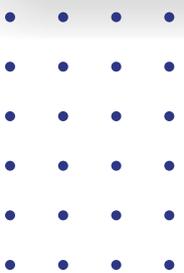


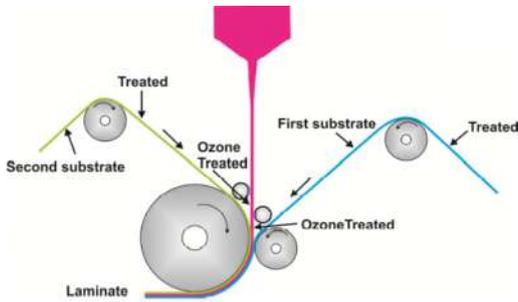
ADVANCED OZONE SOLUTIONS FOR PLASTIC PACKAGING

GENERATION

NEUTRALIZATION



OZONE TREATMENT IN EXTRUSION COATING



Ozone Treatment in Extrusion Coating Lamination

Achieving high-performance bonding in extrusion coating requires treating both the substrate and molten polymer. IEEC Power Electronics, India's corona treatment pioneer, developed "OZOGEN" the Ozone Treatment System to ensure total adhesion.

The system applies ozone (O₃) to the melt at the T-die. It decomposes into oxygen (O₂) and reactive nascent oxygen (O)



This process accelerates oxidation, creating superior bonds at higher speeds and lower temperatures.

Key Advantages

- **Superior Bond Strength** : Maximum adhesion without high-temperature risks.
- **Cost Efficiency** : Reduces expensive acid co-polymers and minimizes necking.
- **Enhanced Quality** : Lower temperatures reduce odors and off taste.
- **Improved Performance** : Boosts line speeds and heat-seal integrity.

OZOGEN ensures reliability while preserving polymer integrity

Technical Specification

Feed Gas	Air
Nominal Production of Ozone	400-500gm/Hr
Concentration of Ozone	16gm / nm ³
Feed Gas Inlet Pressure	4-6bar
Feed Gas Flow Rate	400LPM
Power Consumption	15 KW
The Ozone Applicator Stainless Steel Tube	2Nos. Per 'T' Die Shall Be Provided.
Ozone Delivery Tube Length	15mtrs made of Stainless Steel
Feed Gas Dew-Point	-30ΣC and Dry Air at Atmospheric Pressure
Ambient Temp	5 To 40 ΣC
Humidity	<70% (Yearly Average)
Ozone Generation Vessel	Stainless Steel
System Control	IEEC
System Regulation Range	10 – 100%
Common Outputs & Alarms	System Status, Alarm Messages
Cooling Water Inlet Temp	15°C To 23°C
Cooling Water Pressure	1.5bar- 2.5bar
Cooling Water Demand	<45 LPM
Feed Gas (Total Hydrocarbons, Thc)	≤ 60
Dimensions L X H X W (mm)	3157 x 600 x 2000mm
Ambient Air Temperature (Min, Max)	5-35ΣC; 41-95F
PLC & HMI	Siemens
Protection Class (Cabinet / Cell)	IP32
Installed Power (KVA)	19KVA
Enclosure	Powder Coated Steel
In Contact With Ozone	SS316 / SS304
In Contact With Water	SS316 / SS304
Air Preparation	Mist Separator + Desiccant Dryer + Oil Filter + Moisture Separator
Optional	
Air Preparation	Air Refrigerated Dryer
Cooling Systems	Chiller Optional
Your Scope Of Supply	
Power Input	415 V 3 Phase 7KVA
Cooling Water Inlet Temperature:	15ΣC -23ΣC
Cooling Water Demand	<40 LPM
<i>In Case Of Air As Feed Gas, It Should Be Dust Free & Oil Free. A Refrigerated Air Dryer Is Must To Maintain Low Moisture Content.</i>	

OZONASH OZONE DESTRUCTION SYSTEM

Introducing the OZONASH Ozone Destruction System, an innovative solution that helps companies utilizing corona treatment stations comply with ozone regulations while offering significant cost savings through catalyst regeneration.

The functioning of the system is as follows :

1. The ozone enters the destruction system, where a combination of catalysts efficiently reduces it to oxygen.
2. This process occurs at room temperature, thanks to specially designed catalyst granules containing precious metals. No external energy is required to initiate the reaction.

The multi-stage catalytic destruction system OZONASH consists of the following components :

1. Pre-filter with filtration of up to 5μ to avoid contamination of catalyst.
2. HEPA filter to remove at least 99.97% of dust and other foreign particles up to size of 0.3μ .
3. Activated Alumina beads which act as desiccant and reduces contamination of harmful functional groups with the catalyst.
4. A bed of metal oxide catalyst granules.

By implementing the OZONASH system, companies can ensure compliance with ozone limits, enjoy cost savings through catalyst regeneration, and maintain a durable infrastructure by utilizing suitable materials.

AVAILABLE MODELS

Models	Capacity
Ozanash 400	up to 400 cfm
Ozanash 600	up to 600 cfm
Other capacities available upon request	





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