# Mazzei®

UNIFORM CHEMICAL APPLICATION FOR IRRIGATION SYSTEMS



World Leader in Mixing and Contacting Technologies

> The Low Cost Solution for Agriculture



### Mazzei Chemigation: The Simple, Low Cost Solution for Agriculture

Chemigation is the process of injecting chemicals and fertilizers into an irrigation system. Mazzei pioneered simple-to-use, low cost solutions.

Using high-efficiency Venturi injectors, Mazzei's chemigation technology delivers a uniform distribution of chemicals and fertilizers within the irrigation water. With no moving parts, and often no supplemental pump system, Mazzei is the right choice.

- **Easy to install**
- Uniform chemical injection
- Low cost solution
- Generally injection stops when water flow stops
- Available in polypropylene or PVDF PVDF is resistant to most chemicals, including acids



# There Is No Substitute for a Mazzei

Mazzei patented designs are precisely engineered and cannot be duplicated. Imitations and look-alike products simply do not perform like a Mazzei.

Injecting fertilizer into a pressurized irrigation system is the most common application for Mazzei injectors. With Mazzei you get the advantages of a nonmechanical chemigation system that is easy to maintain. You get precise mixing and uniform distribution of material into the water stream. Mazzei injectors are designed for vacuum transfer of irrigation chemicals, providing additional chemigation safety.



## **Typical Installations for Irrigation Systems**

Mazzei injectors require differential pressure to create suction. The injector's outlet pressure (backpressure) must be sufficiently lower than the inlet pressure. For most models, significant suction occurs with 25-30% pressure differential.

Mazzei Injectors can be installed with the main body in a horizontal position or vertically with the outlet up. The injector suction port can be oriented in any position.

To insure consistent suction, the outlet side of the injector should be flooded or have some restriction downstream (backpressure).

Always use full flow isolation valves and non-restrictive fittings when connecting to the injector. These valves and fittings should be at least the same size as the inlet/outlet connections on the injector. Isolation valves are optional, but recommended.

Do not over-tighten the injector when attaching piping and fittings. The use of an appropriate thread sealant is recommended.

Install pressure gauges near the inlet and outlet of the injector to monitor operating conditions.

### Diagrams 1 and 2

The injector is installed around a point of restriction, such as a regulator valve or a gate/ball valve. These create a differential pressure across the injector, thereby allowing the injector to produce a vacuum and draw in material.

### Diagram 3

When mainline pressure cannot be reduced, a small booster pump can be used to create a sufficient differential to operate the injector.

For additional information, including troubleshooting tips and injector performance data, please visit our Web site at **www.mazzei.net**. Always follow environmental regulations regarding backflow prevention and chemical use.





### NEW!

To help with selecting the right injector for irrigation applications, we have developed a Web-based calculator that will assist users in selecting injectors for liquid injection applications. Called the InjectorSelector<sup>™</sup>, the Web-based tool is accessible for registered and approved users via our Web site, **www.mazzei.net**.

# Why Mazzei

Since 1978, Mazzei has distinguished itself by an ability to evaluate problems and develop innovative solutions. When you need a system and a supplier that delivers longlasting service and value, there's only one name you need to remember: Mazzei.





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