



# LEAKPROOF CONNECTIONS

Reporting the news, progress and other happenings at CPV Manufacturing, Inc.

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## Mark VIII fittings from CPV. Always a perfect match with your system.

The design of Mark VIII O-Seal fittings assures leakproof connections in gases or liquids up to 6000 psi. The union connections in this system are flat faced with a resilient O-ring incorporated into a close tolerance groove on one side of the body. Low torquing of the union nut compresses the O-ring to seal the connection.

These fittings make it easier, faster and more economical to change out gauges or other components that require regular replacement. They are available in couplings, tees, elbows, crosses and reducers in sizes from 1/4 to 2 OD. CPV also offers a complete system of valves (shutoff, needle, check and relief) to compliment the Mark VIII O-Seal fittings.

Mark VIII fittings can be heat sealed into a system by welding, orbital welding or brazing. Brazing can be done with elementary tools and requires very little training. The test data and photos to the right demonstrate the durability of Mark VIII O-Seal Fittings when they are brazed to brass, copper, steel and stainless steel tubing with a hand held propane torch. Each tubing section was hand-tight assembled on the end of a hydraulic pump before pressurization.

In every case the tubing failed before the Mark VIII O-Seal Fittings. In fact, the burst pressures of 9,000 to 16,000 psi substantially exceeded the



Mark VIII O-Seal tests demonstrate the reliability of brazed fittings.

Test No.	Tubing Material	Tubing OD and Wall	Mark VIII Tailpiece	Mark VIII Threadpiece	Tube Burst Pressure
1	Brass	1/2 x .062	Stainless Steel	Steel	14,000 psi
2	Copper	3/8 x 16 gage	Steel	Stainless Steel	9,000 psi
3	SAE 1010 Carbon Steel	3/8 x 0.35	Stainless Steel	Brass Cap	10,500 psi
4	Stainless Steel	3/8 x 1/16	Stainless Steel	Steel	*
5	Stainless Steel	3/8 x 1/32	Stainless Steel	Brass Cap	16,000 psi

All brazed connections held leak tight.

\*Test was terminated at 28,000 psi.

6000 psi rated pressure of these Mark VIII O-Seal Fittings.

CPV has been a leading manufacturer of valves and fittings since 1915. The company's innovative designs are well suited to standard applications, as well as one-of-a-kind custom requirements. For more information or technical literature on Mark VIII O-Seal Fittings or other CPV valves and fittings contact:

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