

IK™ Series

Catalytic ozone destruct units

OZONE

Off-gases containing trace levels of un-reacted ozone must be passed through a thermal or catalytic type vent ozone destruct unit before venting to the atmosphere.

APPLICATIONS

- Catalytic ozone destruct units are suitable for all types of processes where no catalytic poisons are present

MAIN CHARACTERISTICS

- The IK™ units include a heater, reaction chamber, suction fan, control system and are an energy-efficient solution

OZONE DESTRUCT TECHNOLOGY: IK™ SERIES

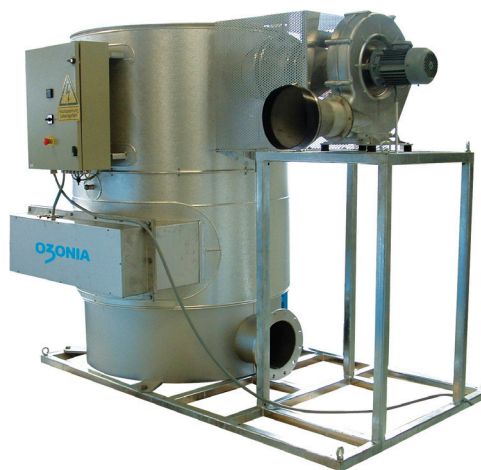
Exhaust gases from processes where ozone has been used invariably contain residual amounts of un-reacted ozone. Before this exhaust can be vented into the atmosphere, it is necessary to decompose the traces of ozone. In most countries it is prohibited to release even low-level concentrations into the atmosphere. There are various methods available to treat vent gas.

Two popular methods are thermal and catalytic destruction which are selected to match the process in question. The thermal destruct units raise the temperature of the off-gas to a level where the half-life of the ozone is reduced to milliseconds and in the catalytic units the ozone molecule decay rate is accelerated on the surface of the catalyst converting the ozone to oxygen.

HOW IT WORKS

Normally, vent gases are saturated with water vapour and contain ozone levels up to 1.5 wt%. Before these gases can be treated it is necessary to heat them so that the relative humidity is less than 100% in order to prevent condensation forming on the surface of the catalyst.

Catalytic destruction does not require high temperatures and very rapidly decomposes ozone to oxygen. Care has to be taken to ensure that catalytic poisons do not enter the system. The IK™ units include the heater and reaction chamber.



PRODUCT HIGHLIGHTS

- Very high ozone destruct efficiency
- Low power consumption
- Long service life
- Virtually maintenance-free
- Easy integration
- Compact dimensions
- High product integrity

OZONIA

TECHNICAL DATA

IK™ MODEL	Flow (g/h)		Ozone Level (barg)		Operating Pressure (mbar)	Apparent Power (kVA)	Dimensions LxHxW (mm)	Weight (kg)
	Volume (m³/h)	Mass (kg/h)	Inlet (10 wt%)	Outlet (ppm)				
IK-15	20	25	< 1.5	< 0.1	-35 ... 50	1.27	400 x 1970 x 634	65
IK-20	40	50	< 1.5	< 0.1	-35 ... 50	1.52	400 x 1996 x 634	89
IK-30	90	110	< 1.5	< 0.1	-35 ... 50	2.45	500 x 2000 x 735	124
IK-40	150	190	< 1.5	< 0.1	-35 ... 50	3.62	600 x 2100 x 850	175
IK-50	230	290	< 1.5	< 0.1	-35 ... 50	5.10	500 x 2040 x 910	236
IK-60	340	430	< 1.5	< 0.1	-35 ... 50	6.78	600 x 2040 x 1000	339
IK-80	610	780	< 1.5	< 0.1	-35 ... 50	12.15	800 x 2040 x 1250	463
IK-100	690	1240	< 1.5	< 0.1	-35 ... 50	19.13	2290 x 1875 x 1360	790
IK-120	1390	1790	< 1.5	< 0.1	-35 ... 50	27.28	2390 x 2055 x 1560	1075

TECHNICAL FEATURES

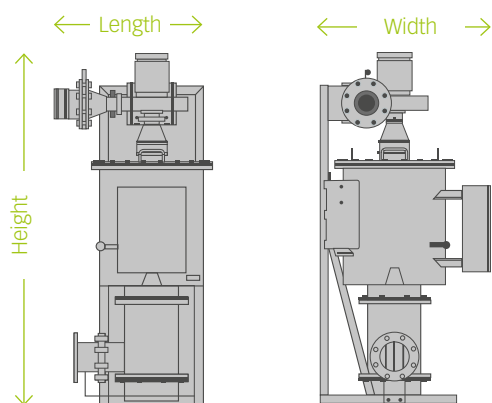
- Design standards: EN, IEC, ISO, SN
- Protection class: IP 54
- Conformity: CE
- Connection data: 3 x 400 VAC ±10%, 50 Hz

MATERIALS

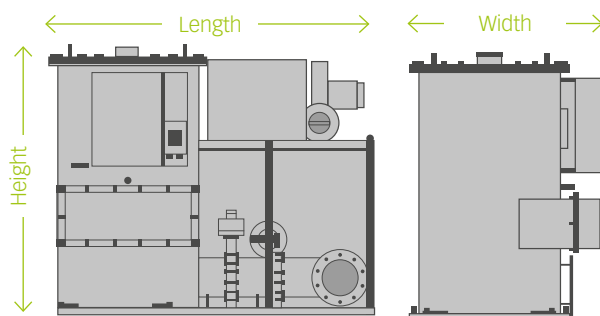
- Heater: Incoloy 800
- Housing and pipes: stainless steel
- Fan: aluminium
- Catalyst: metal oxide
- Insulation: mineral wool
- Control Box: mild steel
- Frame: galvanised steel

REMOTE CONTROL AND ALARMS

- Unit ON/OFF
- Enable REMOTE
- Unit running
- Temperature lower than max. alarm value
- Temperature higher than lower alarm value
- Over protection switch tripped
- All miniature circuit breakers are ON



Models IK-15 to IK-80



Models IK-100 to IK-120

CONTACTS

OZONIA Switzerland	salesCH@ozonia.com	+41 44 801 85 11
OZONIA France	salesFR@ozonia.com	+33 1 58 81 50 69
OZONIA Russia	salesRU@ozonia.com	+7 831 434 16 28
OZONIA North America	sales@ozonia.com	+1 201 676 2525
OZONIA China	salesCN@ozonia.com	+86 10 6597 3860
OZONIA Korea	salesKR@ozonia.com	+82 31 701 9036
OZONIA Japan	salesJP@ozonia.com	+81 3 5444 6361

Your local distributor: