

INTEGRATED



OZONE SYSTEMS FOR **FOOD PROCESSING**

Clean Technology for Food Processing

Ozone, the tri-atomic form of oxygen (O₃), is a very powerful oxidizer with twice the oxidizing potential of chlorine bleach. A natural disinfectant, ozone is replacing traditional chemical oxidants in a growing number of industrial processes, including food, beverage, and dairy processing.

Ozone destroys all common pathogenic organisms through natural processes of oxidation, disinfection, and decomposition to divalent oxygen (O₂). Because ozone is more powerful in cold water, it reduces the need for hot water and steam, saving water, energy, time, and money.



Many Food Processing Applications

Ozone can be used in a wide range of applications in food processing:

- Clean-in-place (CIP)
- Wash fresh produce and fruit
- Disinfect equipment, tools, storage bins, and refrigeration units
- Sanitization of processing and handling equipment
- Preserve food products/extend shelf life
- Process water prep
- Ozone ice
- Wastewater processing and re-use



Benefits of Ozone

- Powerful disinfectant
- Natural chemical
- Few undesirable byproducts
- No residual taste or odor
- Broad application potential
- Effective against all common food borne pathogens
- Regulatory acceptance
- Certified organic and kosher

Critical Elements of Ozone Contacting

All complete ozone contacting systems include four vital components: Feed Gas Preparation, Ozone Generation, Mass Transfer, and Control. Successful ozone applications result when all four elements are executed properly. Pacific Ozone designs and builds integrated ozone contacting systems that ensure proper implementation of ozone for your food processing application.



- O₂** Oxygen/Feed Gas Prep
- O₃** Ozone Generation
- MT** Mass Transfer
- CN** Control/Monitoring



IOCS Series Complete Integrated Ozone Contact System

The sturdy stainless steel constructed IOCS Series is ideal for a wide variety of applications where ozonated water is needed at a consistent rate. The IOCS Systems may be optimized to meet a variety of flow rates and process requirements. IOCS standard packages range from 10 – 500 gal/min water flow rates at 0.5 – 100 lbs/day ozone production. This scalability allows for the finest application of ozone for discrete operations to maximum ozone output for large, centralized whole-plant process water systems.

- Stainless steel construction
- Enhanced Mass Transfer™
- Floating Plate Technology™
- Ozone Destruct System
- Recirculation compatible



PC Series Portable Ozone Systems

The portable PC Series ozone systems incorporate Pacific Ozone high concentration ozone/oxygen generation systems with onboard pump, compressor, and mass transfer system in a rugged, all stainless steel package.

- All stainless steel construction
- Water resistant enclosure
- Onboard air compressor
- Onboard oxygen concentrator
- Onboard side stream injector
- Automatic flow switch
- 5-100 gal/min
- Up to 30 grams/hour ozone



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