



# Ceramic Media Product Brochure



## Ozone Oxidation Catalyst

Pingxiang Rongjian Environmental Protection Chemical Packing  
Co., Ltd

# DIRECTORY

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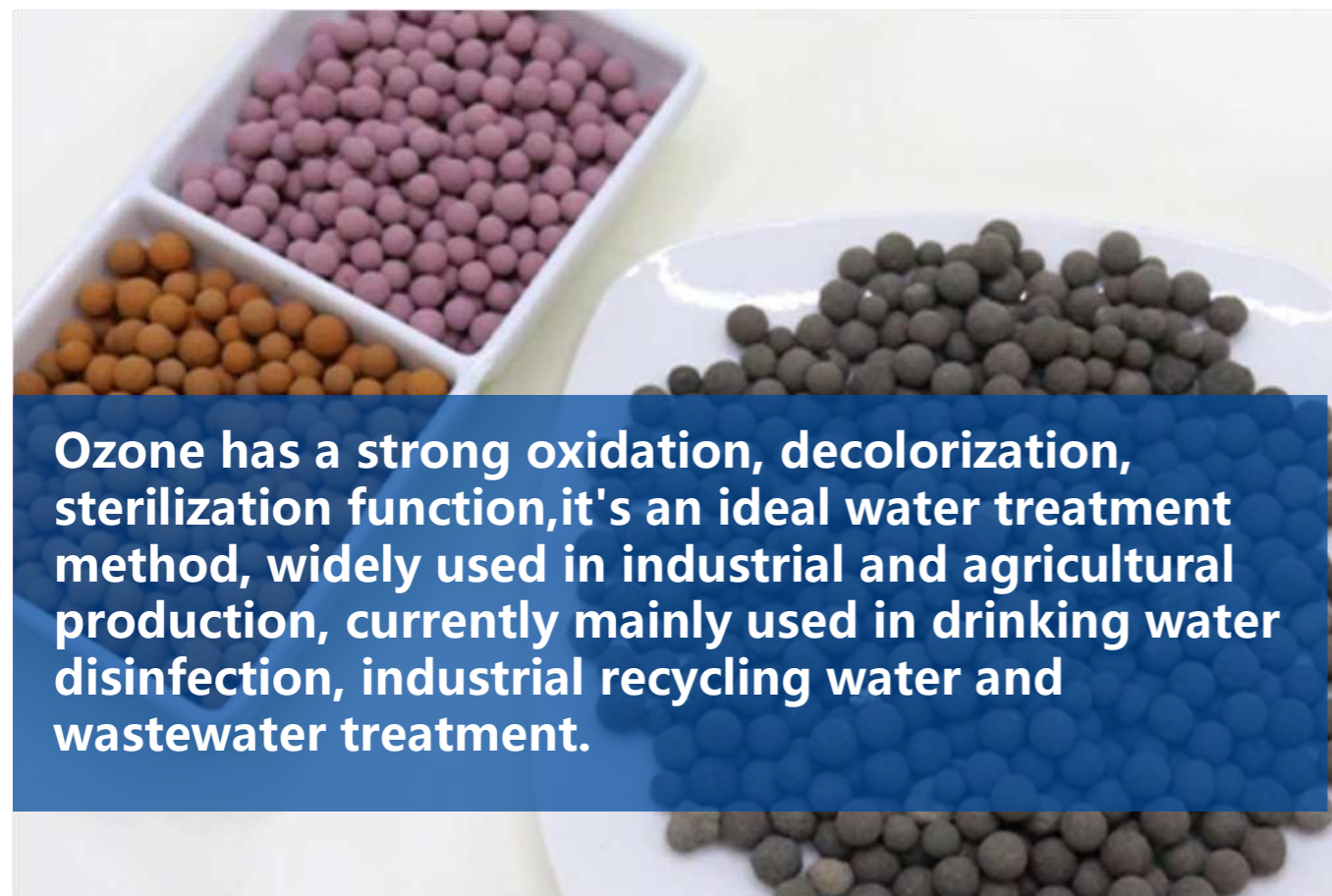
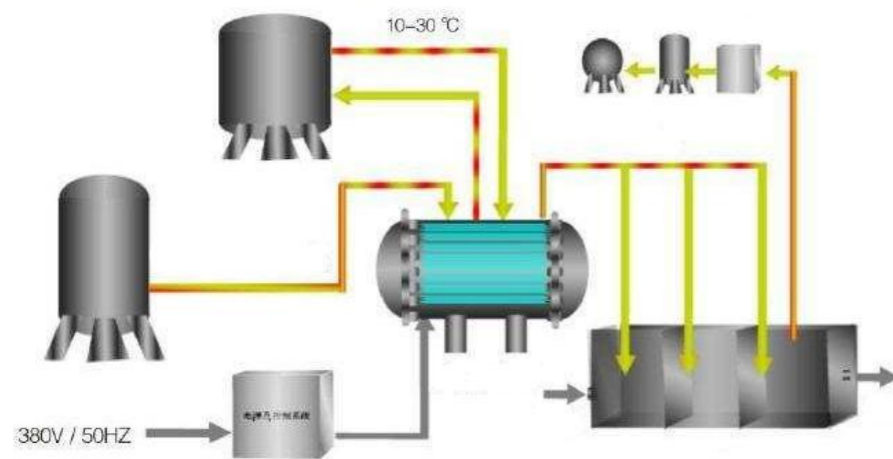
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# Technical Features

- The mechanism of catalytic ozonation is to enhance the process of ozonation under the action of catalyst, that is, to enhance the generation of hydroxyl radical and REDOX cycle. Catalytic ozonation is an advanced oxidative degradation process based on the combination of catalyst and ozone. Its purpose is to promote the degradation of pollutants, improve the ozone utilization rate and reduce the operating cost.



Ozone has a strong oxidation, decolorization, sterilization function, it's an ideal water treatment method, widely used in industrial and agricultural production, currently mainly used in drinking water disinfection, industrial recycling water and wastewater treatment.

# Product Specification



Type	Size (mm)	Bulk Density	Crushing Strength (N)	Specific Surface Area (m <sup>2</sup> /g)	Aperture	Space Speed
Aluminum-based ozone catalyst	3-5	0.72-0.75	>150	>280	>0.4	1-5
	4-6					
	6-8					
Silicon-aluminum based ozone catalyst	3-5	0.95-0.98	>150	>280	>0.4	1-5
	4-6					
	6-8					
Ceramic-based ozone catalyst	3-5	1-1.2	>150	>280	>0.4	1-5
	4-6					
	6-8					

Content	Rongjian Chemical Catalyst	Other Chemical Catalyst
<b>Material</b>	Silicon-aluminum substrate mixed rare element catalyst, main active components include: cerium, lanthanum, zirconium, manganese, titanium and other rare earth elements.	Modified rare earth element composite active component catalyst.
<b>Sintering process</b>	Mixed and sintered, active components are uniform inside and out (long-lasting catalytic activity).	Unknown
<b>Contaminant treatment method</b>	Co-catalyzes oxidation with ozone to generate hydroxyl radicals.	High bed is generally aluminum-based, mainly for adsorption.
<b>Filling height</b>	Low, 1.26m.	High, 3.33m.
<b>Service life</b>	≥5 years	Generally used for 1-3 years.
<b>Maintenance cost</b>	After 5 years, a small amount of catalyst is added annually based on water quality.	High, requires complete replacement after 1-3 years of adsorption saturation.

# Application

*Pre treatment of high concentration, difficult to biodegrade, toxic organic wastewater (such as pharmaceutical, petrochemical, coking, coal chemical, leather, electrophoretic coating, pickling and fermentation wastewater), removal of COD/ammonia nitrogen, chromaticity and other indicators, and improvement of biodegradability*



01

## Coal chemical wastewater

*Remove COD, ammonia nitrogen, chromaticity and other indicators, and improve biodegradability*



02

## Petroleum wastewater

*Remove COD, ammonia nitrogen, chromaticity and other indicators, and improve biodegradability.*



03

## Chemical wastewater

*Improve the biodegradability of wastewater to ensure the operation of the downstream biochemical system and meet discharge standards*



04

## Pesticide wastewater

*Applicable to the current market demand for sewage compliance under the new environmental protection law.*



05

## Medical wastewater

*Improve the biodegradability of wastewater to ensure the operation of the downstream biochemical system and meet discharge standards.*



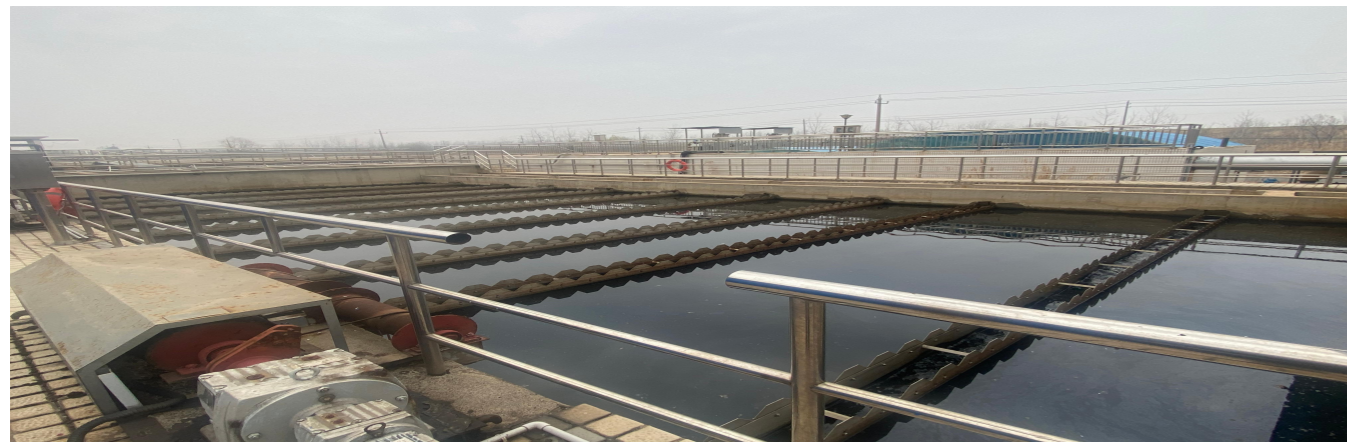
# Engineering Case

- Case 1: Ozone catalyst procurement project for the EPC project of the Vietnam Eco-City Water Treatment Center

## Ho Chi Minh City Water Treatment Center, Vietnam

Project: The water treatment center purchased a 100,000 m<sup>3</sup>/d upgrade project from Rongjian Environmental Protection for ozone-based advanced oxidation.

Achieving the discharge standards of municipal wastewater treatment plants, enabling wastewater reuse, significantly reducing the region's tap water consumption, and optimizing water resource utilization efficiency.



- Case 2: **USA** municipal wastewater treatment plant project, equipment procurement and installation project.



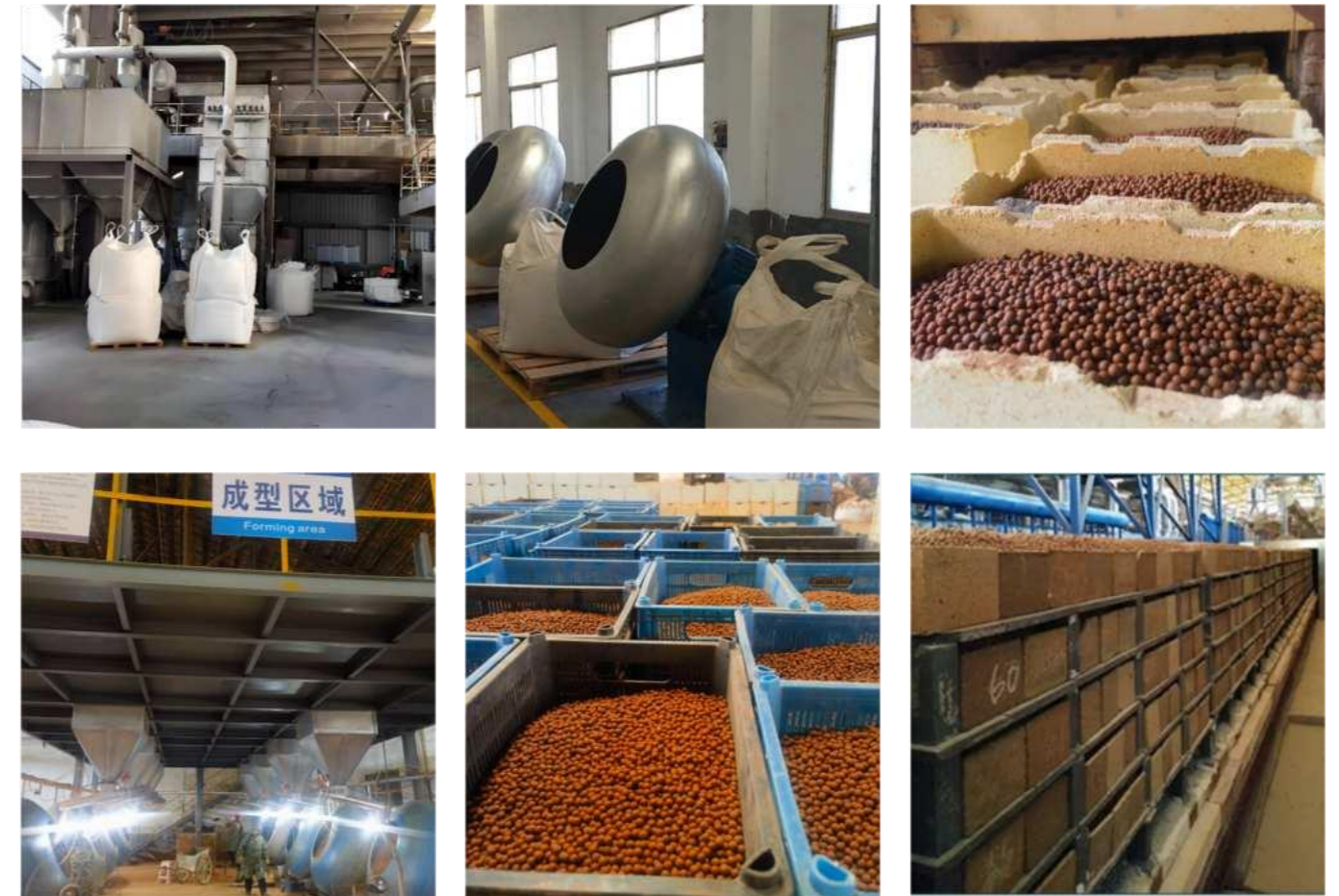
- Case 3: **India** Chemical factory wastewater treatment project



- Case 4: **Kazakhstan** Garment factory wastewater treatment project



# Production Workshop



# Proof of Qualification



# ABOUT US



# Company Profile

## ■ Pingxiang Rongjian Environmental Protection Chemical Packing Co., Ltd

Established in 2010, Pingxiang Rongjian Environmental Protection Chemical Packing Co., Ltd. is a high-tech enterprise specializing in the R&D, production, and sales of chemical packing and environmental protection materials. After 14 years of rapid development, the company has become a leading global supplier of industrial packing materials, with products exported to over 100 countries and regions. We employ more than 300 staff, including nearly 100 technical professionals, forming a highly skilled and experienced R&D and production team.