

DEO™

Catalytic odour treatment

DEO™ is a regenerative catalytic system for eliminating high concentrations of VOCs and other odour emissions. It is a compact system, producing high-performance solutions without consumables. With low maintenance requirements and high energy efficiency.

Catalytic Oxidation

DEO™ is a well-proven technology for reducing VOC and odour emissions. Examples of applications where DEO™ has been shown to provide unique cost and efficiency benefits due to the high gas concentrations are pumping stations, sanitation tanks, buffer tanks and biogas applications.

High separation and stable operation together with reduced operating costs and carbon footprint make DEO™ the natural choice for difficult gas concentrations and sensitive environments.

With the patented wire-mesh catalyst, concentrations of substances can be degraded and oxidised at a relatively low temperature, in a small area. Through efficient heat exchange function, the working temperature is controlled and energy loss is kept low. Most VOCs have a conversion efficiency of over 98%, regardless of concentration. Concentrations of H₂S up to 8000ppm have been treated effectively with stable high oxidation.

DEO™

Centriar DEO™ is available in several sizes with the same patented technology. They are integrated units ready to be connected between source and air outlet. An integrated fan draws in gas through the unit's catalyst element. The catalyst is heated to about 350°C by an electric heater supported by the heat exchanger.

The ingenious RTO exchanger developed by Centriar has a thermal efficiency of up to 95% and can also act as a cooling element. As the unit has no traditional consumable, operating costs are limited to power consumption and servicing. The efficiency of the heat exchanger and the lack of consumables mean that DEO™ has a lower climate impact than competing odour control technologies, even at low gas concentration.



Key benefits

VERY
COMPACT
SIZE

HIGH
PERFOR-
MANCE

NO
CONSUMABLES

HANDLES
HIGH GAS
CONCENTRA-
TIONS

EASY
INSTALLATION



Model	DEO-100™	DEO-200™	DEO-500™	DEO-1000™	DEO-2000™
Versions	Regular/Plus/Lenta	Regular/Plus/Lenta	Regular/Plus/Lenta	Regular/Plus/Lenta	Regular/Plus/Lenta
Application	VOC & H2S/NH3				
Flow rate (m3/h)	100	200	500	1 000	2 000
Heat exchange system	Plate/None (Lenta)	MRO	MRO	MRO	MRO
Cooling system	None	None/Air/Water	None/Air/Water	None/Air/Water	None/Air/Water
Electrical connection	400V, 50Hz, 3-phase, N, PE, 16A, CEE 416-6	400V, 50Hz, 3-phase, N, PE, 16A, CEE 416-6	400V, 50Hz, 3-phase, N, PE, 16A, CEE 416-6	400V, 50Hz, 3-phase, N, PE, 32A, CEE 432-6	400V, 50Hz, 3-phase, N, PE, 63A, CEE 463-6
Installed/operating power (kW)	5,4/= 2,5 kW	8,1/= 1,2 kW	8,1/= 3 kW	16,2/= 6 kW	32,4/= 12 kW
Operating temperature (°C)	330-350	330-350	330-350	330-350	330-350
Temperature differential inlet/outlet (°C)	≈ 100/330 (Lenta)	≈ 20	≈ 20	≈ 20	≈ 20
Thermal Efficiency	65%	N/A	95%	95%	95%
Dimensions (height, width, depth, mm)	770, 650, 480	1450, 580, 480	1762, 804, 694	1 850, 790, 790	1 900, 990, 990
Duct connection (ø mm)	100	100	160	200	250
Material	Aluminium, SS 316, Inconel	Aluminium, SS 316	Aluminium, SS 316	Aluminium, SS 316	Aluminium, SS 316
Weight (kg)	65	118	257	432	552
Installation	Wall mount	Floor	Floor	Floor	Floor
Electrical Cabinet	Built-in	Stand-alone	Stand-alone	Stand-alone	Stand-alone
PLC and communication module	Yes	Yes	Yes	Yes	Yes