

- Liquid oxygen storage tanks, vaporizers and complete plants
- PSA Oxygen (On-site generation, Pressure Swing Adsorption)
- Air preparation systems
- VPSA Oxygen (On-site generation, Vacuum Pressure Swing Adsorption)

#### Instrumentation and Control

- Devices for the management and measurement of Ozone concentration and residual in water
- Alarm monitoring and indication
- System control based on process signal monitoring

## **Cooling Water Supply**

- Air/water cooled chiller units
- Heat exchangers

## **Containerized System**

- Insulated, lit and painted container
- Complete safety concept including alarms in line with international standards
- Electric heating and ventilation fan

#### **Ozone Mixing and Contacting**

- Side stream injection systems
- Fine bubble diffusers
- Closed reactors
- Degassing tanks
- Demistors

#### **Electronic Process Control**

- MCC
- Main PLC

#### **Ozone Destruction in Off Gas**

• Thermal and Catalytic ozone destructors



## About De Nora

Backed by 100 years of experience, you can be confident in the reliability and safety of Capital Controls® Ozone Generators. De Nora is the partnerof-choice for communities and companies around the globe. In fact, more than 500 million people around the world drink water treated by De Nora products every single day.

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