



Ozone mixer

Unit for the ozonisation of final beverages or water



Application

Ozone mixers microbiologically treat beverages or water using ozone gas, extending the final beverage's life. The process is comparable to CO₂ treatment. Ozone systems can also be used to treat the contents of a main water stack tank inside a CIP ring.

A typical application can be:

- Ozonisation of final beverages

Highlights

- The ozone mixer always has the same flow through its measuring systems, which provides very high flexibility without losing ozone dosing accuracy

Working principle

Ozone mixers have a similar working principle to carbonators, except for their lower process pressure. They consist of a mixing vessel in a loop with a pump-driven recirculation line. An ozone generator injects the gas into liquid. A static mixer increases the mixing efficiency between gas and product directly after the ozone generator. The final reaction takes place inside the mixing vessel using a radial jet mixer. A discharge pump transfers the treated product to the production line.

Main components

- Reaction tank
- Ozone generator
- Static mixer
- Recirculation loop
- Product transfer line

Control panel

The ozone mixer is controlled by an Allen Bradley ControlLogix or Siemens PLC. This is fitted in a cabinet which is optionally located on the frame.

Example layout

Measurements on request.



Technical data

Available in different sizes depending on capacity.
All parts in contact with the product are made of AISI 316L.
The frame is made of AISI 304L.

Ozone mixers run at the following capacities:

- 20 000 l/h
- 40 000 l/h
- 60 000 l/h

Other capacities on request.

Electrical power	400 V, 50 Hz
Other supply voltage or frequency available	

Compressed air	600 kPa (6 bar)
-----------------------	-----------------

