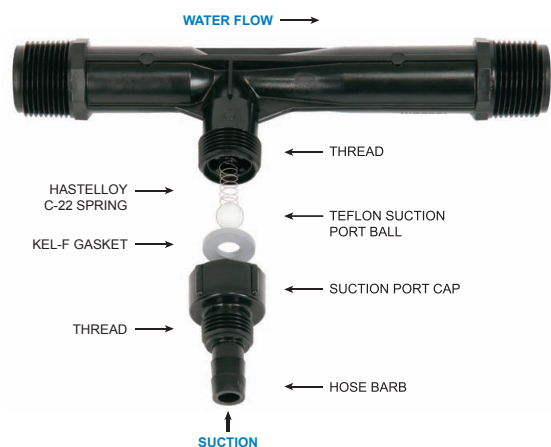


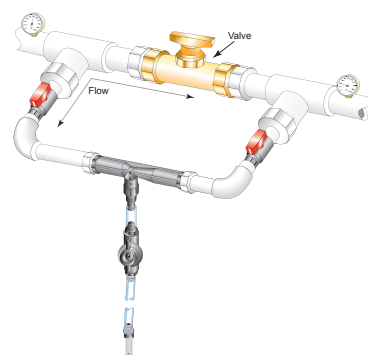


## APPLICATIONS

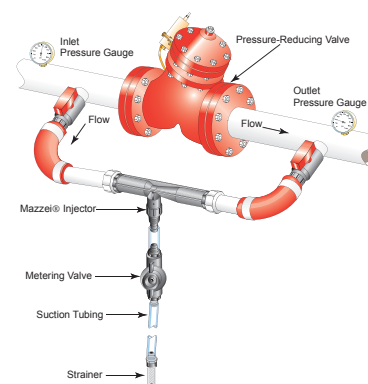
- Fertigation
- Water treatment
- Supplementation
- Disinfection and cleaning
- pH and EC control
- Medicating livestock

## FEATURES

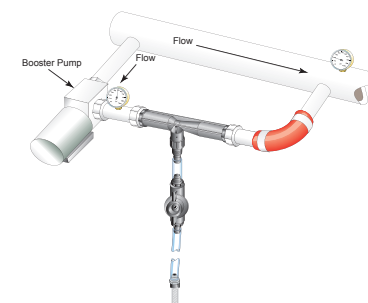
- Water driven - no electricity required
- Easy to install
- Low cost compared to other injection methods
- Made from corrosion resistant materials
- Very low maintenance - no moving parts



**Diagram 1**  
Bypass Assembly A



**Diagram 2**  
With Pressure-Reducing  
Valve



**Diagram 3**  
Bypass with Booster Pump

## OVERVIEW

### Typical Installations for Irrigation Systems

Mazzei injectors require differential pressure to create suction. The injector's outlet pressure (back pressure) 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 ensure consistent suction, the outlet side of the injector should be flooded or have some restriction downstream (back pressure).

### 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.

*Always follow health and environmental safety regulations regarding backflow prevention and chemical use.*

**Performance Chart** 

## INJECTOR PERFORMANCE TABLE | WATER SUCTION CAPACITY

| Operating Pressure        |                            | Model 283<br>1/2" threads |                         | Model 584- 1/2" &<br>3/4" threads |                         | Model 1078<br>1" threads |                         | Model 1583<br>1-1/2" threads |                         | Model 2081<br>2" threads |                         |
|---------------------------|----------------------------|---------------------------|-------------------------|-----------------------------------|-------------------------|--------------------------|-------------------------|------------------------------|-------------------------|--------------------------|-------------------------|
| Injector<br>Inlet<br>PSIG | Injector<br>Outlet<br>PSIG | Motive Flow<br>GPM        | Water<br>Suction<br>GPH | Motive Flow<br>GPM                | Water<br>Suction<br>GPH | Motive<br>Flow GPM       | Water<br>Suction<br>GPH | Motive<br>Flow GPM           | Water<br>Suction<br>GPH | Motive<br>Flow GPM       | Water<br>Suction<br>GPH |
| 20                        | 0                          | 0.32                      | 5.8                     | 4.2                               | 24.8                    | 11                       | 98.2                    | 21.5                         | 228.0                   | 68                       | 631                     |
|                           | 5                          |                           | 3.7                     |                                   | 24.8                    |                          | 95.4                    |                              | 205.4                   |                          | 631                     |
|                           | 10                         |                           | 2.0                     |                                   | 23.7                    |                          | 70.0                    |                              | 143.5                   |                          | 468                     |
|                           | 12                         |                           | 0.6                     |                                   | 19.2                    |                          | 51.5                    |                              | 131.7                   |                          | 299                     |
|                           | 15                         | 15.0                      |                         | 18.0                              | 14.6                    | 17.3                     | 30.3                    |                              | 66.2                    | 17.5                     | 152                     |
| 25                        | 0                          | 0.35                      | 5.9                     | 4.7                               | 25.2                    | 12.2                     | 96.0                    | 24.0                         | 226.8                   | 77                       | 631                     |
|                           | 5                          |                           | 4.8                     |                                   | 25.2                    |                          | 96.7                    |                              | 226.4                   |                          | 631                     |
|                           | 10                         |                           | 2.6                     |                                   | 25.1                    |                          | 89.4                    |                              | 193.9                   |                          | 627                     |
|                           | 15                         |                           | 0.7                     |                                   | 20.8                    |                          | 68.2                    |                              | 148.1                   |                          | 404                     |
|                           | 20                         | 18.5                      |                         | 22.0                              | 12.2                    | 21.9                     | 31.9                    |                              | 49.0                    | 22.3                     | 134                     |
| 30                        | 0                          | 0.39                      | 6.0                     | 5.1                               | 25.3                    | 13.4                     | 94.4                    | 26.3                         | 226.5                   | 84                       | 631                     |
|                           | 5                          |                           | 5.8                     |                                   | 25.4                    |                          | 94.5                    |                              | 226.4                   |                          | 631                     |
|                           | 10                         |                           | 3.8                     |                                   | 24.9                    |                          | 94.5                    |                              | 211.6                   |                          | 631                     |
|                           | 15                         |                           | 2.4                     |                                   | 25.2                    |                          | 82.1                    |                              | 167.3                   |                          | 511                     |
|                           | 20                         |                           | 0.8                     |                                   | 18.2                    |                          | 55.4                    |                              | 125.5                   |                          | 341                     |
|                           | 25                         | 22.5                      |                         | 27.0                              | 11.6                    | 26.0                     | 17.9                    |                              | 18.3                    | 26.0                     | 62                      |
| 35                        | 0                          | 0.41                      | 6.0                     | 5.5                               | 25.5                    | 14.5                     | 94.0                    | 28.4                         | 226.7                   | 91                       | 631                     |
|                           | 5                          |                           | 6.0                     |                                   | 25.5                    |                          | 94.0                    |                              | 226.5                   |                          | 631                     |
|                           | 10                         |                           | 4.8                     |                                   | 25.4                    |                          | 94.0                    |                              | 224.2                   |                          | 631                     |
|                           | 15                         |                           | 3.4                     |                                   | 25.3                    |                          | 91.9                    |                              | 205.7                   |                          | 627                     |
|                           | 20                         |                           | 1.7                     |                                   | 21.9                    |                          | 74.1                    |                              | 164.8                   |                          | 460                     |
| 40                        | 0                          | 0.43                      | 6.0                     | 5.9                               | 25.6                    | 15.5                     | 93.2                    | 30.3                         | 227.3                   | 97                       | 631                     |
|                           | 5                          |                           | 6.0                     |                                   | 25.6                    |                          | 93.2                    |                              | 228.7                   |                          | 631                     |
|                           | 10                         |                           | 5.5                     |                                   | 25.6                    |                          | 93.2                    |                              | 227.2                   |                          | 631                     |
|                           | 15                         |                           | 4.2                     |                                   | 25.5                    |                          | 93.2                    |                              | 220.5                   |                          | 631                     |
|                           | 20                         |                           | 2.6                     |                                   | 25.2                    |                          | 91.9                    |                              | 192.8                   |                          | 524                     |
|                           | 25                         |                           | 1.2                     |                                   | 21.3                    |                          | 72.2                    |                              | 153.4                   |                          | 394                     |
|                           | 30                         |                           | 29.5                    |                                   |                         |                          | 35.5                    |                              | 15.0                    |                          | 34.4                    |
| 45                        | 0                          | 0.46                      | 6.0                     | 6.3                               | 25.9                    | 16.4                     | 92.8                    | 32.2                         | 227.9                   | 103                      | 631                     |
|                           | 5                          |                           | 6.0                     |                                   | 26.0                    |                          | 92.8                    |                              | 228.3                   |                          | 631                     |
|                           | 10                         |                           | 5.8                     |                                   | 26.0                    |                          | 92.8                    |                              | 228.0                   |                          | 631                     |
|                           | 15                         |                           | 4.9                     |                                   | 25.9                    |                          | 92.8                    |                              | 223.5                   |                          | 631                     |
|                           | 20                         |                           | 3.4                     |                                   | 25.7                    |                          | 93.9                    |                              | 212.4                   |                          | 607                     |
|                           | 25                         |                           | 2.7                     |                                   | 23.6                    |                          | 86.9                    |                              | 174.9                   |                          | 508                     |
|                           | 30                         |                           | 1.0                     |                                   | 19.4                    |                          | 66.2                    |                              | 113.1                   |                          | 341                     |
|                           | 35                         | 33.5                      |                         | 40.0                              | 13.5                    | 38.7                     | 36.7                    |                              | 47.1                    | 38.0                     | 149                     |
| 50                        | 0                          | 0.48                      | 6.0                     | 6.6                               | 25.6                    | 17.3                     | 92.4                    | 33.9                         | 227.4                   | 108                      | 631                     |
|                           | 5                          |                           | 6.0                     |                                   | 25.6                    |                          | 92.4                    |                              | 227.4                   |                          | 631                     |
|                           | 10                         |                           | 6.0                     |                                   | 25.6                    |                          | 92.4                    |                              | 226.3                   |                          | 631                     |
|                           | 15                         |                           | 5.7                     |                                   | 25.5                    |                          | 92.4                    |                              | 225.6                   |                          | 631                     |
|                           | 20                         |                           | 4.7                     |                                   | 25.4                    |                          | 92.4                    |                              | 224.4                   |                          | 631                     |
|                           | 25                         |                           | 3.5                     |                                   | 24.5                    |                          | 92.4                    |                              | 203.7                   |                          | 588                     |
|                           | 30                         |                           | 2.1                     |                                   | 21.6                    |                          | 86.4                    |                              | 172.4                   |                          | 453                     |
|                           | 35                         |                           | 0.7                     |                                   | 15.8                    |                          | 64.3                    |                              | 120.6                   |                          | 300                     |
| 60                        | 0                          | 0.54                      | 6.0                     | 7.2                               | 2.8                     | 19                       | 35.0                    | 37.2                         | 40.5                    | 119                      | 115                     |
|                           | 5                          |                           | 6.0                     |                                   | 26.4                    |                          | 92.7                    |                              | 229.7                   |                          | 631                     |
|                           | 10                         |                           | 6.0                     |                                   | 26.4                    |                          | 92.7                    |                              | 228.9                   |                          | 631                     |
|                           | 15                         |                           | 6.0                     |                                   | 26.4                    |                          | 92.7                    |                              | 229.0                   |                          | 631                     |
|                           | 20                         |                           | 5.7                     |                                   | 26.2                    |                          | 92.7                    |                              | 227.9                   |                          | 631                     |
|                           | 30                         |                           | 3.8                     |                                   | 25.4                    |                          | 93.1                    |                              | 206.5                   |                          | 600                     |
|                           | 35                         |                           | 2.4                     |                                   | 23.8                    |                          | 91.7                    |                              | 182.3                   |                          | 509                     |
|                           | 40                         |                           | 1.3                     |                                   | 20.1                    |                          | 77.1                    |                              | 148.0                   |                          | 381                     |
| 70                        | 0                          | 0.58                      | 6.0                     | 7.8                               | 14.4                    | 20.5                     | 44.4                    | 40.1                         | 82.2                    | 128                      | 217                     |
|                           | 5                          |                           | 25.9                    |                                   | 93.4                    |                          | 228.7                   |                              | 631                     |                          |                         |
|                           | 10                         |                           | 25.9                    |                                   | 93.4                    |                          | 228.7                   |                              | 631                     |                          |                         |
|                           | 15                         |                           | 25.9                    |                                   | 93.4                    |                          | 228.7                   |                              | 631                     |                          |                         |
|                           | 20                         |                           | 25.9                    |                                   | 93.4                    |                          | 228.7                   |                              | 631                     |                          |                         |
|                           | 30                         |                           | 25.9                    |                                   | 93.4                    |                          | 228.7                   |                              | 631                     |                          |                         |
|                           | 30                         |                           | 5.2                     |                                   | 25.7                    |                          | 93.5                    |                              | 225.7                   |                          | 631                     |
|                           | 40                         |                           | 2.9                     |                                   | 25.6                    |                          | 92.3                    |                              | 198.6                   |                          | 529                     |
|                           | 45                         |                           | 1.9                     |                                   | 23.4                    |                          | 81.9                    |                              | 159.6                   |                          | 440                     |
|                           | 50                         |                           | 16.7                    | 54.5                              |                         | 124.4                    |                         | 326                          |                         |                          |                         |
|                           | 55                         | 54.0                      |                         | 63.0                              | 9.1                     | 58.9                     | 28.8                    |                              | 43.3                    | 58.5                     | 142                     |