

## Catalytic Ozone Destructor:

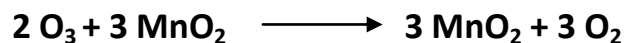


Ozone destructor works on catalytic principle where  $MnO_2$  is used as a catalyst. The purpose of the ozone destruct is to convert ambient ozone gas into harmless oxygen before releasing in the atmosphere.

The residual un-dissolved ozone from the hydraulic system is segregated using an ozone vent. The outlet of the vent is connected to the ozone destruct through expander where water is isolated and drained out and the gases are passed to the destruct.

### **Working Principle**

Un-dissolved gaseous ozone from the application is connected at the bottom of the ozone destructor, where any moisture in the ozone gas is evaporated using heater. Once moisture in the gas is evaporated, dry ozone passes ahead & reacts with manganese dioxide & gets converted into oxygen & released in the atmosphere. Insert figure of formula/ equation



### **Advantages**

- The efficiency of ozone to oxygen is > 99%.
- Catalytic media has indefinite life.
- The conversion of ozone into oxygen is very fast.
- Most preferred & economical technique in destroying un-dissolved ozone

### **Drawbacks**

The drawback of ozone destructor is that, the ozone which is present in gaseous form can only be converted back to oxygen. If ozone is present in a form of mixture with any liquid then it cannot be converted back to oxygen with ozone destructor. There are other techniques available depending upon ozone concentration.