



Desalination Market



**World leader in technology
and innovation.**

The best solution for piping installation
in the desalination industry.



Piping. Systems. Solutions.



The MTS desalination business enables Victaulic to offer the highest quality and most comprehensive product portfolio for desalination systems.

The expertise of Victaulic pipe joining products, paired with the trusted MTS high-pressure plug valve technology allows engineers to specify the most reliable product, contractors to have the speed of installation associated with grooved, and owners to remain confident that their plant will turnover and operate on schedule.



MTS Valves and Technology has over 35 years of expertise in designing and manufacturing industrial valves, as well as 5,000 valves installed on high-pressure lines. MTS Valves feature highest quality and are trusted all over the world.

plug valves for DESALINATION



Providing worldwide expertise and support, the Victaulic team of 600-factory direct sales engineers brings extensive experience and know-how to the desalination industry. The grooved-end MTS plug valve installed with Victaulic rigid couplings:

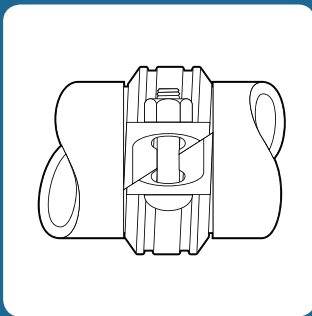
- › Are available up to 20"/500 mm
- › Provides a union at the valve allowing for quick installation and access to the system for schedule and unscheduled work; plants are back up and running sooner
- › Eliminates the need for butt welding, X-ray, inspection, pickle and passivation as well as flanging
- › Dramatically reduces shop fabrication, handling, and transportation; MTS grooved-end valves paired with Victaulic rigid couplings allow for fast, easy field fit
- › Through vertical integration, offers the benefits from proprietary design and manufacturing—delivering the highest performance on the market



Value-added Engineering

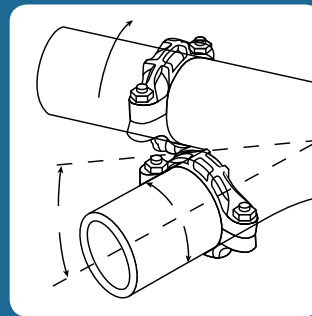
The Couplings

Patented Style 489 rigid couplings feature an angled bolt pad design that provides positive clamping of the pipe to resist torsional and flexural loads.



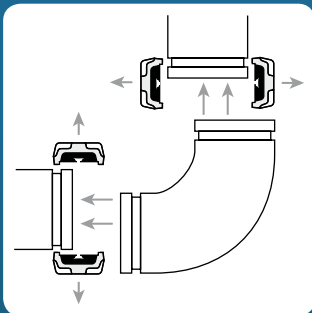
RIGIDITY

The inventor of the patented angled-bolt design, Victaulic is the only grooved system provider to ensure a rigid system. Rigid couplings provide positive clamping of the pipe to resist torsional and flexural loads.



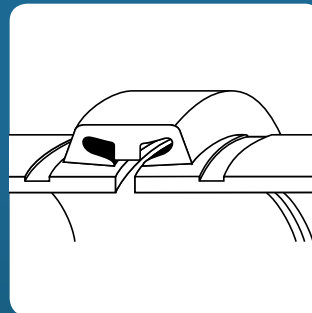
ALIGNMENT EASE

The grooved system allows full rotation of the pipe and system components before tightening so that proper alignment can be achieved eliminating mate-up problems and field rework.



MAINTAINABILITY AND A UNION AT EVERY JOINT

Victaulic grooved-end systems provide easy accessibility when conducting scheduled or unscheduled maintenance, resulting in a continued high level of energy efficiency and little-to-no downtime required. By using Victaulic mechanical piping systems, changing out or servicing equipment is as easy as loosening two bolts and two nuts.



GASKET TECHNOLOGY

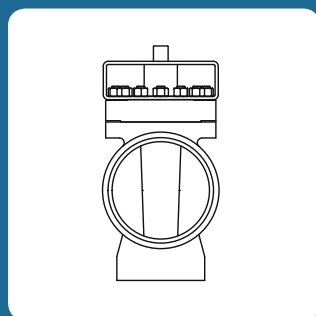
The heart of a mechanical system is the gasket. All Victaulic couplings have the Victaulic proprietary anti-biofouling Grade 'EW' gasket. The Victaulic proprietary Grade 'EW' gasket features a specially engineered compound formula that does not contribute to microbiological growth (and performs more than 75 times better than commercially available potable water approved compounds).

At the root of all the benefits that Victaulic solutions bring to a project—such as jobsite productivity, safety, design flexibility, high performance and quality—are the unique features of our products.



The Valve

MTS plug valves are designed to your specifications. MTS plug valves also feature proprietary plug configurations providing optimum flow control as well as on/off service.



ON/OFF VALVES

The MTS ON/OFF plug valve is the standard by which all other plug valves are measured. With more than 5,000 valves installed in desalination plants worldwide, the valve is designed to withstand some of the most aggressive conditions.

SECONDARY SEALING TECHNOLOGY

The MTS plug valve range includes a unique secondary sealing system ensuring a leak tight valve. The PTFE sleeve guarantees zero leakage through the valve bore, while two secondary proprietary devices are fitted to the valve to prevent leakage in case of damage to sleeve caused by service life or a facility issue. The body-bonnet gasket prevents any leakage between the body and bonnet joint while the rotary gasket prevents any leakage between the bonnet and conical plug.

CONTROL PLUG VALVES

MTS valves provide better flow control to ensure that membrane units are not damaged during plant start-up. MTS control plug valves are able to withstand the harshest of operating conditions in high pressure seawater desalination applications. Different control plug valve designs are available to suit the needs of flow control in the desalination plant. Victaulic engineers will assist customers in developing the most suitable design.

OTHER IN PLANT APPLICATIONS

In addition to control applications, MTS plug valves can be used anywhere in the plant that high pressure shutoff or isolation is needed, such as component isolation or CIP system separation valves (flange x groove transition valves are particularly suited for the latter application).

Benefits to SWRO Plant Construction and Operation

Schedule savings— in the shop and in the field

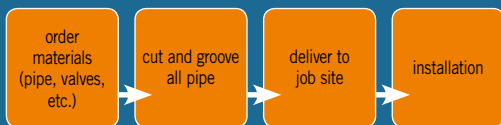
Direct and Indirect benefits:

- › Eliminate butt welding and flanging
- › Reduce time spent in the fabrication shop
- › One-time handling of the valves—ready for on-site installation due to shorter delivery times
- › Rapid on-site installation
- › No certified welders required
- › No pickle and passivation
- › No heat effected zones
- › Reduced material handling in the fabrication shop, and in the field
- › Reduced transportation—no back and forth from fabrication shop to weld tests, to pickle and passivating, back to the fabrication shop and then to the field
- › Reduced risk of damage to the actuator
- › No rework
- › No radiographic (X-Ray) or dye inspection

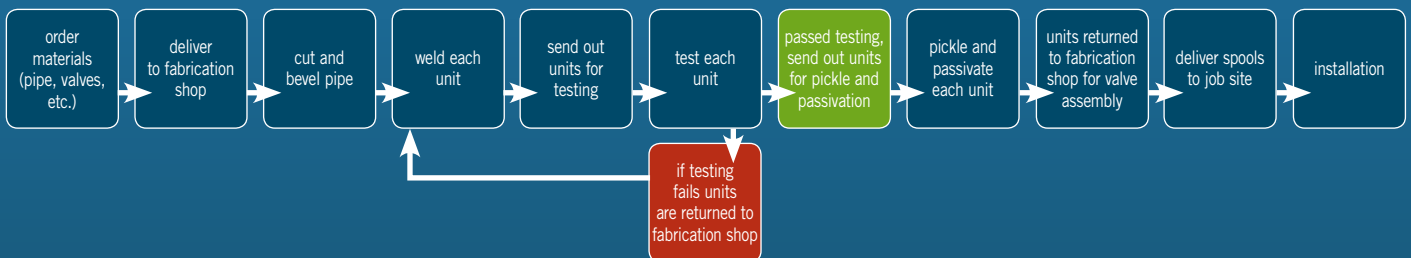
Labor saving piping technology

Now, more than ever, time equals money. Since work is a process, the fastest way to save money is to reduce the number of steps. This flow chart is an example of how Victaulic piping systems reduce time in the fabrication shop and on the jobsite.

THE GROOVED VALVE METHOD



THE WELDED VALVE METHOD



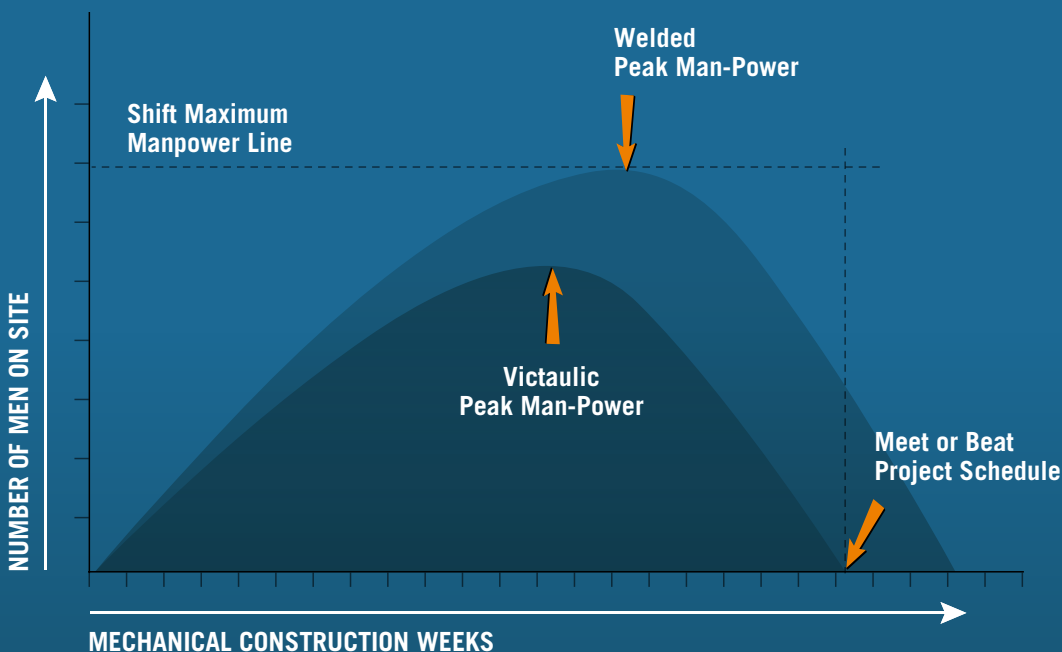
Profitable SWRO operators are able to construct, commission, turnover and minimize downtime thereby keeping water output high. With Victaulic schedule savings are achieved in the fabrication shop, in the field and during plant operations.

- › No 2-holing flanges
- › Easy fit-up
- › Safer handling, safer installation
- › Easier assembly of field spools to valve
- › Global support from two world leaders
- › Easier ability maintain, expand or change a system with grooved
- › Reduced total installed costs



Lower total installed cost and increased safety

Get your project up and running quicker with Victaulic solutions. Reducing man-hours not only results in quicker, less costly installations but also reduces exposure to job site accidents.



Piping. Systems. Solutions.



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