



## INSTALLATION

### Venturi Injectors

A venturi injector is a very common method of ozone injection in industrial applications. A venturi injector combines a method for ozone injection, and provides good mass transfer efficiency in one device. A venturi injector requires a pressure differential across the device to create a vacuum to pull ozone gas into the device. Then, using mixing vanes, the gas is thoroughly mixed with the water. A venturi injector creates very small bubbles desired for great mass transfer and a violent mixing action to dissolve gas into water. Using a venturi injector alone may achieve mass transfer rates of 90%.

### Water Pressures

For a venturi injector to work properly, there must be a pressure differential between the inlet and outlet of the device. It is then important that the outlet of the venturi injector is not obstructed or impeded in any way. We suggest placing pressure gauges directly at the inlet and outlet of the venturi injector. This will help with troubleshooting and determine the effectiveness of the device.

### Water Back-Flow Prevention

When using a venturi injector it is necessary to use a device to ensure water cannot backflow from the venturi injector to the ozone generator. There are many devices used for this task: check valves, water traps and shut-off valves are all used. The best success using a quality water trap in conjunction with a check valve to prevent all water back-flow.

