



Advanced Groove System

The fastest and most reliable Victaulic joint system for 14"/350mm to 72"/1800mm pipe:

When Victaulic designed the Advanced Groove System, our customers set the criteria:

- Contractors asked us for ease of installation, reliability and inspectability, so we developed a new, robust two-piece housing.
- Engineers wanted enhanced strength, so we created a revolutionary wedge-shaped groove that's deeper and wider than that of any other groove system to provide increased coupling-to-pipe engagement.
- To reduce sensitivity to pipe end flare, we located the groove further from the pipe end.







It all adds up to the strongest Victaulic mechanical coupling assembly system ever in this size range. Our patented Advanced Groove System (AGS) delivers exceptional results. AGS-joined pipe handles higher end loads and a higher pressure rating — up to 350 psi/2,410 kPa, depending on pipe size and schedule, with a nominal three-to-one safety factor.



For demonstration only. Do not attempt.

As shown in this actual demonstration, a single 24"/600 mm AGS pipe joint is strong enough to support this payloader. You can be confident that it's strong enough for your piping applications.

- Chilled Water Systems
- Distribution Piping
- Industrial Process Piping
 - District Heating and Cooling
 - Non-Abrasive Mine Piping (however external rings for use with AGS Couplings are available for Abrasive Systems)

Urban Outfitters philadelphia, pennsylvania

Urban Outfitters corporate headquarters needed an innovative piping system solution in order to accommodate an accelerated renovation schedule.

AGS couplings, fittings and valves were utilized on the 14"/350 mm chilled water lines.

The center piece of the new office building is a glass-enclosed heating/cooling central plant that occupies the lobby area.

William Osler Hospital BRAMPTON, ONTARIO

The Victaulic AGS system was utilized on heating, chilled and condenser water piping for distribution and mechanical room systems at the William Osler Hospital in Brampton, Ontario. Taking advantage of the quick installation features, the contractor used the complete AGS system of couplings, fittings, valves and pump accessories to help ensure the project met both budget and project schedule requirements.





Fast, simple, dependable assembly.

All AGS couplings, whether flexible or rigid, have a twopiece design and are secured with either two or four bolts – depending on joint size. This simplifies and speeds assembly. The housings are easy to position into the grooves. A wider, wedge-shaped groove facilitates proper coupling positioning by decreasing initial installation sensitivity. Tightening the nuts to the proper specification completes the joint.

In addition, the surfaces of the two housings meet solidly between the head of the bolt and the securing nut, providing visual confirmation of proper assembly and joint integrity once the nut is properly torqued.

Coupling locks into place into a deeper, wider groove for all-round rigidity.

Only two housings and two to four bolts, depending on joint size, provide 360° contact with the groove and make successful assembly easy.

Visual confirmation of a proper joint when these faces meet on both sides, joint integrity is confirmed.



Strength



Victaulic now offers flexible AGS couplings up to 72 inches (1800 mm) in size — making AGS an ideal solution for HVAC, district heating and cooling and industrial process piping. Additionally, for abrasive services such as slurries and tailings where full pipe wall thickness must be maintained on lined piping systems, Victaulic offers external rings for use with AGS couplings.

Because the AGS coupling system provides great strength and dependability in addition to speed, it's an excellent choice over welding. Other advantages AGS joints provide over welded joints include no flame, superior seismic-shock resistance and a union at every joint for easy adjustment, system maintenance or system expansion.



AGS couplings in 26 to 60 inch (660 to 1500 mm) sizes feature a two-piece housing and four bolts and nuts.



Available as rigid and flexible, couplings.



AGS Vic-Flange[®] adapters are ANSI CL. 125/150 Flanges.



Rigid couplings for stainless steel rated to 300 psi/2065 kPa.



AGS couplings in 62 and 72 inch (1550 and 1800 mm) sizes feature a four-piece housing and eight bolts and nuts.



Butterfly and Check Valves are available for a variety of services. Size may vary. Contact Victaulic for details.



Strainers and Suction Diffusers are available for protecting pumps.

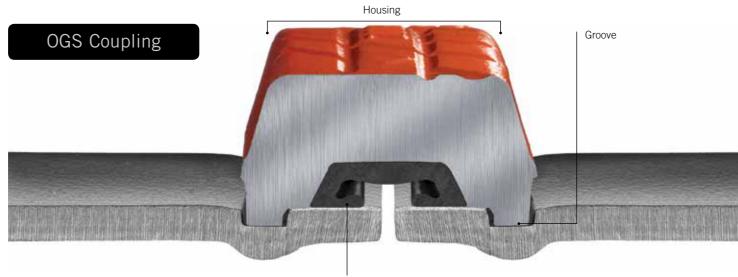


Pre-grooved fittings include elbows, tees and reducers. Available in 14-60"/600-1500 mm sizes.

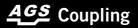
Actual Size Comparison

ORIGINAL GROOVE SYSTEM (OGS) COUPLING 24"/600 mm VS. AGS COUPLING 24"/600 mm

Victaulic has developed a new, robust housing profile that increases the distance from the groove to the end of the pipe to enhance strength. AGS coupling housings make complete 360° contact with the groove. The FlushSeal[™] gasket for AGS products, provides superior sealing.



Gasket



2-piece design for faster installation

First flat-pad rigid coupling design that installs metal-to-metal for visual inspection. Wider housing profile for greater end load capability

Patented coupling locks into a deeper, wider, wedge-shaped groove for extremely strong, dependable joints.

The FlushSeal gasket delivers more contact area for superior sealing.



The above graphics are for illustration purposes only.

VICTAULIC Grooving Tools

Designed to groove the Victaulic AGS groove profile.



VE450FSD

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To learn more about the Victaulic Advanced Groove System,[™] visit www.victaulic.com/ags.



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