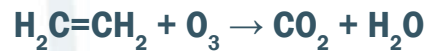




Refrigerated Container Ozone Fumigation System

Gaseous ozone has been shown to effectively combat mold and bacteria in refrigerated environments. The main benefit of using gaseous ozone is that mold and bacteria can be controlled both in the air and on surfaces. Additionally, gaseous ozone oxidizes and destroys ethylene gas that is released when fruits and vegetables begin to ripen by the following reaction:



Thus, the use of gaseous ozone can reduce ripening while in transit.

Ozone Gaseous Treatment Benefits

- Air-borne and surface-borne microbial control
- Ethylene removal
- Ozone generated, monitored and applied automatically on-site
- Treats & sanitizes incoming cold air at point of introduction and maintains ozone residual for mold control
- Product "Insurance" – help maintain product quality during lengthy transit times
- Reduces cross-contamination between rotting/diseased and healthy product
- Can be used for container disinfection between loads
- Reduce or eliminate SO₂ and other chemical usage in containers.
- Odor Control – "fresh and clean" smell

mPact-RCF - Testing and Validation

AMFIL has researched, tested, and collected data on the effects of gaseous ozone in a wide range of fruits and vegetables in cold storage. Our mPact-RCF systems are scaled versions of our proven mPact-CSF (Cold Storage Fumigation) systems which are installed nationwide in packer/shipper operations. Ozone has been proven to effectively kill mold and mold spores in air and on surfaces in multiple cold storage environments. With the mPact-RCF system, the benefits of ozone can now be transferred to produce in transit.





mPact-RCF Specifications

- 1.0 PPM Residual Ozone Concentration
- Integrated Ozone Monitor/Controller with Display
- 40 Day Ozone Data Logging (Downloadable via Data Port)
- Electrical Requirements: 12/24V DC or 120/240/480V AC
- NEMA-4X FRP Enclosure

mPact-RCF - How it Works

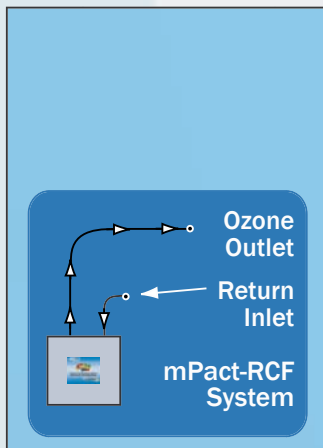
mPact-RCF systems are designed to maintain up to 1.0 PPM gaseous ozone in standard sea, truck and rail reefers. An integrated ozone monitor/controller and data logger provide set point ozone level control and 40 days of continuous system history during shipment. The mPact-RCF system is temporarily affixed within the equipment service/storage area on the front of the shipping container. Flexible inlet and outlet tubing are inserted into the conditioned and returning air streams via existing ports.

As return air enters the inlet to the mPact-RCF system, it is sampled by the internal ozone sensor. The level is checked against the set point and the mPact unit is adjusted for on or off operation.

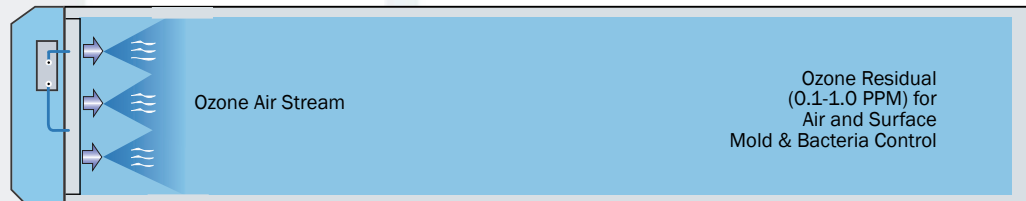


mPact-RCF Refrigerated Container Ozone Fumigation System

FRONT VIEW



TOP VIEW



SIDE VIEW

