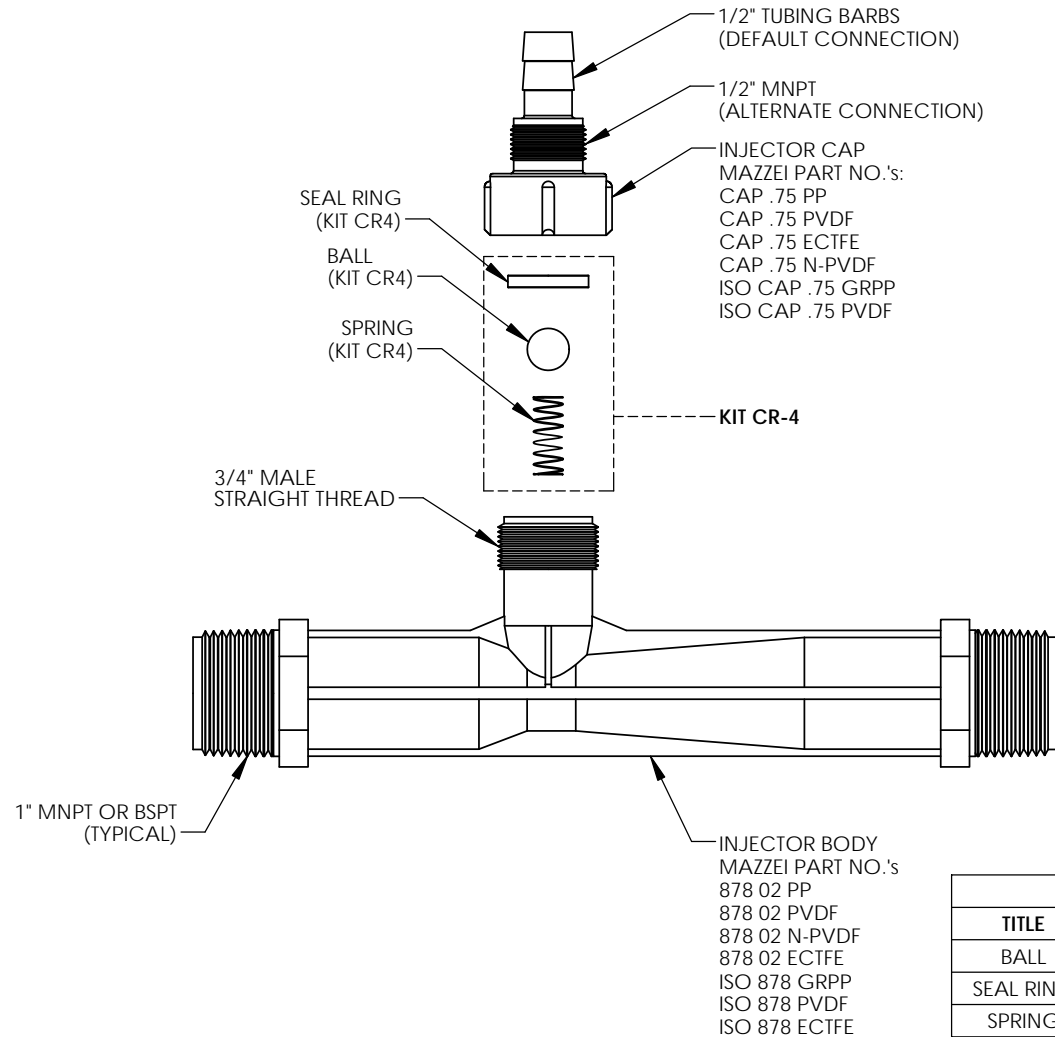


NOTES:

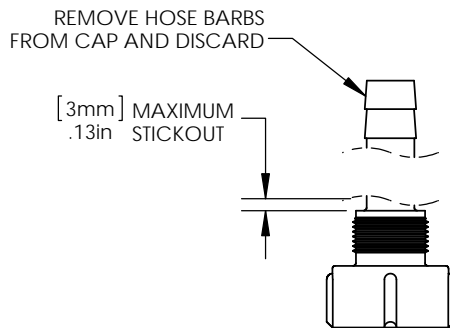
1. MADE IN THE U.S.A.
2. U.S. PATENT No. 5,863,128
3. U.S. No. 3,852,076 AND INTERNATIONAL REGISTERED TRADEMARKS
4. MATERIAL: GLASS FILLED POLYPROPYLENE (PP) OR POLYVINYLIDENE FLUORIDE (PVDF) OR ETHYLENE CHLOROTRIFLUOROETHYLENE (ECTFE)
5. INLET/OUTLET CONNECTION:
1" MNPT OR BSPT
6. SUCTION PORT CONNECTION:

DEFAULT - 1/2" I.D. TUBING BARB WITH INTEGRATED CHECK VALVE

ALTERNATE - 1/2" MNPT - SEE ALTERNATE CAP MODIFICATION DETAIL
7. INSTALLATION RECOMMENDATION: REFER TO MAZZEI TECHNICAL BULLETIN NO. 11: "MAZZEI INJECTOR INSTALLATION RECOMMENDATIONS FOR GAS TO LIQUID MIXING APPLICATIONS".
8. MAZZEI INJECTOR CO., LLC.
500 ROOSTER DR.
BAKERSFIELD, CA 93307
TEL: 661.363.6500
WEB: WWW.MAZZEI.NET



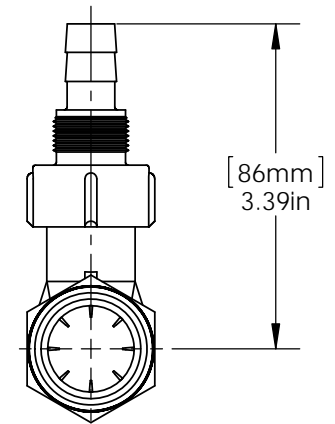
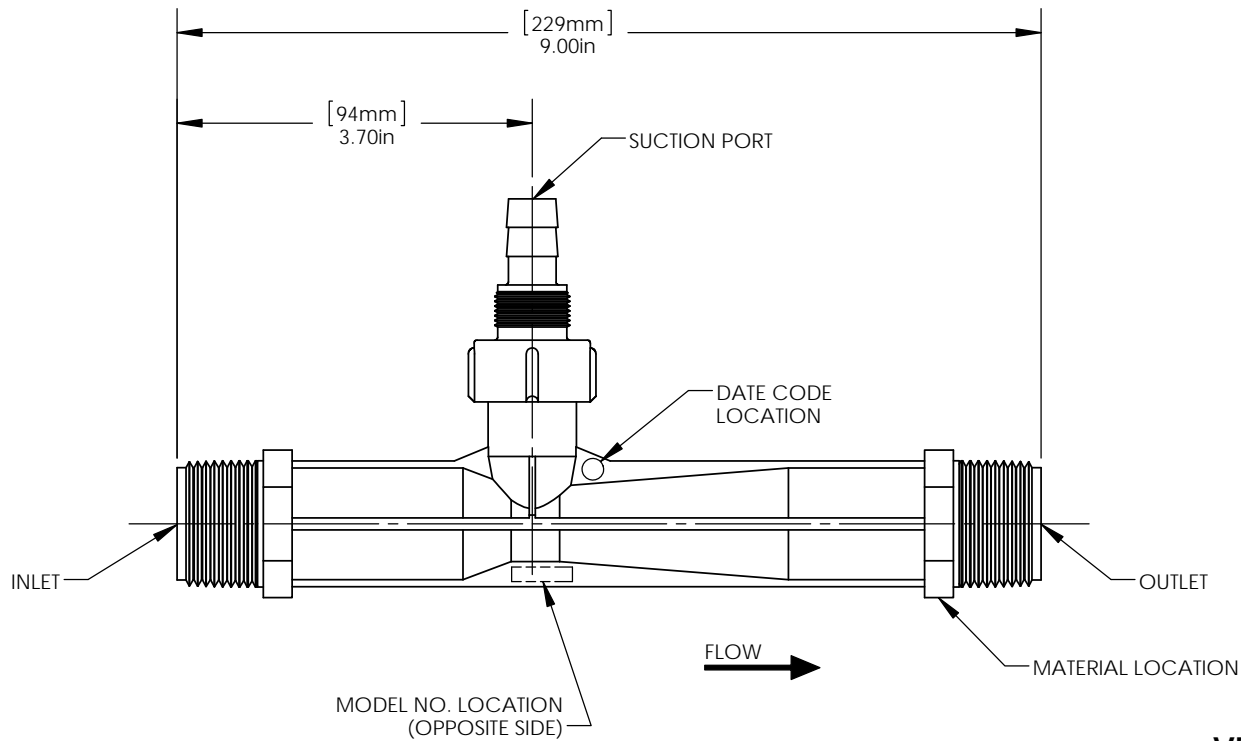
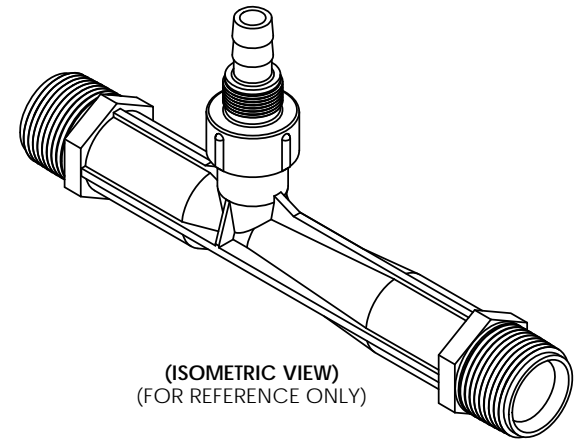
| KIT CR-4 | |
|-----------|-----------------|
| TITLE | MATERIAL |
| BALL | TEFLON ® (PTFE) |
| SEAL RING | KEL-F ® (PCTFE) |
| SPRING | HASTELLOY C-22 |



"CAP MODIFICATION DETAIL"
(ALTERNATE)

VENDOR ITEM CONTROL DRAWING

| | | | | | |
|---|--------------|---|-------------------------------------|--------|--------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |  | TITLE: 1" INJECTOR; MODEL 878 02 | | |
| DRAWN: | T.JOHNS | | DRAWING NO.: 87802-PP/PVDF/ECTFE | | |
| DATE: | 10/23/12 | SIZE: | WEIGHT: | SCALE: | REV.: |
| APPROVED: | P. BANKOWSKI | A | N/A | 1:2 | A |
| | | | | SHEET: | 1 OF 2 |



VENDOR ITEM CONTROL DRAWING

| | | | | | |
|--|----------------|---|-------------------------------------|---------|---------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |  Mazzei [®] | TITLE: 1" INJECTOR; MODEL 878 02 | | |
| DRAWN: T. JOHNS | DATE: 10/23/12 | | DRAWING NO.: 87802-PP/PVDF/ECTFE | | |
| APPROVED: P. BANKOWSKI | SIZE: A | WEIGHT: N/A | SCALE: 1:2 | REV.: A | SHEET: 2 OF 2 |

| Mazzei Injector Company, LLC - Injector Performance Table | | | | | | | |
|---|-----------------|-----------------|-------------------|-------------------------|-----------------|-----------------|-------------------|
| Injector Model | | | | 878 | | | |
| Operating Pressure PSIG | | Water Suction | | Operating Pressure PSIG | | Water Suction | |
| Injector Inlet | Injector Outlet | Motive Flow GPM | Water Suction GPH | Injector Inlet | Injector Outlet | Motive Flow GPM | Water Suction GPH |
| 5 | 0 | 3.7 | 62.9 | 60 | 0 | 12.7 | 72.5 |
| | 1 | | 36.1 | | 5 | | 72.5 |
| | 2 | | 23.8 | | 10 | | 72.5 |
| | 3 | | 7.3 | | 15 | | 72.5 |
| | 4 | | 1.7 | | 20 | | 72.5 |
| 10 | 0 | 5.2 | 93.8 | | 30 | | 71.2 |
| | 2 | | 62.0 | | 35 | | 63.3 |
| | 5 | | 36.5 | | 40 | | 41.5 |
| | 7 | | 15.8 | | 45 | | 16.4 |
| | 8 | | 3.7 | | 70 | | 0 |
| 15 | 0 | 6.3 | 87.4 | 5 | | 73.7 | |
| | 5 | | 62.1 | 10 | | 73.7 | |
| | 7 | | 45.5 | 15 | | 73.7 | |
| | 10 | | 23.6 | 20 | | 73.7 | |
| | 12 | | 7.2 | 30 | | 73.7 | |
| 20 | 0 | 7.3 | 82.9 | 40 | | 67.5 | |
| | 5 | | 80.5 | 45 | | 46.9 | |
| | 10 | | 48.6 | 50 | | 30.7 | |
| | 12 | | 33.6 | 55 | | 12.9 | |
| | 15 | | 21.0 | 80 | 0 | 14.6 | 74.2 |
| 25 | 0 | 8.2 | 82.3 | | 5 | | 74.2 |
| | 5 | | 81.3 | | 10 | | 74.2 |
| | 10 | | 73.2 | | 15 | | 74.2 |
| | 15 | | 45.3 | | 20 | | 74.2 |
| | 20 | | 20.1 | | 30 | | 74.2 |
| 30 | 0 | 8.9 | 79.9 | | 40 | | 73.7 |
| | 5 | | 79.2 | | 50 | | 56.9 |
| | 10 | | 77.0 | | 60 | | 25.8 |
| | 15 | | 65.4 | | 65 | | 7.9 |
| | 20 | | 35.4 | 90 | 0 | 15.5 | 74.3 |
| 25 | 9.1 | 5 | 74.3 | | | | |
| 35 | 0 | 9.7 | 79.4 | | 10 | | 74.3 |
| | 5 | | 79.4 | | 20 | | 74.3 |
| | 10 | | 77.5 | | 30 | | 74.3 |
| | 15 | | 74.5 | | 40 | | 74.3 |
| | 20 | | 52.3 | | 50 | | 70.1 |
| 40 | 0 | 10.3 | 77.5 | | 60 | | 47.9 |
| | 5 | | 77.5 | | 70 | | 18.2 |
| | 10 | | 77.5 | | 75 | | 0.8 |
| | 15 | | 77.5 | 100 | 0 | 16.3 | 76.4 |
| | 20 | | 73.6 | | 5 | | 76.4 |
| 25 | 50.6 | 10 | 76.4 | | | | |
| 30 | 28.2 | 20 | 76.4 | | | | |
| 45 | 0 | 11.0 | 79.6 | | 30 | | 76.4 |
| | 5 | | 79.6 | | 40 | | 76.4 |
| | 10 | | 79.6 | | 50 | | 74.5 |
| | 15 | | 79.6 | | 60 | | 67.8 |
| | 20 | | 78.8 | | 70 | | 44.7 |
| | 25 | | 67.0 | | 80 | | 13.0 |
| | 30 | | 44.2 | 120 | 0 | 17.9 | 75.4 |
| 35 | 22.0 | 5 | 75.4 | | | | |
| 50 | 0 | 11.6 | 74.8 | | 10 | | 75.4 |
| | 5 | | 74.8 | | 20 | | 75.4 |
| | 10 | | 74.8 | | 30 | | 75.4 |
| | 15 | | 74.8 | | 40 | | 75.4 |
| | 20 | | 74.8 | | 50 | | 75.4 |
| | 25 | | 68.3 | | 60 | | 74.9 |
| | 30 | | 56.2 | | 70 | | 70.3 |
| | 35 | | 36.6 | | 80 | | 61.2 |
| 40 | 9.6 | 90 | 34.5 | | | | |
| | | | | 100 | 8.6 | | |

| Mazzei Injector Company, LLC- Injector Performance Table | | | | | | | | | |
|--|--------------------|-------------------------|-------------------------|------------------------------|--------------------|-------------------------|-------------------------|--|-------|
| Injector Model | | | | 878 | | | | | |
| Operating Pressure kg/cm2 | | Water Suction | | Operating Pressure kg/cm2 | | Water Suction | | | |
| Injector Inlet | Injector Outlet | Motive Flow l/min | Water Suction LPH | Injector Inlet | Injector Outlet | Motive Flow l/min | Water Suction LPH | | |
| 0.35 | 0.00 | 13.8 | 238.0 | 4.22 | 0.00 | 47.9 | 274.2 | | |
| | 0.07 | | 136.7 | | 0.35 | | 274.2 | | |
| | 0.14 | | 90.2 | | 0.70 | | 274.2 | | |
| | 0.21 | | 27.7 | | 1.05 | | 274.2 | | |
| | 0.28 | | 6.4 | | 1.41 | | 274.2 | | |
| 0.70 | 0.00 | 19.6 | 354.9 | | | | 2.11 | | 269.6 |
| | 0.14 | | 234.5 | | 2.46 | | 239.8 | | |
| | 0.35 | | 138.1 | | 2.81 | | 156.9 | | |
| | 0.49 | | 59.9 | | 3.16 | | 61.9 | | |
| | 0.56 | | 14.1 | | | | | | |
| 1.05 | 0.00 | 23.9 | 330.7 | 4.92 | 0.00 | 51.7 | 278.8 | | |
| | 0.35 | | 235.2 | | 0.35 | | 278.8 | | |
| | 0.49 | | 172.1 | | 0.70 | | 278.8 | | |
| | 0.70 | | 89.5 | | 1.41 | | 278.8 | | |
| | 0.84 | | 27.3 | | 2.11 | | 278.9 | | |
| 1.41 | 0.00 | 27.7 | 313.7 | | | | 2.81 | | 255.6 |
| | 0.35 | | 304.7 | | 3.16 | | 177.6 | | |
| | 0.70 | | 184.0 | | 3.52 | | 116.3 | | |
| | 0.84 | | 127.3 | | 3.87 | | 48.8 | | |
| | 1.05 | | 79.6 | | | | | | |
| 1.76 | 0.00 | 30.9 | 311.5 | 5.62 | 0.00 | 55.3 | 280.9 | | |
| | 0.35 | | 307.7 | | 0.35 | | 280.9 | | |
| | 0.70 | | 277.2 | | 0.70 | | 280.9 | | |
| | 1.05 | | 171.5 | | 1.41 | | 280.9 | | |
| | 1.41 | | 76.1 | | 2.11 | | 280.9 | | |
| 2.11 | 0.00 | 33.9 | 302.6 | | | | 2.81 | | 279.0 |
| | 0.35 | | 299.7 | | 3.52 | | 215.4 | | |
| | 0.70 | | 291.4 | | 4.22 | | 97.7 | | |
| | 1.05 | | 247.4 | | 4.57 | | 30.0 | | |
| | 1.41 | | 133.8 | | | | | | |
| 2.46 | 0.00 | 36.6 | 300.5 | 6.33 | 0.00 | 58.7 | 281.1 | | |
| | 0.35 | | 300.5 | | 0.35 | | 281.1 | | |
| | 0.70 | | 293.5 | | 0.70 | | 281.1 | | |
| | 1.05 | | 282.0 | | 1.41 | | 281.1 | | |
| | 1.41 | | 198.0 | | 2.11 | | 281.1 | | |
| 2.81 | 0.00 | 39.1 | 293.2 | | | | 2.81 | | 265.2 |
| | 0.35 | | 293.2 | | 3.52 | | 181.1 | | |
| | 0.70 | | 293.2 | | 4.22 | | 68.7 | | |
| | 1.05 | | 278.6 | | 4.92 | | 3.2 | | |
| | 1.41 | | 191.5 | | 5.27 | | | | |
| 3.16 | 0.00 | 41.5 | 293.2 | 7.03 | 0.00 | 61.8 | 289.1 | | |
| | 0.35 | | 293.2 | | 0.35 | | 289.1 | | |
| | 0.70 | | 278.6 | | 0.70 | | 289.1 | | |
| | 1.05 | | 191.5 | | 1.41 | | 289.1 | | |
| | 1.41 | | 106.9 | | 2.11 | | 289.1 | | |
| 3.52 | 0.00 | 43.7 | 301.3 | | | | 2.81 | | 289.1 |
| | 0.35 | | 301.3 | | 3.52 | | 289.1 | | |
| | 0.70 | | 301.3 | | 4.22 | | 282.0 | | |
| | 1.05 | | 301.3 | | 4.92 | | 256.5 | | |
| | 1.41 | | 298.4 | | 5.62 | | 169.2 | | |
| 3.52 | 0.00 | 43.7 | 283.1 | 8.44 | 0.00 | 67.7 | 285.3 | | |
| | 0.35 | | 283.1 | | 0.35 | | 285.3 | | |
| | 0.70 | | 283.1 | | 0.70 | | 285.3 | | |
| | 1.05 | | 283.1 | | 1.41 | | 285.3 | | |
| | 1.41 | | 283.1 | | 2.11 | | 285.3 | | |
| 3.52 | 0.00 | 43.7 | 283.1 | | | | 2.81 | | 285.3 |
| | 0.35 | | 283.1 | | 3.52 | | 283.6 | | |
| | 0.70 | | 283.1 | | 4.22 | | 266.1 | | |
| | 1.05 | | 283.1 | | 4.92 | | 231.7 | | |
| | 1.41 | | 258.5 | | 5.62 | | 130.7 | | |
| 3.52 | 0.00 | 43.7 | 283.1 | | 6.33 | | 32.5 | | |
| | 0.35 | | 283.1 | 7.03 | | | | | |
| | 0.70 | | 283.1 | | | | | | |
| | 1.05 | | 283.1 | | | | | | |
| | 1.41 | | 283.1 | | | | | | |

| Mazzei Injector Company, LLC- Injector Performance Table | | | | | | | | | |
|--|-----------------|-----------------|------------------|-------------------------|-----------------|-----------------|------------------|------|------|
| Injector Model | | | | 878 | | | | | |
| Operating Pressure PSIG | | Air Suction | | Operating Pressure PSIG | | Air Suction | | | |
| Injector Inlet | Injector Outlet | Motive Flow GPM | Air Suction SCFH | Injector Inlet | Injector Outlet | Motive Flow GPM | Air Suction SCFH | | |
| 5 | 0 | 3.3 | 15.0 | 60 | 0 | 11.5 | 71.4 | | |
| | 1 | | 5.4 | | 5 | | 54.9 | | |
| | 2 | | 1.6 | | 10 | | 33.5 | | |
| | 3 | | 0.4 | | 15 | | 20.3 | | |
| | 4 | | | | 20 | | 14.7 | | |
| 10 | 0 | 4.7 | 33.9 | | 30 | | 7.8 | | |
| | 2 | | 8.6 | | 35 | | 5.8 | | |
| | 5 | | 2.9 | | 40 | | 4.4 | | |
| | 7 | | 0.9 | | 45 | | 2.4 | | |
| | 8 | | 0.6 | | | | | | |
| 15 | 0 | 5.8 | 36.1 | 70 | 0 | 12.4 | 77.1 | | |
| | 5 | | 7.5 | | 5 | | 60.1 | | |
| | 7 | | 3.8 | | 10 | | 40.7 | | |
| | 10 | | 0.7 | | 15 | | 25.6 | | |
| | 12 | | | | 20 | | 19.1 | | |
| 20 | 0 | 6.6 | 44.3 | | 30 | | 11.3 | | |
| | 5 | | 12.6 | | 40 | | 6.8 | | |
| | 10 | | 4.3 | | 45 | | 5.0 | | |
| | 12 | | 2.7 | | 50 | | 4.1 | | |
| | 15 | | 1.7 | | 55 | | 2.2 | | |
| 25 | 0 | 7.4 | 44.8 | 80 | 0 | 13.3 | 81.2 | | |
| | 5 | | 17.4 | | 5 | | 65.0 | | |
| | 10 | | 6.8 | | 10 | | 49.9 | | |
| | 15 | | 3.4 | | 15 | | 31.0 | | |
| | 20 | | 1.2 | | 20 | | 23.2 | | |
| 30 | 0 | 8.1 | 51.1 | | 30 | | 14.1 | | |
| | 5 | | 26.1 | | 40 | | 9.1 | | |
| | 10 | | 11.4 | | 50 | | 5.8 | | |
| | 15 | | 6.4 | | 60 | | 3.8 | | |
| | 20 | | 3.0 | | 65 | | 2.4 | | |
| 35 | 0 | 8.8 | 51.9 | 90 | 0 | 14.1 | 85.3 | | |
| | 5 | | 34.4 | | 5 | | 69.6 | | |
| | 10 | | 14.1 | | 10 | | 56.5 | | |
| | 15 | | 8.7 | | 20 | | 27.0 | | |
| | 20 | | 4.8 | | 30 | | 17.3 | | |
| 40 | 0 | 9.4 | 55.9 | | 40 | | 12.1 | | |
| | 5 | | 40.7 | | 50 | | 7.9 | | |
| | 10 | | 17.6 | | 60 | | 5.1 | | |
| | 15 | | 11.7 | | 70 | | 3.4 | | |
| | 25 | | 4.9 | | 75 | | 2.1 | | |
| 45 | 0 | 10.0 | 66.9 | 100 | 0 | 14.8 | 88.7 | | |
| | 5 | | 42.2 | | 5 | | 72.5 | | |
| | 10 | | 20.8 | | 10 | | 62.8 | | |
| | 15 | | 12.8 | | 20 | | 31.0 | | |
| | 20 | | 9.0 | | 30 | | 20.3 | | |
| 50 | 0 | 10.5 | 64.9 | | 120 | | 0 | 16.3 | 14.5 |
| | 5 | | 48.8 | | | | 5 | | 10.1 |
| | 10 | | 23.8 | | | | 10 | | 7.3 |
| | 15 | | 16.2 | | | | 20 | | 5.1 |
| | 20 | | 10.4 | | | | 30 | | 2.9 |
| | 25 | | 8.4 | 40 | | 98.1 | | | |
| | 30 | | 4.7 | 50 | | 81.0 | | | |
| | 35 | | 4.4 | 60 | | 70.9 | | | |
| | 40 | | 1.1 | 70 | | 41.9 | | | |
| | | 80 | 26.2 | | | | | | |
| | | 90 | 19.2 | | | | | | |
| | | 100 | 14.6 | | | | | | |
| | | | 10.8 | | | | | | |
| | | | 7.9 | | | | | | |
| | | | 5.8 | | | | | | |
| | | | 4.6 | | | | | | |
| | | | 2.5 | | | | | | |

| Mazzei Injector Company, LLC- Injector Performance Table | | | | | | | | | |
|--|-----------------|-------------------|-------------------|---------------------------|-----------------|-------------------|-------------------|--|-----|
| Injector Model | | | | 878 | | | | | |
| Operating Pressure kg/cm2 | | Air Suction | | Operating Pressure kg/cm2 | | Air Suction | | | |
| Injector Inlet | Injector Outlet | Motive Flow l/min | Air Suction l/min | Injector Inlet | Injector Outlet | Motive Flow l/min | Air Suction l/min | | |
| 0.35 | 0.00 | 12.6 | 7.1 | 4.22 | 0.00 | 43.5 | 33.7 | | |
| | 0.07 | | 2.6 | | 0.35 | | 25.9 | | |
| | 0.14 | | 0.7 | | 0.70 | | 15.8 | | |
| | 0.21 | | 0.2 | | 1.05 | | 9.6 | | |
| | 0.28 | | | | 1.41 | | 6.9 | | |
| 0.70 | 0.00 | 17.8 | 16.0 | | | | 2.11 | | 3.7 |
| | 0.14 | | 4.0 | | 2.46 | | 2.7 | | |
| | 0.35 | | 1.4 | | 2.81 | | 2.1 | | |
| | 0.49 | | 0.4 | | 3.16 | | 1.1 | | |
| | 0.56 | | 0.3 | | | | | | |
| 1.05 | 0.00 | 21.8 | 17.0 | 4.92 | 0.00 | 47.0 | 36.4 | | |
| | 0.35 | | 3.5 | | 0.35 | | 28.4 | | |
| | 0.49 | | 1.8 | | 0.70 | | 19.2 | | |
| | 0.70 | | 0.4 | | 1.05 | | 12.1 | | |
| | 0.84 | | | | 1.41 | | 9.0 | | |
| 1.41 | 0.00 | 25.1 | 20.9 | | | | 2.11 | | 5.3 |
| | 0.35 | | 5.9 | | 2.81 | | 3.2 | | |
| | 0.70 | | 2.0 | | 3.16 | | 2.4 | | |
| | 0.84 | | 1.3 | | 3.52 | | 1.9 | | |
| | 1.05 | | 0.8 | | 3.87 | | 1.0 | | |
| 1.76 | 0.00 | 28.1 | 21.1 | 5.62 | 0.00 | 50.3 | 38.3 | | |
| | 0.35 | | 8.2 | | 0.35 | | 30.7 | | |
| | 0.70 | | 3.2 | | 0.70 | | 23.6 | | |
| | 1.05 | | 1.6 | | 1.05 | | 14.6 | | |
| | 1.41 | | 0.6 | | 1.41 | | 10.9 | | |
| 2.11 | 0.00 | 30.8 | 24.1 | | | | 2.11 | | 6.7 |
| | 0.35 | | 12.3 | | 2.81 | | 4.3 | | |
| | 0.70 | | 5.4 | | 3.52 | | 2.7 | | |
| | 1.05 | | 3.0 | | 4.22 | | 1.8 | | |
| | 1.41 | | 1.4 | | 4.57 | | 1.1 | | |
| 2.46 | 0.00 | 33.3 | 24.5 | 6.33 | 0.00 | 53.3 | 40.3 | | |
| | 0.35 | | 16.2 | | 0.35 | | 32.9 | | |
| | 0.70 | | 6.7 | | 0.70 | | 26.7 | | |
| | 1.05 | | 4.1 | | 1.05 | | 12.7 | | |
| | 1.41 | | 2.3 | | 1.41 | | 8.2 | | |
| 2.81 | 0.00 | 35.5 | 26.4 | | | | 2.11 | | 5.7 |
| | 0.35 | | 19.2 | | 2.81 | | 3.7 | | |
| | 0.70 | | 8.3 | | 3.52 | | 2.4 | | |
| | 1.05 | | 5.5 | | 4.22 | | 1.6 | | |
| | 1.41 | | 3.1 | | 4.92 | | 1.0 | | |
| 3.16 | 0.00 | 37.7 | 31.6 | 7.03 | 0.00 | 56.2 | 41.9 | | |
| | 0.35 | | 19.9 | | 0.35 | | 34.2 | | |
| | 0.70 | | 9.8 | | 0.70 | | 29.7 | | |
| | 1.05 | | 6.0 | | 1.05 | | 14.6 | | |
| | 1.41 | | 4.2 | | 1.41 | | 9.6 | | |
| 3.52 | 0.00 | 39.7 | 30.6 | | | | 2.11 | | 6.9 |
| | 0.35 | | 23.0 | | 2.81 | | 4.8 | | |
| | 0.70 | | 11.3 | | 3.52 | | 3.4 | | |
| | 1.05 | | 7.6 | | 4.22 | | 2.4 | | |
| | 1.41 | | 4.9 | | 4.92 | | 1.4 | | |
| 3.52 | 1.76 | | 2.4 | 8.44 | 0.00 | 61.6 | 46.3 | | |
| | 2.11 | | 2.0 | | 0.35 | | 38.3 | | |
| | 2.46 | | 1.0 | | 0.70 | | 33.4 | | |
| | | | | | 1.41 | | 19.8 | | |
| | | | | | 2.11 | | 12.4 | | |
| | | | | | 2.81 | | 9.1 | | |
| | | | | | 3.52 | | 6.9 | | |
| | | | | | 4.22 | | 5.1 | | |
| | | | 4.92 | 3.7 | | | | | |
| | | | 5.62 | 2.7 | | | | | |
| | | | 6.33 | 2.2 | | | | | |
| | | | 7.03 | 1.2 | | | | | |