





# WHERE INNOVATION AND SOLUTIONS ARE JOINED TOGETHER



Since the first patent in 1919, Victaulic® has delivered innovative pipe joining solutions that help customers succeed worldwide. Look inside many of the world's most recognizable landmarks and industrial facilities, and you'll find Victaulic® solutions at work making bold design innovations possible, speeding time to completion, allowing for unpredictable seismic movements and setting the stage for scalability.

Today, Victaulic<sup>®</sup> supports its customers with manufacturing facilities and branches located around the globe including our world headquarters location in Easton, Pennsylvania, USA. Our international presence ensures that our worldwide customers are served with speed and efficiency.

As the world's leading producer of grooved mechanical pipe joining systems, Victaulic<sup>®</sup> has been delivering global innovative solutions across diverse business lines including building services, clean water and wastewater, fire protection, industrial construction, maritime, mining, oil, gas and chemical, power generation as well as custom castings.

From concept to commissioning, Victaulic® provides the technologies and services necessary to simplify your next project.

### TABLE OF CONTENTS

- ii The Victaulic® Difference
- 1 Original Groove System (OGS)
- 25 Advanced Groove System (AGS)
- 33 Victaulic® Bolted Split-Sleeve Products (VBSP)
- 35 Hole Cut System
- **37** Expansion Joints
- 41 Plain End System for Carbon Steel
- 43 Stainless Steel System
- 55 Copper System
- 61 Shouldered Steel System
- 65 Hydronic Balancing Solutions
- 67 HDPE System
- 69 Aquamine® PVC System
- 73 Grooved PVC System
- 74 FRP System
- 75 Pipe Preparation Tools
- 105 Gaskets/Seals/O-Rings
- 111 Design Data
- 115 Index

victaulic.com i G-103-INT REV P

# THE VICTAULIC® DIFFERENCE

### **GROOVED PIPE JOINING TECHNOLOGY**

### How does it work?

The groove is made by cold forming or machining a groove into the end of a pipe. A gasket encompassed by the coupling housing is wrapped around the two grooved pipe ends, and the key sections of the coupling housing engage the grooves. The bolts and nuts are tightened with a socket wrench or impact wrench.

### Types of grooved couplings

- Flexible coupling allows for controlled linear and angular movement, which accommodates pipeline deflection as well as thermal expansion and contraction.
- **Rigid coupling** does not allow for movement, similar to a flanged or welded joint.



GASKET

GROOVE

HOUSING

GROOVE

**BOLT/NUT** 

At the core of all the benefits that Victaulic® solutions bring to a project – such as productivity, safety, design flexibility and quality – are the unique features of our products.

contraction

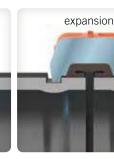
### VICTAULIC® GROOVED END PIPING SYSTEMS PROVIDE:



Easy system maintenance and expansion—through simple coupling disassembly that allows for easy access.

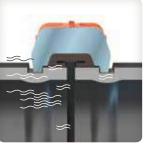


Alignment ease—through a design that allows for full rotation of the pipe and system components before tightening.

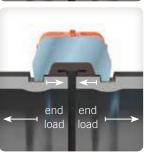




Flexibility—with the inherent axial movement and deflection properties of flexible couplings in a groove system. May be used to accommodate pipeline thermal expansion and contraction, misalignment and settlement, and seismic stress absorption.



Noise and vibration attenuation – by isolating the transference of vibration at each joint.



Self restrained pipe joints—Couplings engage the pipe grooves to hold the pipes against full pressure thrust loads without the need of supplemental restraints.



**Rigidity**—with an angled pad design that provides positive clamping of the pipe to resist torsional and flexural loads.

### Original Groove System (OGS)

The Victaulic® grooved piping system is the most versatile, economical, and reliable piping system available. It is up to three times faster to install than welding, easier and more reliable than threading or flanging, resulting in lower total installed cost. The system is designed for roll grooved or cut grooved standard pipe or roll grooved light wall pipe. Also, pipe end preparation is fast and easy. It can be done on the job site or in the shop with a variety of Victaulic® grooving tools.

With the introduction of Victaulic® Installation-Ready™ technology, the original groove system has evolved to a new level. Grooved couplings featuring this patented Victaulic® technology install ten times faster than other pipe joining methods. Why is it different? Prior to Victaulic® Installation-Ready™ technology, grooved coupling assembly

consisted of disassembling the coupling by removing the bolts and nuts, removing the gasket, fitting the gasket over the gap between two grooved pipe ends, wrapping the housings around the gasket and then tightening down the bolts and nuts. Couplings featuring Installation-Ready™ technology come pre-assembled and are simply pushed onto a grooved pipe end, joined by a second grooved pipe end, and then bolts and nuts are tightened down. What previously required minutes, now takes only seconds.



page	Adapters	page
3	Vic-Flange® Adapter (Style 741)	8
3	Vic-Flange® Adapter (Style 743)	8
3		
4	Fittings	page
4	Elbows	9
4	Tees, Crosses, Wyes and Laterals	10
5	Adapters, Nipples, Caps and Plugs	11
5	Reducers	12
5	XL Fittings for use with XL Couplings	12
6		
6	Expansion Joints	page
	Mover® Expansion Joint (Style 150)	13
6	Expansion Joint (Style 155)	13
	3 3 3 4 4 4 5 5 5	3  Vic-Flange® Adapter (Style 741) 3  Vic-Flange® Adapter (Style 743) 3 4  Fittings 4  Elbows 5  Adapters, Nipples, Caps and Plugs 6  Expansion Joints 6  Expansion Joints 6  Mover® Expansion Joint (Style 150)

### Vic-Ring® Couplings

Vic-Ring® Coupling (Style 41) 7
Vic-Ring® Coupling (Style 44) 7

For global pipe size designations, download product submittals.

page

21

21





Valve	S	page	Strainers and Diffusers
6	Vic-300® MasterSeal™ Butterfly Valve (Series 761)	14	Suction Diffuser (Series 731-D)
6	Butterfly Valve (Series 700)	14	Vic-Strainer® Tee Type (Series 730)
	Vic-Check® Valve (Series 716H and 716)	15	Vic-Strainer® Wye Type (Series 732
	Venturi Check Valve (Series 779)	15	
	Swinger® Swing Check Valve		Specialty Products
3	Swinger® Swing Check Valve (Series 712 and 713)	16	High Pressure Coupling (Style 808)
•	Diverter Valve (Series 725)	16	High Pressure Ring Coupling (Style 809)
1	Vic®-Ball Valve (Series 721 and 726)	17	
0	Ball Valve (Series 727)	17	EndSeal® System
	Brass-body Ball Valve, Threaded (Series 722)	18	XL (Extended Life) System for Rubber-lined Abrasive Services
4	Three Port Diverter Valve (Series 723)	18	Mechanical-T® Spigot Assemblies (S
•	Vic-Plug® Valve (Series 377)	18	
	MTS Plug Valve (Series 465)	19	
	Triple Service Assemblies (Butterfly/Check)	19	
	Triple Service Assemblies (Plug/Check)	19	
A.	Delta-Y Assemblies	20	For global nine size designations

4	Vic-Strainer® Wye Type (Series 732)	21
Speci	ialty Products	page
0	High Pressure Coupling (Style 808)	22
	High Pressure Ring Coupling (Style 809)	22
4	EndSeal® System	23
G	XL (Extended Life) System for Rubber-lined Abrasive Services	24
-	Mechanical-T® Spigot Assemblies (Style 926)	24

For global pipe size designations, download product submittals.

### Original Groove System (OGS)



# QuickVic® Rigid Coupling STYLE 107

### Download submittal 06.21 for complete information

- Angled bolt pad provides rigidity
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For coating options, download product submittal

### Approvals/Listings:









Download publication 10.01 for complete information



# QuickVic® Flexible Coupling STYLE 177N

### **Download submittal 06.24 for complete information**

- Sizes from DN50-DN150 | 2-6"
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal

### Approvals/Listings:





Download publication 10.01 for complete information



# **Composite Flexible Coupling STYLE 171**

### Download submittal 06.22 for complete information

- For use where corrosive conditions exist
- Designed for use on reverse osmosis systems
- For use on roll/cut grooved PVC
- Sizes from DN40-DN100 | 1½-4"
- Pressures up to 150 psi | 1034 kPa | 10 bar
- For stainless steel and FRP applications, contact Victaulic®



# Zero-Flex® Rigid Coupling

### <u>Download submittal 06.02</u> for complete information

- Angled bolt pad provides rigidity
- Sizes from DN25-DN300 | 1-12"
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For coating options, download product submittal
- For sizes DN350-DN1250 | 14-50", download submittal 20.02 for information on AGS Style W07

### Approvals/Listings:













Download publication 10.01 for complete information

# Flexible Coupling

### **Download submittal 06.04 for complete information**

- Cross-ribbed, two piece housing construction
- Sizes from DN20-DN600 | ¾-24"
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal
- For sizes DN350-DN1800 | 14-72", download submittal 20.03 for information on AGS Style W77



### Approvals/Listings:

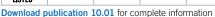












# Flexible Coupling STYLE 75

### Download submittal 06.05 for complete information

- Lightweight coupling for moderate pressures
- Sizes from DN25-DN200 | 1-8"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- For coating options, download product submittal



### Approvals/Listings:













Download publication 10.01 for complete information



### **Reducing Coupling STYLE 750**

### Download submittal 06.08 for complete information

- Replaces two couplings and a reducing fitting
- Sizes from DN50-DN250 | 2-10"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- For coating options, download product submittal











Download publication 10.01 for complete information



### **Snap-Joint® Coupling** STYLE 78

### **Download submittal 06.09** for complete information

- Designed for quick disconnect service
- Sizes from DN25-DN200 | 1-8"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal



### **Outlet Coupling**

**STYLE 72** 

### **Download submittal 06.10** for complete information

- Joining device to provide an integral reducing outlet
- Sizes from DN40-DN150 11/2-6"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- For coating options, download product submittal

### Approvals/Listings:





Download publication 10.01 for complete information

### Vic-Boltless® Coupling and Tool **STYLES 791 AND 792 Download submittal 06.11 for complete information**

- Provides a secure, tamper resistant, low profile joint
- Installed only with Victaulic® Style 792 tool
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 700 psi | 4826 kPa | 48 bar
- For coating options, download product submittal



### **High Pressure Rigid Coupling** STYLE HP-70

### Download submittal 06.12 for complete information

- Heavy housing for high pressure service
- Sizes from DN50-DN400 | 2-16"
- Pressures up to 1000 psi | 6895 kPa | 69 bar
- For coating options, download product submittal

### Approvals/Listings:





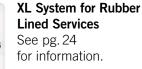
Download publication 10.01 for complete information



Style XL77 Pipe-to-Fitting Connections



Style XL79 Fitting-to-Fitting Connections



### XL Couplings for use with XL Fittings

Style XL77 and XL79

### **Download submittal 07.07 for complete information**

- For use with XL (extended life) fittings
- Style XL77 for pipe-to-fitting connections
- Style XL79 for fitting-to-fitting connections
- Sizes from DN80-DN300 | 3-12"
- Pressures up to 1000 psi | 6895 kPa | 69 bar



# Vic-Ring® Coupling STYLE 41

### **Download submittal 16.04** for complete information

- Provided with a variety of ring options to maintain full pipe wall thickness for abrasive systems
- Sizes from DN750 DN1675 | 30 66"
- Pressures up to 90 psi | 621 kPa | 6 bar
- For coating options, download product submittal
- For AGS Vic-Ring® products, see pg. 28



# Vic-Ring® Coupling STYLE 44

### **Download submittal 16.05** for complete information

- Provided with a variety of ring options to maintain full pipe wall thickness for abrasive systems
- Sizes from DN100-DN1500 | 4-60"
- Pressures up to 175 psi | 1207 kPa | 12 bar
- For coating options, download product submittal
- For AGS Vic-Ring® products, see pg. 28

FP



### Vic-Flange® Adapter **STYLE 741**

### **Download submittal 06.06 for complete information**

- ANSI Class 125 and 150, Australian Standard Table E, PN10/16, and JIS 10K
- Sizes from DN50-DN600 | 2-24"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For AGS sizes DN350-DN600 | 14-24", download submittal 20.04 for information on AGS Style W741

### Approvals/Listings:









Download publication 10.01 for complete information



### Vic-Flange® Adapter **STYLE 743**

### Download submittal 06.06 for complete information

- ANSI Class 300 flanges
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 720 psi | 4964 kPa | 50 bar
- For coating options, download product submittal

### Approvals/Listings:







Download publication 10.01 for complete information



### Approvals/Listings:









Download publication 10.01 for complete information

### Fittings — Elbows

<u>Download submittal 07.01</u> for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from DN20-DN600 | 34-24"
- Download product submittal for the following: coating options; standard thread options; flange bolt hole pattern options
- For AGS sizes DN350 DN1500 | 14 60", download submittal 20.05 for complete information

### **Elbows**



**No. 10** 90° Elbow



**No. 100-1½D** 90° 1½ D Long Radius Elbow



No. 100-3D 90° 3 D Long Radius Elbow



**No. 100-5D** 90° 5 D Long Radius Elbow



**No. 100-6D** 90° 6 D Long Radius Elbow

For 3D, 5D and 6D long radius bends, download submittal 07.02



**No. 11** 45° Elbow



No. 110-1½D 45° 1½ D Long Radius Elbow



No. 110-3D 45° 3 D Long Radius Elbow



**No. 110-5D** 45° 5 D Long Radius Elbow



**No. 110-6D** 45° 6 D Long Radius Elbow



**No. 12** 22½° Elbow



**No. 13** 11¼° Elbow



**No. 18** 90° Adapter Elbows



**No. 19** 45° Adapter Elbows



For coating options, download product submittal



**No. 10-DR** Drain Elbow



No. R-10G
Reducing Base
Support Elbows
(OGS Groove ×
OGS Groove)



No. R-10F Reducing Base Support Elbows (OGS Groove × Flange)



Hole Cut



### Approvals/Listings:











Download publication 10.01 for complete information

# Fittings — Tees, Crosses, Wyes and Laterals

<u>Download submittal 07.01</u> for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from DN20-DN600 | 34-24"
- Download product submittal for the following: coating options; standard thread options
- For AGS sizes DN350-DN1500 | 14-60",
   download submittal 20.05 for complete information

### Tees, Crosses, Wyes, and Laterals



No. 20 Tee



No. 35 Cross



No. 33 True Wye



No. 29M
Tee with
Threaded Branch



No. 25
Grooved Branch
Reducing Tee



**No. 29T**Threaded Branch
Reducing Tee



No. 21 Bullhead Tee



No. 30 45° Lateral



No. 30-R 45° Reducing Lateral



No. 32 Tee Wye



**No. 32-R**Reducing
Tee Wye





### Approvals/Listings:











Download publication 10.01 for complete information

# Fittings — Adapters, Nipples, Caps and Plugs

<u>Download submittal 07.01</u> for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from DN20-DN600 | ¾-24"
- Download product submittal for the following: coating options; standard thread options; flange bolt hole pattern options
- For AGS sizes DN350-DN1500 | 14-60", download submittal 20.05 for complete information

### Adapters, Nipples, Caps and Plugs



No. 40 Adapter Nipple (OGS Groove × Thread)



No. 42 Adapter Nipple (OGS Groove × Bevel)



No.43
Adapter Nipple
(OGS Groove ×
OGS Groove)



**No. 80** Female Threaded Adapter



No. 53 Swaged Nipple (OGS Groove × OGS Groove)



No. 54 Swaged Nipple (OGS Groove × Thread)



No. 55
Swaged Nipple
(Thread ×
OGS Groove)



**No. 60** Cap



No.61 Bull Plug



No. 48 Hose Nipple



**No. 41** ANSI Class 125 Flanged Adapter Nipple



No. 41-DN PN10/16 Flanged Adapter Nipple



No. 45F ANSI Class 150 Flat Face Flanged Adapter Nipple



No. 45R ANSI Class 150 Raised Face Flanged Adapter Nipple



No. 46F ANSI Class 300 Flat Face Flanged Adapter Nipple



No. 46R ANSI Class 300 Raised Face Flanged Adapter Nipple



### Original Groove System (OGS)



### Approvals/Listings:











Download publication 10.01 for complete information

### Fittings — Reducers

Download submittal 07.01 for complete information on original grooved end fittings for carbon steel pipe

- Standard fitting pressure ratings conform to ratings of installed coupling
- All fittings supplied with grooves or shoulders for fast installation
- Fittings available from DN20-DN600 | 34-24"
- Download product submittal for the following: coating options; standard thread options
- For AGS sizes DN350-DN1500 | 14-60", download submittal 20.05 for complete information

### Reducers



No. 50 Concentric Reducer



No. 51 **Eccentric** Reducer



No. 52 Small Threaded Reducer



No. XL100 1½D 90° Elbow



No. XL110 1½D 45° Elbow



XL System for **Rubber Lined Services** See pg. 24 for information.



No. XL100 3D 90° Elbow



No. XL110 3D 45° Elbow

### **Other Fitting Systems**

Download submittal 07.02 for long radius steel elbows (3D, 5D, and 6D)

Download submittal 07.03 for EndSeal® Extra Heavy (ES) fittings

Download submittal 07.04 for fabricated steel fittings (segmentally welded and full flow)

Download submittal 07.06 for shouldered steel fittings

**Download submittal 07.07 for XL fittings** 

**Download submittal 14.04 for plain end fittings** 

Download submittal 17.16 for stainless steel fittings

Download submittal 18.11 for Type 316 Vic-Press® fittings

Download submittal 18.12 for Type 304 Vic-Press® fittings

Download submittal 20.05 for 465 fittings

**Download submittal 21.03 for aluminum fittings** 

Download submittal 22.04 for CTS copper fittings, 22.10 for Australian Standard copper fittings, 22.11 for EN1057 standard copper fittings

Download submittal 25.03 for alternate style fittings machined for rubber or urethane lining

Download submittal 50.01 for Aquamine® fittings



# Mover® Expansion Joint STYLE 150

### Download submittal 09.04 for complete information

- Slip-type expansion joint providing up to 76 mm | 3" axial end movement
- Sizes from DN50-DN150 | 2-6"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For additional types of expansion joints, see pg. 37



# **Expansion Joint**

STYLE 155

### Download submittal 09.05 for complete information

- Combination of couplings and short nipples, joined in tandem to provide increased expansion
- Style 155 grooved expansion joints are rated to the working pressure of the coupling used
- Sizes from DN20−DN300 | ¾−12"
- For coating options, download product submittal
- For AGS sizes DN350 DN600 | 14 24", download submittal 20.12 for information on Style W155
- For additional types of expansion joints, see pg. 37

HDPE



### Vic-300<sup>®</sup> MasterSeal<sup>™</sup> Butterfly Valve **SERIES 761**

### **Download submittal 08.20 for complete information**

- Designed for bi-directional, dead end services to full working pressure
- Available without handle, with gear operator, with lever lock handle and memory stop or with 10-position handle and memory stop
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes DN350-DN600 | 14-24", download submittal 20.06 for information on Series W761
- For AGS sizes DN650-DN1200 | 26-48", download submittal 20.07 for information on Series W709



### **Butterfly Valve**

**SERIES 700** 

### **Download submittal 08.05 for complete information**

- Two piece stem permits narrow disc design for low pressure drop performance
- Supplied standard with aluminum bronze disc, 316 stainless steel optional
- Sizes from DN40-DN150 | 1½-6"
- Pressures up to 200 psi | 1379 kPa | 14 bar



### Vic-Check® Valve

### **SERIES 716H**

### **Download submittal 08.08** for complete information

- Features a stainless steel disc
- Sizes from DN50-DN80 | 2-3"
- Pressures up to 365 psi | 2517 kPa | 25 bar
- For AGS sizes DN350 DN600 | 14 24", **download submittal 20.08** for information on Series W715



### Vic-Check® Valve

### **SERIES 716**

### **Download submittal 08.08 for complete information**

- Features an elastomer encapsulated disc
- Sizes from DN100 DN300 | 4 12"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes DN350 DN600 | 14 24", download submittal 20.08 for information on Series W715

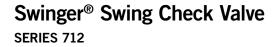


### **Venturi Check Valve**

### **SERIES 779**

### **Download submittal 08.10 for complete information**

- Provides a variety of functions unlike any other measuring device
- Sizes from DN100 DN350 | 4 14"
- Pressures up to 300 psi | 2068 kPa | 21 bar



### <u>Download submittal 08.11</u> for complete information

- Features a stainless steel clapper
- Sizes from DN50-DN100 | 2-4"
- Pressures up to 300 psi | 2068 kPa | 21 bar



# Swinger® Swing Check Valve SERIES 713

### **Download submittal 08.11** for complete information

- Features a stainless steel clapper
- Available size is DN50 | 2"
- Pressures up to 1000 psi | 6895 kPa | 69 bar



### **Diverter Valve**

**SERIES 725** 

### **Download submittal 08.40** for complete information

- Provides 180° service on backfill paste lines for increased efficiency and reduced downtime
- Available in DN150 | 6"
- Pressures up to 1000 psi | 6895 kPa | 69 bar

Hole Cut



### Vic®-Ball Valve

### **SERIES 721**

### **Download submittal 08.14** for complete information

- Standard port, end-entry valve with a streamlined design for excellent flow characteristics
- Sizes from DN100-DN150 | 4-6"
- Pressures up to 800 psi | 5516 kPa | 55 bar



### Vic®-Ball Valve

### **SERIES 726**

### Download submittal 08.23 for complete information

- High pressure standard port ball valve with grooved ends
- Available without handle, with a lever operator or a gear operator
- Sizes from DN40-DN150 | 1½-6"
- Pressures up to 1000 psi | 6895 kPa | 69 bar



### **Ball Valve**

### **SERIES 727**

### **Download submittal 08.42 for complete information**

- High pressure enhanced port NACE-compliant ball valve
- Up to 1/3 better flow than competitive standard port ball valves
- Floating ball reduces torque requirements
- Sizes from DN50-DN150 | 2-6"
- Pressure up to 1500 psi | 10342 kPa | 103 bar

HDPE





# **Brass Body Valve** — Threaded SERIES 722

### <u>Download submittal 08.15</u> for complete information

- Standard port, female threaded end valve constructed from forged brass
- Sizes from DN8-DN50 | 1/4-2"
- Pressures up to 600 psi | 4137 kPa | 41 bar

### Approvals/Listings:





Download publication 10.01 for complete information



# Three Port Diverter Valve SERIES 723

### **Download submittal 08.13** for complete information

- NACE MR-01-75 compliant, three-port ball valve with common bottom inlet for diverting flow 90° left or right
- Available without handle, with lever operator or gear operator
- Available in DN50 | 2" size
- Pressures up to 600 psi | 4137 kPa | 41 bar



### Vic-Plug® Valve

**SERIES 377** 

### **Download submittal 08.12 for complete information**

- Only eccentric grooved end plug valve made specifically for throttling services
- Available without handle, with lever operator or gear operator
- Sizes from DN80-DN300 | 3-12"
- Pressures up to 175 psi | 1207 kPa | 12 bar



### MTS Plug Valve

### **SERIES 465**

### **Download submittal 17.36** for complete information

- Typically used in reverse osmosis desalination plants for on/off and control services
- Available without operator or with manual, pneumatic, hydraulic and electric actuators
- Sizes from DN50-DN450 | 2-18"
- Pressures up to 1450 psi | 9997 kPa | 100 bar

# Triple Service Assemblies

### **BUTTERFLY/CHECK VALVE**

### **Download submittal 08.09 for complete information**

- Assembles with Style 107 rigid couplings or Style 177 flexible couplings
- Sizes from DN65-DN300 | 2½-12"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes DN350 DN600 | 14 24",
   download submittal 20.18 for more information

### Approvals/Listings:





Download publication 10.01 for complete information

# **Triple Service Assemblies**

### PLUG/CHECK VALVE

### **Download submittal 08.09** for complete information

- Provides shut-off, throttling with positive mechanical memory and non-slam check service in one unit
- Sizes from DN80-DN300 | 3-12"
- Pressures up to 175 psi | 1207 kPa | 12 bar



### Approvals/Listings:





**Download publication 10.01** for complete information

HDPE



# **Delta-Y Assemblies**STYLE DLY

### **Download submittal 07.08** for complete information

- Assembles with Style 107 rigid couplings, Series 761 Vic-300® MasterSeal™ butterfly valve and cast fittings
- Ideal for bulk cement/barite systems commonly found on offshore drilling platforms
- Sizes from DN125-DN150 | 5-6"
- Pressures up to 300 psi | 2068 kPa | 21 bar



### **Suction Diffuser**

**SERIES 731-D** 

### **Download submittal 09.20** for complete information

- Allows building up at a 90° angle from the pump, saving valuable space in the mechanical room while still protecting the pump against cavitation
- ANSI Class 150, Australian Standard Table E, PN10/16, GB, and JIS 10K
- Sizes from DN80-DN300 | 3-12"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For AGS sizes DN350 DN600 | 14 24", download submittal 20.20 for information on Series W731-D





### **Download submittal 09.02 for complete information**

- Lighter than flanged Y-type strainers and provides straight through flow for lower pressure drop
- Sizes from DN40-DN300 | 1½-12"
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For coating options, download product submittal
- For AGS sizes DN350-DN600 | 14-24", download submittal 20.11 for information on Series W730





## Vic-Strainer® Wye Type

**SERIES 732** 

### Download submittal 09.03 for complete information

- Provides straight through flow for lower pressure drop
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For AGS sizes DN350-DN600 | 14-24", download submittal 20.19 for information on Series W732

FRP



# High Pressure Coupling STYLE 808

### **Download submittal 15.01** for complete information

- Double-bolted coupling for use with Schedule 80 or heavier steel pipe
- Sizes from DN150-DN300 | 6-12"
- Pressures up to 4000 psi | 27579 kPa | 275 bar
- For coating options, download product submittal



# High Pressure Ring Coupling STYLE 809

### **Download submittal 15.02** for complete information

- Double-bolted coupling for use with Schedule 80 or heavier steel pipe
- Coupling engages directly onto rings (supplied with coupling) welded to the O.D. of the pipe
- Sizes from DN150 DN250 | 6 10"
- Pressures up to 3000 psi | 20684 kPa | 206 bar



### **EndSeal® System**

COUPLING: STYLE HP-70ES; FITTINGS: NO. 62ES, NO. 63ES, NO. 64ES, NO. 35ES, NO. 22ES

<u>Download submittal 06.13</u> for the Style HP-70ES Coupling <u>Download submittal 07.03</u> for the ES Fittings

- For plastic coated pipe or high pressure rigid systems
- Schedule 80 wall thickness for use with HP-70ES couplings
- Coupling sizes from DN50-DN300 | 2-12" and Fitting sizes from DN50-DN150 | 2-6"
- Pressures up to 2500 psi | 17237 kPa | 172 bar
- For coating options, download product submittal







No. 63ES 45° Elbow



No. 64ES Tee



No. 35ES Cross



No. 22ES Header Tee





### XL (Extended Life) System for **Rubber-lined Abrasive Services**

### **Download submittal 07.07** for complete information

- 1½D and 3D elbows designed for 6 mm | ¼" extra lining resulting in up to three times the service life when compared to standard rubber lined fittings
- Sizes from DN80-DN300 3-12"
- Comes with Style XL77 flexible couplings for pipe-to-fitting and Style XL79 flexible couplings for fitting-to-fitting connections



No. XL100 1½D 90° Elbow



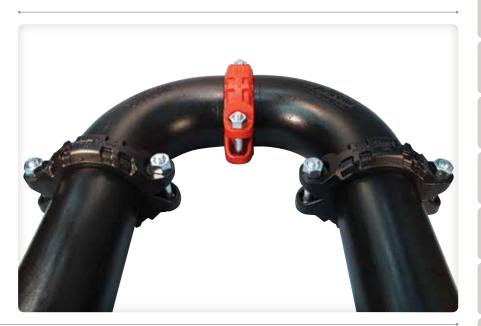
No. XL100 90° Elbow



No. XL110 1½D 45° Elbow



No. XL110 3D 45° Elbow





### Mechanical-T® Spigot Assemblies **STYLE 926**

### **Download submittal 11.07** for complete information

- Mining tailings spigot assemblies for DN550-DN650 | 22-26" tailings lines
- Features stainless steel strap and 178 mm | 7" outlet saddle
- Utilizes existing Victaulic® product to complete assembly
- Outlets compatible with steel or HDPE piping systems
- Pressure up to 170 psi | 1172 kPa | 12 bar

### Advanced Groove System 465

Victaulic® offers a comprehensive portfolio of Advanced Groove System (AGS) couplings for systems DN350-DN1800 | 14-72" and a full range of DN350-DN1500 | 14-60" AGS fittings, valves and accessories. Our large diameter piping solutions provide strength and dependability in addition to speed, making them an excellent choice over welding. Other advantages AGS joints provide over welded joints include no flame installation, superior seismicshock resistance and a union at every joint for easy adjustment, system maintenance or system expansion.





Couplings	page
AGS Rigid Coupling (Style W07)	27
O AGS Flexible Coupling (Style W77)	27
AGS Stainless Steel Rigid Coupling (Style V	V89) 27

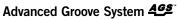
Vic-Ring® Couplings	page
AGS Vic-Ring® Rigid Coupling (Style W07)	28
AGS Vic-Ring® Flexible Coupling (Style W77)	28
Adapters	page
AGS Vic-Flange® Adapter (Style W741)	28

Fittings	page
AGS Fittings	29
Expansion Joints	page
AGS Expansion Joint (Style W155)	30
Valves	page
AGS Vic-300® Butterfly Valve (Series W761)	30
AGS Butterfly Valve (Series W709)	30
AGS Vic-Check® Dual Disc Valve (Style W715)	31
AGS Triple Service Valve Assemblies	31
Strainara and Diffusara	nage

Strainers and Diffusers	
AGS Suction Diffuser (Series W731-D)	32
AGS Tee Type Vic-Strainer® (Series W730)	32
AGS Wye Type Vic-Strainer® (Series W732)	32





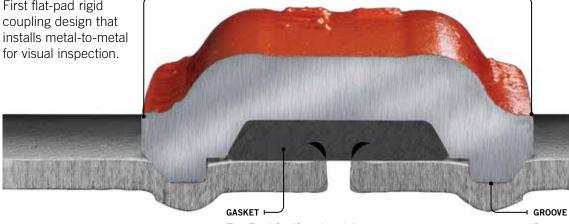


### 2-piece design for faster installation

First flat-pad rigid

### HOUSING

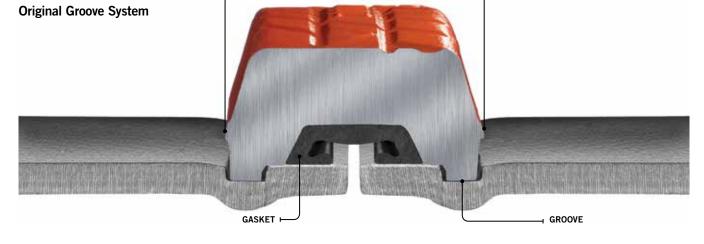
Wider housing profile for greater end load capability.



The FlushSeal® gasket delivers more contact area for superior sealing.

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

### HOUSING





### **AGS Rigid Coupling**

**STYLE W07** 

### **Download submittal 20.02** for complete information

- First flat pad, metal-to-metal, rigid coupling to be offered in this size range
- Sizes from DN350-DN1250 | 14-50"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For original groove sizes DN25-DN300 | 1-12" (Style 07), download submittal 06.02;
   For original groove featuring Installation-Ready™ technology sizes DN50-DN300 | 2-12" (Style 107), download submittal 06.21



### **AGS Flexible Coupling**

**STYLE W77** 

### Download submittal 20.03 for complete information

- Unique wedge shaped key profile increases allowable pipe end separation
- Sizes from DN350-DN1800 | 14-72"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For original groove sizes DN20-DN600 | ¾-24" (Style 77), download submittal 06.04; For original groove couplings featuring Installation-Ready™ technology sizes DN50-DN150 | 2-6" (Style 177N), download submittal 06.24



# AGS Stainless Steel Rigid Coupling

### Download submittal 20.15 for complete information

- Wedge shaped coupling housing keys fully engage the patented AGS grooves to provide a rigid joint
- Sizes from DN350-DN600 | 14-24"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For original groove sizes DN50 DN300 | 2 12", <u>download submittal 17.24</u> for information on Style 89

**VBSP** 

HDPE



# AGS Vic-Ring® Rigid Coupling STYLE W07

### <u>Download submittal 16.11</u> for complete information

- Coupling installs on the supplied ring to maintain full pipe wall thickness on abrasive systems
- Sizes from DN350-DN1200 | 14-48"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For OGS Vic-Ring® products, see pg. 7



# AGS Vic-Ring® Flexible Coupling STYLE W77

### **Download submittal 16.12 for complete information**

- Coupling installs on the supplied ring to maintain full pipe wall thickness on abrasive systems
- Sizes from DN350-DN1550 | 14-62"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal
- For OGS Vic-Ring® products, see pg. 7



# AGS Vic-Flange® Adapter

### **Download submittal 20.04** for complete information

- Designed for directly incorporating flanged components with ANSI Class 125-150 or PN10/16 bolt hole patterns
- Sizes from DN350-DN600 | 14-24"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For original groove sizes DN50-DN300 | 2-12", <u>download submittal 06.06</u> for information on Style 741



### **AGS Fittings**

### **Download submittal 20.05** for complete information

- Sizes from DN350-DN1500 | 14-60"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- Download product submittal for the following: coating options; flange bolt hole pattern options
- For original groove fittings, download submittal **07.01** for more information

### **AGS Fittings**



No. W10 90° Elbow



No. W11 45° Elbow



No. W12 22½° Elbow



No. W13 11¼° Elbow



No. W100 90° 1½ D Long Radius Elbow



No. W110 45° 1½ D Long Radius Elbow



No. W20 Tee



No. W35 Cross



No. W33 True Wye



No. W25 Reducing Tee



No. W30 45° Lateral



No. W30-R 45° Reducing Lateral



No. W42 Adapter Nipple (AGS Groove × Bevel)



No. W43 Adapter Nipple (AGS Groove × AGS Groove)



No. W49 Adapter Nipple (AGS Groove × OGS Groove)



No. W60 Cap



No. W50 Concentric Reducer



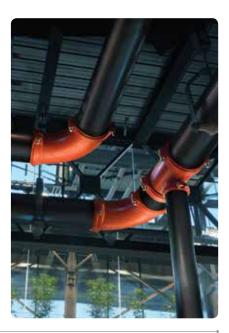
No. W51 **Eccentric** Reducer



No. W41 Flanged Adapter Nipple



No. W45R Flanged Adapter Nipple



# AGS Expansion Joint STYLE W155

### Download submittal 20.12 for complete information

- Combination of Style W77 couplings and short nipples, joined in tandem to provide increased expansion
- Sizes from DN350-DN600 | 14-24"
- For coating options, download product submittal
- For original groove sizes DN20 DN300 | ¾ 12", download submittal 09.05 for information on Style 155



# AGS Vic-300® Butterfly Valve SERIES W761

### **Download submittal 20.06 for complete information**

- Offers an easily installed choice to cumbersome, multi-bolt wafer or lug-type flanged valves
- Sizes from DN350-DN600 | 14-24"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For original groove sizes DN50-DN300 | 2-12", download submittal 08.20 for information on Series 761



**SERIES W709** 

### **Download submittal 20.07** for complete information

- Offers an easily installed choice to cumbersome, multi-bolt wafer or lug-type flanged valves
- Sizes from DN650-DN1200 | 26-48"
- Pressures up to 150 psi | 1034 kPa | 10 bar





# AGS Vic-Check® Dual Disc Valve STYLE W715

### **Download submittal 20.08** for complete information

- Utilizes a spring-assisted, dual disc design that achieves drop tight sealing
- Can be installed in both horizontal or vertical flow up positions
- Sizes from DN350-DN600 | 14-24"
- Pressures up to 230 psi | 1586 kPa | 16 bar
- For original groove sizes DN50-DN300 | 2-12",
   download submittal 08.08 for information
   on Series 716H/716 or download submittal 08.10 for information on Series 779



### **AGS Triple Service Valve Assemblies**

### **Download submittal 20.18 for complete information**

- Provides shut-off and throttling with positive mechanical memory
- Comprised of a Series W761 AGS butterfly valve and a Series W715 Vic-Check® valve
- Sizes from DN350-DN600 | 14-24"
- Pressures up to 232 psi | 1600 kPa | 16 bar
- For original groove sizes DN80–DN300 | 3–12", download submittal 08.09

Hole Cut



### **AGS Suction Diffuser**

#### **SERIES W731-D**

#### **Download submittal 20.20** for complete information

- Allows building up at a 90° angle from the pump saving valuable space in the mechanical room while still protecting the pump against cavitation
- Flanges may be machined to match most global (ANSI, DIN, GB, JIS, and AS-E) flange bolt hole patterns within the diffuser pressure rating
- Sizes from DN350-DN600 | 14-24"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For original groove sizes DN80-DN300 | 3-12", <u>download submittal 09.20</u> for information on Series 731-D



# AGS Tee Type Vic-Strainer® SERIES W730

#### **Download submittal 20.11 for complete information**

- Lighter than flanged Y-type strainers and provides straight through flow for lower pressure drop
- Sizes from DN350-DN600 | 14-24"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal
- For original groove sizes DN40-DN300 | 1½-12", download submittal 09.02 for information on Series 730



# AGS Wye Type Vic-Strainer® SERIES W732

#### Download submittal 20.19 for complete information

- Provides straight through flow for lower pressure drop
- Sizes from DN350-DN450 | 14-18"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For original groove sizes DN50-DN300 | 2-12", <u>download submittal 09.03</u> for information on Series 732

#### Victaulic® Bolted Split-Sleeve Products (VBSP)

Victaulic® offers a variety of large diameter pipe joining solutions specifically designed to meet the needs of your system.

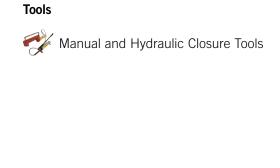
Victaulic® Bolted Split-Sleeve couplings are available in a range of unrestrained and restrained flexible designs for use on carbon steel, stainless steel, HDPE and other pipe materials.

Victaulic® Bolted Split-Sleeve couplings are designed for use on water and wastewater transmission lines as well as hydroelectric penstock lines. VBSP couplings can also provide expansion and contraction capabilities when needed.





Couplings	page
Non-Restrained Flexible Coupling for Carbon Steel Pipe (Style 230)	33
Non-Restrained Flexible Coupling for Stainless Steel Pipe (Style 230S)	34
Restrained Flexible Single-Gasket Coupling for Carbon Steel Pipe (Style 234)	34
Restrained Flexible Single-Gasket Coupling for Stainless Steel Pipe (Style 234S)	34





### **Non-Restrained Flexible Coupling** for Carbon Steel Pipe **STYLE 230**

#### **Download submittal 60.01** for complete information

- Non-restrained flexible pipe joint for water and wastewater pipelines
- Sizes from DN200-DN3600 | 8-144"
- Pressures up to 400 psi | 2758 kPa | 28 bar
- Up to 13 mm | ½" intermittent axial movement
- For coating options, download product submittal

102

# Non-Restrained Flexible Coupling for Stainless Steel Pipe

**STYLE 230S** 

#### **Download submittal 60.02** for complete information

- Non-restrained flexible pipe joint used where corrosion resistance is required
- Sizes from DN80-DN2400 | 3-96"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Up to 13 mm | ½" intermittent axial movement



# Restrained Flexible Single-Gasket Coupling for Carbon Steel Pipe STYLE 234

#### **<u>Download submittal 60.09</u>** for complete information

- Sizes from DN200 DN3000 | 8 120"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Designed for use on water transmission, force mains and penstock lines
- For coating options, download product submittal



# Restrained Flexible Single-Gasket Coupling for Stainless Steel Pipe STYLE 234S

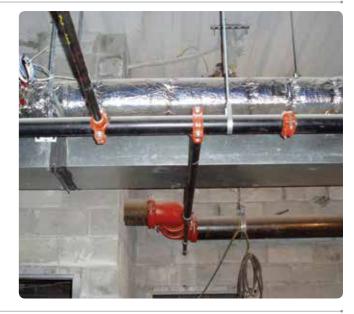
#### **Download submittal 60.10** for complete information

- Sizes from DN200 DN1500 | 8 60"
- Pressures up to 200 psi | 1379 kPa | 14 bar
- Ideal for field joint connections requiring flexibility and thrust restraint

Intro

#### **Hole Cut Systems**

Victaulic® developed the hole cut piping system concept to enable a fast and easy mid-pipe outlet solution that would not require welding. The system allows for a direct branch connection at any location where a hole can be cut in the pipe. Gaskets are molded to conform to the outer diameter of the pipe and are pressure responsive to provide a seal. Victaulic® hole cut products are mounted to the pipe using either a locating collar (Style 920 and 920N) or a toe and heel (Style 923 and 924), and provide a smooth flow area.





Outlets and Couplings	page	Tools
Mechanical-T® Outlet (Style 920/920N)	35	Vic-Tap® Hole Cutting Tools
Outlet Coupling (Style 72)	36	
Vic-Let® Strapless Outlet (Style 923)	36	
Vic-O-Well® Strapless Thermometer Outlet (Style 924)	36	



#### Approvals/Listings:













# Mechanical-T® Outlet

#### **STYLE 920/920N**

#### **Download submittal 11.02** for complete information

- Provides a direct branch connection at any location where a hole can be cut in the pipe
- Available as a tee or cross outlet with female threaded or grooved ends
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for the following: coating options; standard thread options

page

95



# **Outlet Coupling**

#### **STYLE 72**

#### **Download submittal 06.10** for complete information

- Joining device to provide an integral reducing outlet
- Sizes from DN40-DN150 | 1½-6"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for the following: coating options; standard thread options

#### Approvals/Listings:





Download publication 10.01 for complete information



# Vic-Let® Strapless Outlet STYLE 923

#### **Download submittal 11.05 for complete information**

- Provides a fast, easy pipe outlet without the need for a strap or lower housing
- Sizes from DN100-DN250 | 4-10"
- Pressures up to 300 psi | 2068 kPa | 21 bar

#### Approvals/Listings:



Download publication 10.01 for complete information



### Vic-O-Well® Strapless Thermometer Outlet STYLE 924

#### **Download submittal 11.06 for complete information**

- Provides a fast, easy connection, combining the features of a thermowell and strapless mechanical outlet
- Sizes from DN100 DN250 | 4 10"
- Pressures up to 300 psi | 2068 kPa | 21 bar

#### **Expansion Joints**

**Expansion Joints** 

Victaulic® offers a wide variety of expansion solutions to accommodate pipe movement in your system. Victaulic® expansion joints can provide up to 1069 mm | 42" of movement in a piping system. Select expansion joints allow for deflection as well as expansion and contraction capabilities. Stainless steel expansion joints are available for air systems requiring expansion compensators. Victaulic® expansion joints are available with Original Groove System (OGS), Advanced Groove System (AGS), bolted split-sleeve, and flanged ends.



Mover® Expansion Joint (Style 150)	38
Expansion Joint (Style 155)	38
AGS Expansion Joint (Style W155)	38
Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe (Style 231)	39
Non-Restrained Flexible Expansion Coupling for Stainless Steel Pipe (Style 231S)	39
Expansion Joint Coupling (Style 152A)	40

page

Hole Cut



# Mover® Expansion Joint STYLE 150

#### <u>Download submittal 09.04</u> for complete information

- Slip-type expansion joint providing up to 76 mm | 3" axial end movement
- Sizes from DN50-DN150 | 2-6"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For coating options, download product submittal



# **Expansion Joint** STYLE 155

#### **Download submittal 09.05 for complete information**

- Combination of couplings and short nipples, joined in tandem to provide increased expansion
- Style 155 grooved expansion joints are rated to the working pressure of the coupling used
- Sizes from DN20 DN300 | ¾ 12"
- For coating options, download product submittal
- For AGS sizes DN350-DN600 | 14-24", download submittal 20.12 for information on Style W155



# AGS Expansion Joint STYLE W155

#### **Download submittal 20.12** for complete information

- Combination of Style W77 couplings and short nipples, joined in tandem to provide increased expansion
- Sizes from DN350-DN600 | 14-24"
- For coating options, download product submittal
- For original groove sizes DN20-DN300 | ¾-12", <u>download submittal 09.05</u> for information on Style 155



# Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe STYLE 231

#### **Download submittal 60.03** for complete information

- Non-restrained flexible expansion joint provides up to 102 mm | 4" of axial movement
- Sizes from DN400-DN3600 | 16-144"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For coating options, download product submittal



# Non-Restrained Flexible Expansion Coupling for Stainless Steel Pipe STYLE 231S

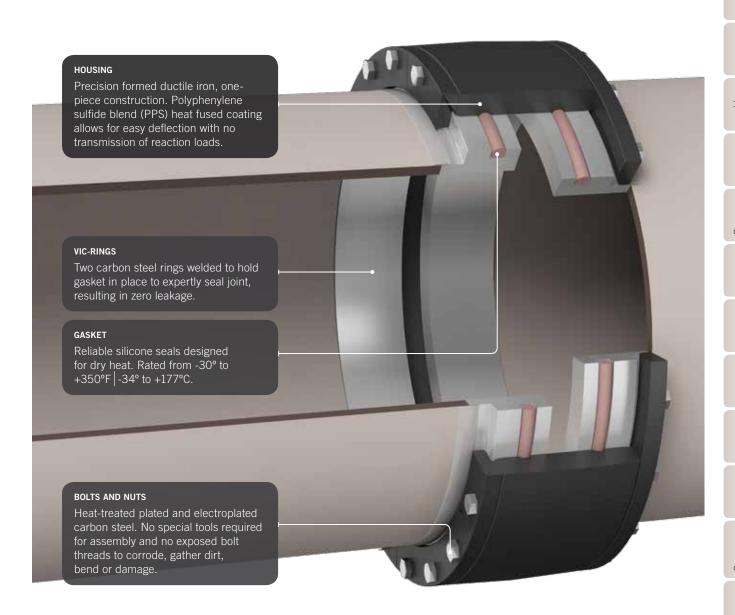
#### **Download submittal 60.04 for complete information**

- Flexible non-restrained expansion joint for aeration systems
- Up to 102 mm | 4" axial movement
- Sizes from DN80 DN2400 | 3 96"
- Pressures up to 300 psi | 2068 kPa | 21 bar

# **Expansion Joint Coupling STYLE 152A**

#### **Download submittal 09.15** for complete information

- Large diameter pulverized coal/limestone coupling with 4° of deflection capability
- Sizes from DN250-DN780 | 10-30"
- Pressures up to 50 psi | 345 kPa | 3 bar



#### Plain End Systems for Carbon Steel

The Victaulic® plain end piping method is ideal for maintenance and repairs as well as new systems such as roof drains, slurries, tailings and oil field services. Roust-A-Bout® couplings and plain end fittings are UL and ULC Listed for fire protection services.

Victaulic® plain end couplings are primarily designed for use on standard weight steel pipe (Schedule 40), but may be used on light wall steel or other metallic pipe, such as aluminum or stainless steel. They are not intended for use on plastic pipe, plastic-coated pipe or brittle pipe, such as asbestos cement or cast iron. Nor are they intended for use on pipe with a surface hardness greater than 150 Brinell.

Roust-A-Bout® Plain End Coupling (Style 99)







41



### Roust-A-Bout® Plain End Coupling **STYLE 99**

#### **Download submittal 14.02** for complete information

- Grips to provide a strong component for joining plain and beveled end pipe and fittings
- Not designed for use with plastic pipe
- Sizes from DN25-DN450 | 1-18"
- Pressures up to 750 psi | 5171 kPa | 52 bar
- For coating options, download product submittal

42



### **Fittings**

#### **Download submittal 14.04** for complete information

- Compatible with Style 99 Roust-A-Bout® coupling
- For coating options, download product submittal



No. 10P 90° Elbow



No. 11P 45° Elbow



No. 100P 90° Long Radius Elbow



No. 110P 45° Long Radius Elbow



No. 20P Tee



No. 35P Cross



No. 33P True Wye



No. 61P Steel Bull Plug



No. 25P Reducing Tee



No. 30P 45° Lateral



No. 53P Swaged Nipple



No. 40P Adapter Nipple (Plain End × Thread)



No. 42P Adapter Nipple (Plain End × Bevel)



No. 43P Adapter Nipple (Plain End × Groove)

#### **Stainless Steel Systems**

The Victaulic® grooved system for stainless steel pipe offers a fast, easy and reliable method for joining ANSI and ISO wall thickness stainless steel pipe. For light wall and thin wall stainless steel pipe, specially designed RX rolls are used to create the proper groove profile required for installing Victaulic® products (download submittal 17.01 for more detail.)

The revolutionary Vic-Press® for schedule 10S system provides quick, easy and safe installation and maintenance. It has the integrity to stand up to the demands of industrial applications by providing a positive mechanical interlock between the pipe and the fitting. The Vic-Press® for Schedule 10S press-to-connect system joins off-the-shelf ASTM A-312 stainless steel pipe.

In addition to the products listed below, the following Victaulic products may also be used on Stainless Steel pipe. Refer to the individual product submittals for additional information.

- Style 07 Rigid Coupling
- Style HP-70 Rigid Coupling
- Style 75 Flexible Coupling
- Style 77 Flexible Coupling
- Style 171 Flexible Coupling
- Style 78 Snap Joint Coupling
- Style 791 Boltless Coupling
- Style 741 Flange Adapter
- Style 743 Flange Adapter

Couplings	page	Fittings	page
Type 316 Rigid Coupling (Style 489)	44	ANSI Schedule 10S Fittings	47
Duplex Rigid Coupling (Style 489DX)	44	ANSI Schedule 40S Fittings	48
Type 316 Flexible Coupling (Style 77S)	45		
Duplex Flexible Coupling (Style 77DX)	45	Valves	page
Type 316 Lightweight Flexible Coupling (Style 475)	45	Butterfly Valve (Series 763)	49
Duplex Lightweight Flexible Coupling (Style 475DX)	46	Vic-300 <sup>®</sup> MasterSeal <sup>™</sup> Stainless Steel Butterfly Valve (Series 461)	49
Rigid Coupling (Style 89)	46	Swinger® Check Valve (Series 712S)	49
		Vic-Ball® Valve (Series 726S)	50
Adapters	page	Vic-Ball® Valve (Series 726D)	50
		Three-Piece Vic-Press® Ball Valve	
Type 316 Vic-Flange® Adapter (Style 441)	46	(Series P569 Groove × Groove)	50
		MTS Plug Valve (Series 465)	51

Regardless of the coupling selected to join stainless steel pipe, the Victaulic® pressure responsive elastomeric gasket seals the joint. Stainless steel housings provide the highest level of protection against external corrosion, while ductile iron couplings can be used to join stainless steel pipe in non-corrosive environments. For pressure ratings and end loads for ductile iron couplings on stainless steel pipe, download submittal 17.09.

Vic-Press®	page
For Schedule 10 Stainless Steel 304	52
For Schedule 10 Stainless Steel 316	53

OGS

Index







# Type 316 Rigid Coupling STYLE 489

#### **Download submittal 17.25 for complete information**

- Greatly reduces linear or angular movement and is useful for valve connections where rigidity is required
- Sizes from DN40-DN300 | 1½-12"
- Pressures up to 600 psi | 4137 kPa | 41 bar
- For the duplex stainless steel coupling, download submittal 17.33 for Style 489DX

#### Approvals/Listings:



Download publication 10.01 for complete information



# **Duplex Rigid Coupling** STYLE 489DX

#### **Download submittal 17.33** for complete information

- Greatly reduces linear or angular movement and is useful for valve connections where rigidity is required
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 1200 psi | 8274 kPa | 83 bar
- Optional super duplex stainless steel housing
- For the Type 316 stainless steel coupling, download submittal 17.25 for Style 489



### Type 316 Flexible Coupling **STYLE 77S**

#### **Download submittal 17.03 for complete information**

- Provides a rugged mechanical joint for grooved end stainless steel piping systems
- Sizes from DN200-DN450 | 8-18"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- For the duplex coupling in sizes DN20-DN150 | 34-6", download submittal 17.20 for information on Style 77DX



### **Duplex Flexible Coupling** STYLE 77DX

#### **Download submittal 17.20 for complete information**

- Designed to provide a rugged mechanical joint for roll grooved stainless steel systems
- Sizes from DN20-DN150 34-6"
- Pressures up to 1200 psi | 8274 kPa | 83 bar
- Optional super duplex stainless steel housing
- For Type 316 stainless steel coupling in sizes DN200-DN450 | 8-18", download submittal 17.03 for information on Style 77S

#### Approvals/Listings:



Download publication 10.01 for complete information



#### Approvals/Listings:



Download publication 10.01 for complete information

## Type 316 Lightweight Flexible Coupling **STYLE 475**

#### **Download submittal 17.14 for complete information**

- Designed to provide a durable mechanical joint for grooved end stainless steel piping systems
- Sizes from DN25-DN100 | 1-4"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- For the duplex coupling, download submittal 17.34 for information on Style 475DX

### **Duplex Lightweight Flexible Coupling** STYLE 475DX

#### **Download submittal 17.34 for complete information**

- Designed to provide a durable mechanical joint for grooved end stainless steel piping systems
- Sizes from DN25-DN100 | 1-4"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Optional super duplex stainless steel housing
- For the Type 316 stainless steel coupling, download submittal 17.14 for Style 475



#### Approvals/Listings:



Download publication 10.01 for complete information



# **Rigid Coupling**

STYLE 89

#### **Download submittal 17.24 for complete information**

- Greatly reduces linear or angular movement and is useful for valve connections where rigidity is required
- Galvanized coated ductile iron coupling
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 1200 psi | 8274 kPa | 83 bar
- For other ductile iron couplings to use on stainless steel pipe download submittal 17.09

### Vic-Flange® Adapter **STYLE 441**

#### **Download submittal 17.27 for complete information**

- ANSI Class 150 and ISO PN10/16
- Constructed from Grade CF8M stainless steel, making it ideal for externally corrosive environments
- Sizes from DN50-DN150 2-6"
  - Pressures up to 275 psi | 1896 kPa | 19 bar















# **ANSI Schedule 10S Fittings**

#### **Download submittal 17.16** for complete information

- Grooved ends eliminate pipe end preparation for the fittings
- Sizes from DN20-DN300 | 34-12"
- Available in Type 304L or 316L
- **Download submittal 17.27** for flange bolt hole pattern options

### Approvals/Listings:



Download publication 10.01 for complete information



No. 410 SS 90° Elbow



No. 411 SS 45° Elbow



No. 412 SS



22½° Elbow



No. 413 SS 11¼° Elbow



No. 420 SS Tee



No. 425 SS Grooved Branch Reducing Tee



No. 430 SS 45° Lateral



No. 433 SS True Wye



No. 435 SS Cross



No. 442 SS Adapter Nipple (Groove × Bevel)



No. 443 SS Adapter Nipple (Groove × Groove)



No. 450 SS Concentric Reducer



No. 451 SS Eccentric Reducer



No. 460 SS Cap



No. 441N **DN** Flanged Adapter Nipple

Index



## **ANSI Schedule 40S Fittings**

#### **Download submittal 17.16** for complete information

- Grooved ends eliminate pipe end preparation for the fittings
- Sizes from DN20-DN300 | 34-12"
- Available in Type 304L or 316L
- Designed for higher pressure systems
- Download product submittal for standard thread options



No. 410H SS 90° Elbow



No. 411HSS 45° Elbow



**No. 412H SS** 22½° Elbow



**No. 413H SS** 11<sup>1</sup>/<sub>4</sub>° Elbow



No. 420H SS Tee



No. 425HSS Grooved Branch Reducing Tee



No. 430H SS 45° Lateral



No. 433HSS True Wye



No. 435HSS Cross



No. 440H SS Adapter Nipple (Groove × Thread)



No. 442H SS Adapter Nipple (Groove × Bevel)



No. 443HSS Adapter Nipple (Groove × Groove)



No. 450H SS Concentric Reducer



No. 451HSS Eccentric Reducer



No. 60 SS Cap



### **Butterfly Valve**

#### **SERIES 763**

#### **Download submittal 17.23** for complete information

- The disc is constructed of stainless steel and provides a bubble-tight shut-off at full rated pressure
- Available with a tamper resistant lever handle or a gear operator
- Sizes from DN50-DN250 | 2-10"
- Pressures up to 300 psi | 2068 kPa | 21 bar



# Vic-300<sup>®</sup> MasterSeal<sup>™</sup> Stainless Steel Butterfly Valve SERIES 461

#### **Download submittal 17.40** for complete information

- Designed for bi-directional, dead end services to full working pressure
- Available without handle, with gear operator, with lever lock handle and memory stop or with 10-position handle and memory stop
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 300 psi | 2068 kPa | 21 bar



# Swinger® Check Valve SERIES 712S

#### **Download submittal 17.08** for complete information

- The large closure access bonnet permits easy access for in-line service
- Designed for use with standard Victaulic® grooved fittings and couplings for fast installation on inlet and outlet ports
- Available in size DN50 | 2"

# Vic-Ball® Valve

#### **SERIES 726S**

#### **Download submittal 17.22 for complete information**

- High pressure Type 316 stainless steel standard port ball valve with grooved ends
- Sizes from DN40-DN150 | 1½-6"
- Pressures up to 1000 psi | 6895 kPa | 69 bar



### Vic-Ball® Valve

#### **SERIES 726D**

#### **Download submittal 17.28 for complete information**

- High pressure super duplex stainless steel standard port ball valve with grooved ends
- Sizes from DN50-DN150 2-6"
- Pressures up to 1200 psi | 8274 kPa | 83 bar



### Three-Piece Vic-Press® Ball Valve **SERIES P569**

#### **Download submittal 18.14** for complete information

- The three-piece swing-out design permits easy in-line maintenance
- Sizes from DN15-DN50 \ \\ \frac{1}{2}-2\''
- Pressures up to 400 psi | 2758 kPa | 28 bar
- For the entire Vic-Press® line of products, see pgs. 52 and 53



# MTS Plug Valve

#### **SERIES 465**

#### **Download submittal 17.36** for complete information

- Typically used in reverse osmosis desalination plants for on/off and control services
- Available without operator or with manual, pneumatic, hydraulic and electric actuators
- Sizes from DN50-DN450 | 2-18"
- Pressures up to 1450 psi | 9997 kPa | 100 bar

Tools



## Vic-Press® for Schedule 10S Stainless Steel Type 304

#### Download submittal 18.12 for complete information

- Fast, easy, reliable way to join small diameter Schedule 5S or 10S Type 304/304L stainless steel
- Meets ASME requirements for ANSI Class 150 systems
- Sizes from DN15-DN50 | ½-2"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for standard thread options and flange bolt hole pattern options

#### Approvals/Listings:



Download publication 10.01 for complete information



Style P597 Standard Coupling  $(P \times P)$ 



Style P586 **Short Tangent** 90° Elbow  $(P \times P)$ 



Style P542 90° Street Elbow  $(P \times T)$ 



Style P591 45° Elbow  $(P \times P)$ 



Style P543 45° Street Elbow  $(P \times T)$ 

#### **Connection Key**

**P** Press

**F** Female Thread

M Male Thread

T Plain End

**L** Flanged

**G** Grooved



Style P592 Tee  $(P \times P \times P)$ 



Style P588 Tee with Threaded Branch  $(P \times P \times F)$ 



Style P593 Tee with Reducing Branch  $(P \times P \times P)$ 



Style P596 Male Threaded Adapter  $(P \times M)$ 



Style P599 Female Threaded Adapter  $(P \times F)$ 



Style P561 Weld Adapter  $(P \times T)$ 



Style P584 Threaded Union  $(P \times P)$ 



Style P595 Flange Adapter  $(P \times L)$ 



Style P565 Van Stone Flange Adapter  $(P \times L)$ 



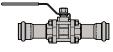
Style P587 Transition Nipple  $(G \times T)$ 



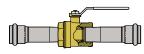
Style P594 Concentric Reducer  $(P \times P)$ 



End Cap



Style P569 Stainless Steel Ball Valve  $(P \times P \text{ shown})$  $(G \times G \text{ and } P \times G \text{ also available})$ 



Style P589 Brass Body Ball Valve  $(P \times P)$ 



Index



## Vic-Press® for Schedule 10S Stainless Steel Type 316

#### Download submittal 18.11 for complete information

- Fast, easy, reliable way to join small diameter Schedule 5S or 10S Type 316/316L stainless steel
- Meets ASME requirements for ANSI Class 150 systems
- Sizes from DN15-DN50 \ \frac{1}{2}-2"
- Pressures up to 500 psi | 3447 kPa | 34 bar
- Download product submittal for standard thread options and flange bolt hole pattern options



Style P507





Style P568 Short Tangent 90° Elbow  $(P \times P)$ 



Style P562 90° Street Elbow  $(P \times T)$ 



Style P571 45° Elbow  $(P \times P)$ 



Style P563 45° Street Elbow  $(P \times T)$ 



**P** Press

F Female Thread

M Male Thread

T Plain End

**L** Flanged

**G** Grooved



Style P508 Slip Coupling  $(P \times P)$ 



Style P572 Tee  $(P \times P \times P)$ 



Style P578 Tee with Threaded Branch  $(P \times P \times F)$ 



Style P573 Tee with Reducing Branch  $(P \times P \times P)$ 



Style P576 Male Threaded Adapter  $(P \times M)$ 



Style P579 Female Threaded Adapter  $(P \times F)$ 



Style P585 Threaded Union  $(P \times P)$ 



Style P575 Flange Adapter  $(P \times L)$ 



Style P566 Van Stone Flange Adapter  $(P \times L)$ 



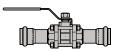
Style P577 Transition **Nipple**  $(G \times T)$ 



Style P574 Concentric Reducer  $(P \times P)$ 

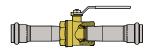


End Cap



Style P569

Stainless Steel Ball Valve  $(P \times P \text{ shown})$  $(G \times G \text{ and } P \times G \text{ also available})$ 



Style P589 Brass Body Ball Valve  $(P \times P)$ 



OGS

AGS

VBSP

Hole Cut

pansion Joints

Plain End

nless eel Copper

> Shoulder Steel

Hydronic Balancing

HDPE

Aquamine® PVC

Grooved PVC

FRP

000

Gaskets/ als/O-Rings

Design

Index

#### **Copper Systems**

The Victaulic® original grooved copper system offers a full line of couplings, fittings and valves for systems rated up to 300 psi  $\mid$  2068 kPa  $\mid$  21 bar, as well as a line of roll grooving tools for on-site grooving. The Victaulic® grooved copper system is cold-formed, eliminating the need for soldering or brazing. The copper connection system joins DN50–DN200  $\mid$  2–8" copper.



For CTS standard products for copper tubing download submittal 22.01

For Australian Standard (AS) products for copper tubing download submittal 22.10

Couplings page	Dielectric Waterway Fitting page
QuickVic® Rigid Coupling (Style 607-CTS) 56	Dielectric Waterway Fitting (Style 647-CTS) 57
Rigid Coupling (Style 606-AS) 56	
Rigid Coupling (Style 606-EN1057) 56	Fittings page
	Fittings for Copper 58
Adapters page	
Vic-Flange® Adapter for Copper (Style 641-CTS) 57	Valves page
Vic-Flange® Adapter for Copper	Butterfly Valve for Copper (Series 608N-CTS) 59
(Style 641-EN1057) 57	Butterfly Valve for Copper (Series 608N-AS) 59
	Butterfly Valve for Copper (Series 608N-EN1057) 59
	Outlets page
	Mechanical-T® Bolted Branch Outlet and Cross Assemblies for Copper (Style 622-CTS) 59

**VBSP** 

# Copper Systems QuickVic® Rigid Coupling

STYLE 607-CTS

#### **Download submittal 22.13** for complete information

- Installation-Ready<sup>™</sup> design
- Designed for use on K, L, M or DWV copper tubing
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 300 psi | 2068 kPa | 21 bar
- Optional galvanized housing coating

#### Approvals/Listings:





Download publication 10.01 for complete information



#### Approvals/Listings:



**Download publication 10.01** for complete information

### **Rigid Coupling**

STYLE 606-AS STYLE 606-EN1057

<u>Download submittal 22.10</u> for Style 606-AS <u>Download submittal 22.11</u> for Style 606-EN1057

- Eliminates brazing or soldering
- Style 606-AS available in sizes from DN50-DN200 | 2-8"
- Style 606-EN1057 available in sizes from DN50-DN150 | 2-6"
- Pressures up to 355 psi | 2448 kPa | 24 bar
- WRAS approved gasket

For CTS standard products for copper tubing download submittal 22.01

For Australian Standard (AS) products for copper tubing download submittal 22.10

HDPE



## Vic-Flange® Adapter for Copper

STYLE 641-CTS STYLE 641-EN1057

Download submittal 22.03 for Style 641-CTS
Download submittal 22.11 for Style 641-EN1057

- Sizes from DN50-DN150 | 2-6"
- Pressures up to 300 psi | 2068 kPa | 21 bar

#### Approvals/Listings:





Download publication 10.01 for complete information





# **Dielectric Waterway Fitting STYLE 647-CTS**

#### **Download submittal 22.21** for complete information

- Used to join carbon steel or stainless steel pipe to copper tubing with one fitting
- Available in groove × groove, groove × thread or thread × thread
- Sizes from DN15-DN100 | ½-4"
- Pressures up to 300 psi | 2068 kPa | 21 bar

For CTS standard products for copper tubing download submittal 22.01

For Australian Standard (AS) products for copper tubing download submittal 22.10

HDPE





#### Approvals/Listings:







Download publication 10.01 for complete information

### **Fittings for Copper**

Download submittal 22.04 for CTS fittings

Download submittal 22.10 for AS fittings

Download submittal 22.11 for EN1057 fittings

- Full-flow, standard radius copper fittings are supplied as either roll grooved wrought copper or bronze fittings
- Designed for installation in copper systems using either a Style 607 rigid coupling, Style 606 rigid coupling, or a Style 641 Vic-Flange® adapter
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 300 psi | 2068 kPa | 21 bar



No. 610-CTS No. 610-AS No. 610-EN1057 90° Elbow



No. 611-CTS No. 611-AS No. 611-EN1057 45° Elbow



No. 620-CTS No. 620-AS No. 620-EN1057



× Groove)

No. 625-CTS No. 625-EN1057 Reducing Tee (Groove × Groove



No. 626-CTS No. 626-EN1057 Reducing Tee (Groove × Groove × Cup)



No. 650-CTS No. 650-AS No. 650-EN1057

Concentric Reducer (Groove × Groove)



No. 652-CTS No. 652-EN1057 Concentric Reducer

(Groove  $\times$  Cup)



No. 660-CTS No. 660-AS No. 660-EN1057 Cap For CTS standard products for copper tubing download submittal 22.01

For Australian Standard (AS) products for copper tubing download submittal 22.10

### **Butterfly Valve for Copper**

SERIES 608N-CTS SERIES 608N-AS SERIES 608N-EN1057

Download submittal 22.14 for 608N-CTS
Download submittal 22.10 for 608N-AS
Download submittal 22.11 for 608N-EN1057

- Joins quickly to copper tube by utilizing Style 607 or Style 606 couplings
- Sizes from DN65-DN150 | 2½-6"
- Pressures up to 300 psi | 2068 kPa | 21 bar



# Mechanical-T® Bolted Branch Outlet and Cross Assemblies for Copper

STYLE 622-CTS

#### Download submittal 22.12 for complete information

- Provides a direct branch connection at any location on K, L and M copper tubing
- Sizes from DN65-DN100 | 2½-4"
- Pressures up to 300 psi | 2068 kPa | 21 bar

#### Approvals/Listings:





Download publication 10.01 for complete information

For CTS standard products for K, L, M and DWV copper tubing download submittal 22.01

For Australian Standard (AS) products for copper tubing download submittal 22.10

OGS

AGS

VBSP

Hole Cut

Expansion Joints

Plain End

tainless

Copper

d Hydron Balancii

HDPE

Aquamine'

Grooved PVC

FRP

Tools

Gaskets/ Seals/O-Ring

Design

#### **Shouldered Steel System**

The line of products for shouldered systems includes couplings, fittings and valves. For systems from DN50-DN200 | 2-8", Style SC77 coupling provides a flexible joint for systems with pressures up to 580 psi | 4000 kPa | 40 bar. Shouldered fittings are ready to install and match the pressure ratings of Style SC77 coupling.

Available only in Australia and South Africa.

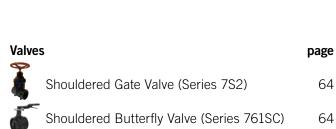
Transition Coupling for HDPE to Shouldered Steel (Style SC998)





Couplings	page	Fittings	page
Flexible Coupling for Shouldered Steel Pipe (Style SC77)	62	Shouldered Steel Fittings	63







# **Flexible Coupling for Shouldered Steel Pipe**

**STYLE SC77** 

#### **Download submittal 16.10** for complete information

- Sizes from DN50-DN200 | 2-8" (pipe 0.D.)
- Pressures up to 580 psi | 4000 kPa | 40 bar
- Supplied standard with galvanized coating
- For other coating options, download product submittal



## **Transition Coupling for HDPE** to Shouldered Steel

STYLE SC998

#### **Download submittal 19.08** for complete information

- Sizes available to join 63-110 mm HDPE pipe to DN50-DN100 | 2-4" shouldered pipe (pipe O.D.)
- Pressures rating conforms to the maximum rating of the pipe
- For coating options, download product submittal





# **Shouldered Steel Fittings**

#### **Download submittal 07.06** for complete information

- Shouldered end fittings to be installed using Victaulic couplings for shouldered pipe
- Sizes from DN50-DN200 | 2-8" (pipe O.D.)
- Pressure ratings conform to ratings of installed coupling
- Fittings supplied standard with galvanized coating



No. SC10 90° Elbow



No. SC11 45° Elbow



No. SC20 Tee



No. SC25 Reducing Tee



No. SC30 45° Lateral



No. SC30-R 45° Reducing Lateral



No. SC33 True Wye



No.SC35 Cross



No. SC50 Concentric Reducer



No. SC60 Cap



No. SC45F Flat Face Flanged Adapter Nipple



No. SC45R Raised Face Flanged Adapter Nipple

# **Shouldered Gate Valve**

#### **SERIES 7S2**

#### **Download submittal 08.43 for complete information**

- Non-Rising Stem (NRS) gate valve designed in accordance with AS-2638.2
- Sizes from DN80-DN200 | 3-8" (pipe O.D.)
- Pressures up to 350 psi | 2413 kPa | 24 bar



### **Shouldered Butterfly Valve SERIES 761SC**

#### **Download submittal 08.31 for complete information**

- Designed for bi-directional, dead end services to full working pressure
- Available bare, with gear operator, with lever lock handle and memory stop or with 10-position handle and memory stop
- Sizes from DN50-DN200 | 2-8" (pipe 0.D.)
- Pressures up to 300 psi | 2068 kPa | 21 bar

HDPE

#### **Hydronic Balancing Solutions**

Victaulic® provides balancing products that allow contractors to improve productivity on the jobsite, and allow engineers to accurately control building temperatures, while optimizing energy efficiency. Balancing valves enhance comfort and cut energy costs through precise control of building temperature.

Only available in Europe, Middle East, Africa and India.





# Oventrop Double Regulating and Commissioning Valve

**SERIES 7890** 

#### Download submittal 08.70 for complete information

- Valve performs presetting, measuring, isolating, filling and draining system functions
- Preset memory position to achieve system balance
- Sizes from DN65 DN300 | 2½ 12"
- Pressure dependant upon coupling selection



# **Grooved End Metering Station** (Orifice Type)

**SERIES 7340** 

#### **Download submittal 08.71 for complete information**

- Accurate, economical method for obtaining flow measurements
- Maintenance free design
- Sizes from DN65-DN300 | 2½-12"

OGS

AGS

VBSP

Hole Cut

ypansion

Plain End

stainless

Copper

dered Hy

HDPE

Aquamine

Grooved PVC

FRP

Tools

Gaskets/

Design

#### **HDPE Systems**

The Victaulic® HDPE system provides easy incorporation of standard IPS fittings and valves directly to HDPE pipe using the HDPE-to-grooved transition coupling. The Victaulic® system permits more accurate estimates and assures on-time modification and future retrofit. Unique mechanical features permit a wide variety of applications for most HDPE piping systems. It combines the advantages of fast installation, design integrity and reliable operation.





Couplings page

Plain End Coupling for HDPE Pipe (Style 995N)

67

**Adapters** 

Vic-Flange® Plain End Adapter for HDPE Pipe (Style 994) 68

page

HDPE to Steel Transition Coupling (Style 997) 68



#### Approvals/Listings:

**⟨FM**⟩

Download publication 10.01 for complete information

# Plain End Coupling for HDPE Pipe STYLE 995N

#### **Download submittal 19.02 for complete information**

- Coupling teeth create 360° grip of HDPE pipe for secure seal
- Sizes from DN50-DN500 | 2-20"
- Pressure rating conforms to the maximum rating of the pipe
- For coating options and available metric sizes, download product submittal

Hole Cut



# **HDPE to Steel Transition Coupling STYLE 997**

#### **Download submittal 19.03** for complete information

- Fastest way to join HDPE to IPS pipe
- Sizes from DN50-DN300 | 2-12"
- Pressure rating conforms to the maximum rating of the pipe
- For coating options, download product submittal

#### Approvals/Listings:



Download publication 10.01 for complete information



#### Approvals/Listings:



**Download publication 10.01** for complete information

# Vic-Flange® Plain End Adapter for HDPE Pipe

**STYLE 994** 

- Permits direct connection of ANSI Class 125 and 150 flange components into HDPE systems
- Sizes from DN100-DN200 | 4-8"
- Pressure rating conforms to the maximum rating of the pipe
- For coating options, download product submittal

#### Aquamine® PVC System

Victaulic® Aquamine® Reusable PVC piping system offers a complete line of high impact, resistant, reusable pipe, fittings, valves and specialty items. This product line is ideal for a wide variety of water services due to its high impact resistant PVC pipe and synthetic rubber o-rings that provide chemical resistance. The spline assembly used in Victaulic® Aquamine® PVC piping uniquely engages into the grooves of both the coupling and the pipe. The thickened pipe end provides joint reinforcement and security.



Couplings	page	Fittings and Pipe	page
Aquamine® Plain End Coupling (Series 2970	) 69	Aquamine® Fittings	71
Aquamine® Transition Coupling for PVC to HDPE (Series 2971)	70	Aquamine® Pipe (Series 2900)	72
Aquamine® Transition Coupling for PVC to Grooved Steel (Series 2972)	70	Valves	page
		Aquamine® Ball Valve (Series 2921)	72
		Aquamine® Butterfly Valve (Series 2950)	72



# Aquamine® Plain End Coupling SERIES 2970

- Repair coupling for PVC systems; no pipe preparation required
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 350 psi | 2413 kPa | 24 bar

# **Aquamine® Transition Coupling for PVC to HDPE**

**SERIES 2971** 

#### <u>Download submittal 50.05</u> for complete information

- Provides convenient transition from PVC to HDPE without need for special adapters
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 350 psi | 2413 kPa | 24 bar



# Aquamine® Transition Coupling for PVC to Grooved Steel

**SERIES 2972** 

#### **Download submittal 50.06 for complete information**

- Provides convenient transition from PVC to grooved steel without need for special adapters
- Sizes from DN50-DN200 | 2-8"
- Pressures up to 350 psi | 2413 kPa | 24 bar

Intro

Series 2904

 $(ALF \times ALF)$ 

Series 2910

 $(ALM \times ALM)$ 

Series 2917

90° Elbow

Coupling

Tee



 $(NPT-F \times NPT-F \times NPT-F)$ 



Series 2940 **Outlet Fitting**  $(ALM \times ALM \times$ NPT-F)

### **Aquamine® Fittings**

#### **<u>Download submittal 50.01</u>** for complete information

- Variety of straight and reducing fittings
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 350 psi | 2413 kPa | 24 bar



Series 2905 Coupling (ALF×SCF)



Series 2912 45° Long  $(ALM \times ALM)$ 

Series 2918

Reducing Tee



Series 2906 Coupling  $(ALM \times PEM)$ 



Series 2913 90° Sweep  $(ALM \times ALM)$ 

Series 2919

Reducer



Series 2907 Coupling  $(ALM \times VIC)$ 



Series 2914 45° Sweep  $(ALM \times ALM)$ 



Series 2908 Coupling  $(ALM \times NPT-M)$ 



Series 2909 Coupling  $(PEM \times NPT-M)$ 



Series 2915 End Cap (ALM)



Series 2916 Transition **Slagi**  $(ALM \times FLG)$ 



Series 2920 Reducer  $(ALM \times ALM \times ALM)$   $(ALM \times ALM \times ALM)$   $(ALF \times ALM)$  $(ALM \times SCF)$ 



Series 2930 **Outlet Coupling**  $(ALF \times ALF \times NPT-F)$ 

#### **Connection Key**

**ALF** Female End **ALM** Male End

FLG Flange End

**SCF** Solvent Cement Female End

**PEM** Plain End Male

VIC Victaulic® Standard Groove End

**NPT-F** National Pipe Taper Thread Female

**NPT-M** National Pipe Taper Thread Male



### Aquamine® PVC Pipe

#### **SERIES 2900**

#### **Download submittal 50.01** for complete information

- PVC 1120 Type 1, grade 1 (class 12454) conforming to ASTM D-1784 and ASTM D-2241
- Sizes from DN50-DN300 | 2-12"
- Pressures up to 350 psi | 2413 kPa | 24 bar
- For Aquamine® grooving tools, see pg. 94



# Aquamine® Ball Valve SERIES 2921

#### **Download submittal 50.01 for complete information**

- Available with a lever handle or a square nut
- Sizes from DN50-DN150 | 2-6"
- Pressures up to 100 psi | 690 kPa | 7 bar



# Aquamine® Butterfly Valve SERIES 2950

- Provided with a lever handle for easy on-off operation
- Sizes from DN50-DN150 | 2-6"
- Pressures up to 250 psi | 1724 kPa | 17 bar

#### **Grooved PVC System**

Before the Victaulic® groove system, joining PVC pipe was time consuming and difficult. Weather conditions and curing times delayed the completion of glued or solvent cement joined PVC systems.

Victaulic® groove products assemble PVC pipe joints in a matter of minutes. A groove can be roll or cut grooved into the PVC pipe. Mechanical couplings require just two bolts and nuts and are used to join the pipe ends while also providing a union at every joint.

The following Victaulic® products may also be used on PVC pipe. Refer to the individual product submittals for additional information.

- Style 75 Flexible Coupling
- Style 77 Flexible Coupling
- Style 78 Snap Joint Coupling
- Style 791 Boltless Coupling
- Style 741 Flange Adapter
- Style 743 Flange Adapter
- Style HP-70 Rigid Coupling





# Composite Flexible Coupling STYLE 171

- For use where corrosive conditions exist
- Designed for use on reverse osmosis systems
- For use on roll/cut grooved PVC
- Sizes from DN40-DN100 | 1½-4"
- Pressures up to 150 psi | 1034 kPa | 10 bar
- For stainless steel and FRP applications, contact Victaulic®

#### FRP System

The Victaulic® fiberglass-reinforced plastic piping solution offers more efficient installations and is ideal for most applications that currently use butt and wrap to join FRP/GRP pipe. The Style 296-A is rated for pressures up to 150 psi | 1034 kPa | 10 bar and the FlushSeal® gasket ensures a smooth flow path.

The Style 296-A is used on a wide variety of applications. Pipe ends are built-up to accommodate AGS grooves that are used to engage the coupling on the pipe.







# **Coupling for Fiberglass Reinforced Plastic Pipe**

**STYLE 296-A** 

- Designed to create a rigid pipe joint without any special tools while maintaining existing support requirements
- Can be installed in any weather
- No curing time required
- Sizes from DN25 DN300 | 1 12"
- Pressures up to 150 psi | 1034 kPa | 10 bar

#### **Pipe Preparation Tools**

Victaulic® is the world's leading developer of pipe preparation tools. These tools simplify pipe end preparation and are available for pipe sizes ranging from DN15 | ½" up to DN1800 | 72".

Victaulic® tools are available for manual use, field use and fab shop environments. As with our pipe joining technologies, Victaulic® tools make pipe end preparation faster, easier and safer.

Additionally, Victaulic® offers plastic groovers, hole cutting, pipe cut-off, pressing tools, VBSP closure tools and a variety of accessories.

Tools are shipped with standard rolls included.



Field Portable Roll Grooving Tools	page	Plant/Shop Fabrication Roll Grooving Tools	page
VE12	77	₩ VE268	86
VE26	77	VE414MC	87
VE26/46 Power Drive Kit	78	₩ VE460	88
VE46	78	<u></u> VE872	89
VE226	79		
VE226 Power Drive Kit	79	Field Manual and Motorized Cut Grooving Tools	page
		VG28GD, VG28GD-ABR, VDG26GD	90
Field Fabrication Roll Grooving Tools	page	VG824, VG824DG, VG824-ABR, VG828	91
VE106/VE107	80	VG	92
VE272SFS	81		
TVE270FSD/VE271FSD	82	Plastic Groovers	page
VE416FS	83	VPG26	93
TVE416FSD/VE417FSD	84	<b>VPG824</b>	93
YE450FSD	85		

For grooving stainless steel, download submittal 17.01.



### **Pipe Preparation Tools**





Aquamine® Grooving Tools	page	Tool Accessories	page
APG	94	VPD752	97
		Power Mule II	98
Hole Cutting Tools	page	VAPS112	98
₩ HCT908	94	VAPS224	99
VHCT900	95	VAPS1672	99
VIC-TAP® II	95	XAPS270	100
		PT101/PT102	101
Pipe Cut-Off Tools	page	. –	
VCT1 Manual	96	Closure Tools	page
VCT2 Automatic	96	Style 809 Ring Clamps	101
		VBSP Closure Tools	102
Vic-Press® Tools	page		
PFT510	97	Fabrication Cell	page
		VAP131	103
		VAPS 131R	103
		VAPS 131F	104

VAPS 131T

104



Tool Ratings — I	Maximum Capacity 1	Pipe Size (DN in)/Schedule								
Model	Pipe Material	20 3⁄4	25 1	32 1¼	40 1½	50 2				
	Steel	5-10 5-40								
\/[12	Stainless		40S							
VE12	Aluminum <sup>2</sup>	5-10	5-40							
	PVC Plastic			4	0					
VE12SS	Lt. Wall SS		5S –	5S – 10S						

- Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by <u>downloading submittal 24.01</u>.
- <sup>2</sup> 6061-T4 or 6063-T4 alloy must be used.

# Field Portable Roll Grooving Tools **VE12 GROOVE IN-PLACE**

#### **Download submittal 24.01** for complete information

- Tool is manually operated using the supplied crank
- Enhanced tracking rolls allow bi-directional grooving
- Power Requirements: None
- Weight: 8 kg | 17 lbs.

Ratings — I	Maximum Capacity 1	F	Pipe Si	ze (DN	in)/S	chedul	е		
Model	Pipe Material	50 2	60 2½	80     100     125     150       3     4     5     6					
VESCE	Steel	5 -	5-40 5-10						
VE203	VE26S Stainless	40S Only							
VE26C	Copper		K, L	L, M, DWV, EN1057					
VE26AC	Copper			Α, Ι	3, D				
\/E26B	Aluminum <sup>2</sup>	5-	-40	5-10					
VE26P	PVC Plastic			40					
VE26SS	Lt. Wall SS	5S-10S							

- Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.
- <sup>2</sup> 6061-T4 or 6063-T4 alloy must be used.

# Field Portable Roll Grooving Tools VE26 GROOVE IN-PLACE

- Tool is manually operated using the supplied crank
- Enhanced tracking rolls allow bi-directional grooving
- Optional power drive adapter kit available to alternately groove pipe using a Ridgid\* 300 power drive or VPD752
- Power Requirements: None
- Weight: 10 kg | 22 lbs.
  - \* Ridgid is a registered trademark of the Ridge Tool Company

Newer tools with serial numbers ending in "C" are compatible with the Power Drive Kit; tools which do not contain the "C" suffix will require retrofit to accept the Power Drive Kit; contact Victaulic® for details

Weight: 3 kg | 7 lbs.

Ridgid is a registered trademark of the Ridge Tool Company



#### Tool Ratings — Maximum Capacity 1 Pipe Size (DN in)/Schedule 120 125 150 Model Pipe Material 31/2 41/2 Steel 5 - 40VE46S Stainless 40S Only Aluminum<sup>2</sup> 5 - 40VE46P **PVC Plastic**

Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.

6061-T4 or 6063-T4 alloy must be used.

## Field Portable Roll Grooving Tools

#### Download submittal 24.01 for complete information

- Tool is manually operated using the supplied crank
- Enhanced tracking rolls allow bi-directional grooving and helps to hold the tool on the pipe end during the roll grooving process
- Optional power drive adapter kit available to alternately groove pipe using a Ridgid\* 300 Power Drive or VPD752
- Power Requirements: None

78

Ridgid is a registered trademark of the Ridge Tool Company

Weight: 13 kg 28 lbs.

Intro



# Field Portable Roll Grooving Tools VE226 PORTABLE GROOVER

#### **Download submittal 24.01** for complete information

- Tool is operated using a standard 9.5 mm | %" square ratchet drive\*
- Drive Requirements: Mounts to Victaulic® VPD752 or Ridgid\*\* 300 Power Drive; optional bases available
- Weight: 17 kg | 37 lbs.
  - \* Standard 9.5 mm | %" square ratchet drive is included with tools ordered in EMEA-I, but not included with tools ordered in Asia Pacific
  - \*\* Ridgid is a registered trademark of the Ridge Tool Company

Tool Ratings — N	Maximum Capacity 1				F	Pipe Si	ze (DN	in)/S	chedul	е			
Model	Pipe Material	20 3⁄4	25 1	32 1¼	40 1½	50 2	60 2½	80 3	90 3½	100 4	120 4½	125 5	150 6
VE2266	Steel	5-4				40							
VE226S	Stainless				405	5 Only							
	Steel		5 -	40									
\/F226B	Stainless	40S Only											
VE226B	Aluminum <sup>2</sup>		5 –	40									
	PVC Plastic		4	0									
VESSCM	Steel							5-40		5-10			
VE226M	Stainless					40S Only							
VE226C	Copper							K, L	, M, DV	VV, EN1	057		
VE226A	Copper								Α, Ι	B, D			
VE226BSS	Lt. Wall SS		5S -	105									
VE226MSS	Lt. Wall SS								5S-	-10S			
\/F226D	Aluminum <sup>2</sup>					5-40 5-10							
VE226P	PVC Plastic							4	10				

Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.



# Field Portable Roll Grooving Tools VE226 POWER DRIVE KIT

- Kit for connecting a VE226 roll grooving tool to a Ridgid\* 700 Power Drive
- Weight: 34 kg | 75 lbs.
  - \* Ridgid is a registered trademark of the Ridge Tool Company

<sup>&</sup>lt;sup>2</sup> 6061-T4 or 6063-T4 alloy must be used.



### **Field Fabrication Roll Grooving Tools** VE106/VE107 GROOVE-N-GO

- Mobile light-duty roll grooving tool with an integral motor/drive unit mounted to portable hand truck
- Reduces pipe handling by allowing the tool to be wheeled directly to the pipe preparation site
- 9.5 mm | %" square ratchet drive for operation (standard)
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Completely self-contained unit with an integral motor, safety foot switch and power plug
- Power Requirements: VE106 is provided with 110 volt, 15 amp power; VE107 is provided with 220 volt, 6 amp power
- Weight: 64 kg | 140 lbs.

Tool Ratings — M	laximum Capacity 1	Pipe Size (DN in)/Schedule												
Model	Pipe Material	32 1¼	40 1½	50 2	60 2½	80 3	90 3½	100 4	125 5	150 6				
	Steel 2,3	5-40												
VE106/VE107	Stainless <sup>2</sup>	40S												
VE100/VE107	Lt. Wall SS⁴				5	5S – 10S	5							
	Copper⁵				K, L, M, DWV, EN1057									

- Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.
- <sup>2</sup> Use standard grooving rolls marked with the prefix R.
- <sup>3</sup> EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- <sup>4</sup> Use grooving rolls marked with the prefix RX.
- <sup>5</sup> Use grooving rolls marked with the prefix RR.



# Field Fabrication Roll Grooving Tools **VE272SFS**

- Hand pump operation with a unique pivot arm design reduces handle effort
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Equipped with stabilizer
- Power Requirements: Victaulic® VPD752 or Ridgid\* 300 Power Drive
- Weight: 84 kg | 184 lbs.
- \* Ridgid is a registered trademark of the Ridge Tool Company

Tool Ratings — I	Maximum Capacity <sup>1</sup>	Pipe Size (DN in)/Schedule													
Model	Pipe Material	20 3⁄4	25 1	32 1¼	40 1½	50 2	60 2½	80 3	90 3½	100 4	125 5	150 6	200 8	250 10	300 12
	Steel <sup>2,3</sup>	5-40 5-20												20	
	Stainless <sup>2</sup>	40S 6.35 mm													mm
VE272SFS	Lt. Wall SS⁴							5S <i>-</i>	105						
VE2/25F5	Aluminum ⁵	5-40 5-2									20				
	PVC Plastic 6	ic <sup>6</sup> 40													
	Copper <sup>7</sup>						ŀ	(, L, M,	DWV, E	N1057	, A, B, [	)			

- <sup>1</sup> Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.
- Use standard grooving rolls marked with the prefix R.
- <sup>3</sup> EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- <sup>4</sup> Use grooving rolls marked with the prefix RX.
- 6061-T4 or 6063-T4 alloy must be used.
- Use grooving rolls marked with the prefix RP.
- Use grooving rolls marked with the prefix RR.





### **Field Fabrication Roll Grooving Tools** VE270FSD/VE271FSD

- Completely self-contained unit with integral gear motor, safety guards, safety foot switch and power cord/plug
- Equipped with a unique pivot arm design, making roll changing quick and easy without removing shafts
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Power Requirements: VE270FSD is provided with 110 volt, 15 amp power; VE271FSD is provided with 220 volt, 6 amp power
- Weight: 154 kg | 340 lbs.

Tool Ratings — M	laximum Capacity <sup>1</sup>	Pipe Size (DN in)/Schedule													
Model	Pipe Material	20 ¾	4 1 11/4 11/2 2 21/2 3 31/2 4 5 6 8									250 10	300 12		
	Steel <sup>2,3</sup>	5-40												5-20	
	Stainless <sup>2</sup>	40S 6.35 mm													mm
VE270FSD/	Lt. Wall SS⁴		5S-10S												
VE271FSD	Aluminum ⁵								5 -	40				5 –	20
	PVC Plastic <sup>6</sup>								4	0					
	Copper <sup>7</sup>						ŀ	Κ, L, M,	DWV, E	N1057	, A, B, [	)			

Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.

- Use standard grooving rolls marked with the prefix R.
- EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- Use grooving rolls marked with the prefix RX.
- 6061-T4 or 6063-T4 alloy must be used.
- <sup>6</sup> Use grooving rolls marked with the prefix RP.
- Use grooving rolls marked with the prefix RR.



# Field Fabrication Roll Grooving Tools **VE416FS**

- VE416FS is designed for field grooving of OGS pipe and should not be used for continuous field production grooving; For field production grooving capabilities, use a VE450FSD tool, see pg. 85
- Equipped with a pipe stabilizer for DN50−DN300 |
   6−12" pipe sizes to control pipe sway
- Groove depth adjuster allows for easy adjustment for initial groove diameter
- Power Requirements: Victaulic® VPD752 or Ridgid\* 300 Power Drive
- Weight: 109 kg | 240 lbs.
  - \* Ridgid is a registered trademark of the Ridge Tool Company

Tool Ratings — N	Maximum Capacity <sup>1</sup>	Pipe Size (DN in)/Schedule											
Model	Pipe Material	50 2								300 12			
	Steel <sup>2,3</sup>		5-40 10						10-STD				
	Stainless <sup>2</sup>		40S										
VE416FS	Lt. Wall SS <sup>4</sup>					5S – 1	0S						
VE410F3	Aluminum 5,6				5 –	40				5-STD			
	PVC Plastic <sup>6</sup>	40											
	Copper <sup>7</sup>			K, L, M,	DWV, I	EN1057	7						

- <sup>1</sup> Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.
- Use standard grooving rolls marked with the prefix R.
- <sup>3</sup> EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- <sup>4</sup> Use grooving rolls marked with the prefix RX.
- 6061-T4 or 6063-T4 alloy must be used.
- Use grooving rolls marked with the prefix RP.
- Use grooving rolls marked with the prefix RR.



# Field Fabrication Roll Grooving Tools **VE416FSD/VE417FSD**

- VE416FSD/VE417FSD is designed for field grooving of OGS pipe and should not be used for continuous field production grooving; For field production grooving capabilities, use a VE450FSD tool, see pg. 85
- Groove depth adjuster allows for easy adjustment for initial groove diameter
- Completely self-contained units with integral gear motors, safety foot switch and power cord/plug
- Power Requirements: VE416FSD is provided with 110 volt, 15 amp for integral gear motor; VE417FSD is provided with 220 volt, 8 amp service
- Weight: 154 kg | 340 lbs.

Tool Ratings — N	Maximum Capacity 1			Pi	pe Size	e (DN	in)/Scl	nedule				
Model	Pipe Material	50 2	60 2½	80 3	100 4	125 5	150 6	200 8	250 10	300 12		
	Steel 2,3	5-40 10-ST								10-STD		
	Stainless <sup>2</sup>	40S STD										
VE416FSD/	Lt. Wall SS <sup>4</sup>					5S – 1	0S					
VE417FSD	Aluminum 5,6				5 –	40				5-STD		
	PVC Plastic 6				40							
	Copper <sup>7</sup>			K, L, M,	DWV, I	EN1057	7					

- Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by <u>downloading submittal 24.01</u>.
- <sup>2</sup> Use standard grooving rolls marked with the prefix R.
- <sup>3</sup> EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- <sup>4</sup> Use grooving rolls marked with the prefix RX.
- <sup>5</sup> 6061-T4 or 6063-T4 alloy must be used.
- <sup>6</sup> Use grooving rolls marked with the prefix RP.
- Use grooving rolls marked with the prefix RR.





### Field Fabrication Roll Grooving Tools VE450FSD

- The VE450FSD is designed for field production grooving and not continuous fabrication shop production grooving
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process, and quickly change upper roll design
- Lifting point to move the tool using a crane
- Frame can accept most forklifts
- Onboard storage for tool accessories
- Power Requirements: Self-contained unit with two 220 volt, single phase 50/60 hertz, 20 amp integral gear motors to handle heavier loads, safety foot switch and power cord/plug
- Weight: 374 kg | 825 lbs.

Tool Ratings — I	Maximum Capacity <sup>1</sup>						Pip	e Size	(DN   in)	/Sched	lule					
						ogs							A	GS		
Model	Pipe Material	100 4	125 5	150 6	200 8	250 10	300 12	350 14	400 16	450 18	350 14	400 16	450 18	500 20	550 22	600 24
	Steel <sup>2,3</sup>			5-40		'	5-STD						5 – 3	STD		
	Stainless 4			405				ST	ΓD				ST	ΓD		
VE450FSD	Lt. Wall SS <sup>5</sup>			5S -	- 10S								10	os		
	Aluminum 6,7			5-40			STD									
	PVC Plastic 7		4	.0												

- Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.
- Use standard grooving rolls marked with the prefix R for both OGS and AGS.
- EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- Use standard grooving rolls marked with the prefix R for OGS and RW for AGS.
- Use grooving rolls marked with the prefix RX for OGS and RWX for AGS. (Special RWX Rolls are available for grooving true Sch. 10 (6.4 mm | 0.250). These rolls are not interchangeable with roll sets from other tool models. Contact Victaulic® for details.
- 6061-T4 or 6063-T4 alloy must be used.
- Use grooving rolls marked with the prefix RP.



- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Equipped with a unique pivot arm design, making roll changes quick and easy, without removing shafts
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Power Requirements: 220/440 volt, 3 phase, 60 hertz standard in Asia Pacific; 230/400 volt, 3 phase, 50 hertz standard in EMEA-I; the tool can also be supplied in various voltages, contact Victaulic® for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 333 kg | 735 lbs.

Tool Ratings —	Maximum Capacity <sup>1</sup>					F	Pipe Siz	ze (DN	in)/S	chedul	е				
Model	Pipe Material	20 ¾	25 1	32 1¼	40 1½	50 2	60 2½	80 3	90 3½	100 4	125 5	150 6	200 8	250 10	300 12
	Steel <sup>2,3</sup>						5 –	40						5-	-20
	Stainless <sup>2</sup>						40	)S							
\/F260	Lt. Wall SS <sup>4</sup>							5S <i>-</i>	10S						
VE268	Aluminum 5,6								5-	40				5 –	-20
	PVC Plastic <sup>6</sup>								4	0					
	Copper <sup>7</sup>							K, L	, M, DV	/V, EN1	057			10 5-	

- <sup>1</sup> Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.
- Use standard grooving rolls marked with the prefix R.
- EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- Use grooving rolls marked with the prefix RX.
- <sup>5</sup> 6061-T4 or 6063-T4 alloy must be used.
- <sup>6</sup> Use grooving rolls marked with the prefix RP.
- Use grooving rolls marked with the prefix RR.



### **Plant/Shop Fabrication Roll Grooving Tools**

VE414MC

- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Roll changes are quick and easy, without removing shafts
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Power Requirements: 220/440 volt, 3 phase, 60 hertz standard in Asia Pacific; 230/400 volt, 3 phase, 50 hertz standard in EMEA-I; the tool can also be supplied in various voltages, contact Victaulic® for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 333 kg | 735 lbs.

Tool Ratings — N	Maximum Capacity <sup>1</sup>				Pi	pe Size	e (DN	in)/Scl	hedule			
						OG	S				AC	S
Model	Pipe Material	50 2	60 2½	80 3	100 4	125 5	150 6	200 8	250 10	300 12	350 14	400 16
	Steel 2,3			,	5 –	40		,		10-STD	10-	STD
	Stainless 4					409	5				ST	D
VE414MC	Lt. Wall SS <sup>5</sup>					5S <b>-</b> 1	0S				5S-	10S
VE414IVIC	Aluminum 6,7				5-	40				5-STD		
	PVC Plastic 7				40							
	Copper <sup>8</sup>			K, L, M,	DWV, I	N1057	7					

- Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.
- Use standard grooving rolls marked with the prefix R for both OGS and AGS.
- EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- Use standard grooving rolls marked with the prefix R for OGS and RW for AGS.
- Use grooving rolls marked with the prefix RX for OGS and RWX for AGS (Special RWX Rolls are available for grooving true Sch. 10 (6.4 mm | 0.250).
- 6061-T4 or 6063-T4 alloy must be used.
- Use grooving rolls marked with the prefix RP.
- Use grooving rolls marked with the prefix RR.





# Plant/Shop Fabrication Roll Grooving Tools

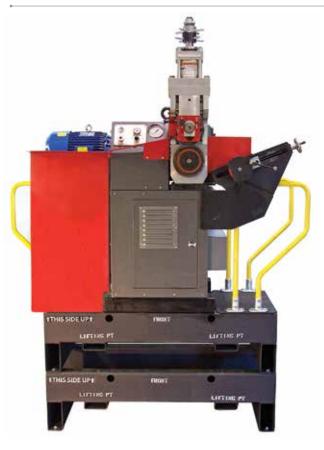
**VE460** 

- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Enhanced tracking rolls help to keep the pipe on the tool during the roll grooving process
- Support bases are required to groove pipe sizes DN650 | 26" and larger. Each support base is 304.8 mm | 12" in height and corresponds with a range of allowable pipe sizes it can groove
- Power Requirements: 220/440 volt, 3 phase, 60 hertz standard in Asia Pacific; 230/400 volt, 3 phase, 50 hertz standard in EMEA-I; the tool can also be supplied in various voltages, contact Victaulic® for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 680 kg | 1500 lbs.

Tool Ratin Maximum	ngs — n Capacity <sup>1</sup>				l	Pipe Si	ze (DN	in)/S	chedule	;			
							00	GS					
Model	Pipe Material	100 4	125 5	150 6	200 8	250 10	300 12	350 14	400 16	450 18	500 20	550 22	600 24
	Steel 2,3		5-	80		5-	XS						
	Stainless <sup>2</sup>			405				ST	ΓD				
VE460	Lt. Wall SS 4			5S –	105			5S – 1	OS, TRU	JE 10			
	Aluminum 5,6			5 –	40								
	PVC Plastic <sup>6</sup>		4	0									

Tool Rati Maximun	ngs — n Capacity ¹							ı	Pipe Si		in)/Se	chedul	е						
Model	Pipe Material	350 14	400 16	450 18	500 20	550 22	600 24	650 26	700 28	750 30	800 32	850 34	900 36	950 38	1000 40	1050 42	1200 48	1250 50	1500 60
	Steel 2,3			10-	-XS							9.5	5 mm –	12.7 m	m <sup>7</sup>				
VE460	Stainless <sup>2</sup>			S7	ΓD														
	Lt. Wall SS 4	5S - 1	OS, TRU	JE 10															

- Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by <u>downloading submittal 24.01</u>.
- $^{\rm 2}$   $\,$  Use standard grooving rolls marked with the prefix R for OGS and RW for AGS.
- <sup>3</sup> EndSeal® grooving rolls marked with the prefix RZ are available. Contact Victaulic® for details.
- <sup>4</sup> Use grooving rolls marked with the prefix RX for OGS and RWX for AGS. (Special RWX Rolls are available for grooving true Sch. 10 (6.4 mm | 0.250). These rolls are not interchangeable with roll sets from other tool models. Contact Victaulic® for details.
- <sup>5</sup> 6061-T4 or 6063-T4 alloy must be used.
- Use grooving rolls marked with the prefix RP.
- <sup>7</sup> API-5L Grade B pipe.



# Plant/Shop Fabrication Roll Grooving Tools

**VE872** 

- The fully-motorized, semi-automatic, electrohydraulic tool comes complete with safety guards and safety foot switch
- Support bases are required to groove DN750 | 30" and larger pipe sizes; each support base is 406 mm | 16" in height and corresponds with a range of allowable pipe sizes it can groove
- Power Requirements: 220/440 volt, 3 phase, 60 hertz standard in Asia Pacific; 230/400 volt, 3 phase, 50 hertz standard in EMEA-I; the tool can also be supplied in various voltages, contact Victaulic® for details
- 3-phase requires tool power to be hard wired by a local certified electrician
- Weight: 862 kg | 1900 lbs.

Tool Rating Maximum											Pi	pe S	ze (C	)N ir	ı)/Sc	hedu	le									
Model	Pipe Material	200 8	250 10	300 12	350 14	400 16	450 18	500 20	550 22	600 24	650 26	700 28	750 30	800 32	850 34	900 36	950 38	1000 40	1050 42	1200 48	1250 50	1350 54	1400 56	1500 60	1550 62	1800 72
VE872	Carbon Steel		. 40 00									9.5	mm	.375	to 12	2.7 mi	m   .5	00¹								
VE8/2	Carbon Steel											14	.3 mn	n – 16	mm	wall (	Grade	e B Or	nly							

Physical properties shall be in accordance with API specification 5L, Grades B, X42, X46, X52, X56 or X60, download publication 25.09. For physical properties not listed contact Victaulic® for details.





### **Field Manual Cut Grooving Tools**

**VG28GD (GEAR DRIVE) VG28GD-ABR (ABRASION) VDG26GD (DOUBLE GROOVE)** 

- VG28GD will produce a single OGS cut groove for unlined piping systems
- VG28GD-ABR will produce a single OGS cut groove that allows for lining of the pipe for abrasive services
- VDG26GD will produce a double OGS cut groove for high pressure systems in conjunction with installing the DN150 | 6" Style 808 couplings
- The VG28GD, VG28GD-ABR and VDG26GD are designed to be driven by the Power Mule II
- Drive Requirements: External drive, min. 1.12 kw | 1½ hp
- Drive Speed: 38 rpm max.
- Weight: 17 kg 37 lbs.

Tool Ratings — M	laximum Capacity			Pipe S	Size (DN	in)/Scl	nedule		
Model	Pipe Material	50 2	65 2½	80 3	90 3½	100 4	125 5	150 6	200 8
	Steel				40-	-80¹			
V(C20CD2	Stainless				40-	-80¹			
VG28GD <sup>2</sup>	Aluminum				40-	-80¹			
	Ductile Iron				Cl	ass 53 M	in.		
VG28GD-ABR <sup>2</sup>	Steel				40-801				40
VDG26GD <sup>2</sup>	Steel							40-80	

<sup>1</sup> DN150 6" Schedule 80

<sup>&</sup>lt;sup>2</sup> Special knives and stops may be required.



Tool Ratings — Maximum Cap			Pi	pe Si	ize (C	N i	n)/Sc	hedu	ıle	
Model	Pipe Material	200 8	250 10	300 12	350 14	400 16	450 18	500 20	550 22	600 24
	Steel		40-	-80			30	0 – ST	D	
VC0241	Stainless		30	O – ST	D					
VG8241	Aluminum	3	0 – ST	D						
	Ductile Iron				Clas	s 53	Min.			
VG824DG <sup>1</sup>	Steel	2	10-8	0						
VG824-ABR <sup>1</sup>					4	10 – X	S			

Special knives and stops may be required.

### **Field Manual Cut Grooving Tools**

VG824 (OGS) VG824-ABR (ABRASION OGS) VG824DG (DOUBLE GROOVE)

#### **Download submittal 24.01** for complete information

- VG824 will produce a single OGS cut groove for unlined piping systems
- VG824-ABR will produce a single OGS cut groove that allows for lining of the pipe for abrasive services
- VG824DG will produce a double OGS cut groove for high pressure piping systems in conjunction with installing Style 808 couplings
- The VG824, VG824DG and VG824-ABR are designed to be driven by the Power Mule II
- Drive Requirements: External drive, min.
   1.12 kw | 1½ hp
- Drive Speed: 38 rpm max.
- Weight: 37.2 kg | 82 lbs.



Tool Ratings — N	Maximum Capacity	Pip	e Siz	e (DN	in)/9	Sched	ule
Model	Pipe Material	350 14	400 16		500 20		600 24
VG828 <sup>1</sup>	Steel		12.	7 mm	–19 n	nm	

Special knives and stops may be required.

# Field Manual Cut Grooving Tools VG828 (AGS)

- VG828 will produce a single AGS cut groove
- The VG828 is designed to be driven by the Power Mule II
- Drive Requirements: External drive, min. 1.12 kw | 1½ hp
- Drive Speed: 38 rpm max.
- Weight: 37.2 kg | 82 lbs.

### **Field Cut Grooving Tools**

#### VG VIC®-GROOVER

- Designed for manual or power cut grooving
- Supplied with a ratchet handle for manual operation
- Drive Requirements: Manual or external drive, min. 0.37 kw | ½ hp
- External power drives must meet all safety conditions
- Drive Speed: 40 rpm max.
- Weight: 13 kg | 28 lbs.

Tool Ratings —	Maximum Capacity <sup>1</sup>				F	ipe Si	ze (DN	in)/S	chedul	е			
Model	Pipe Material	20 ¾	25 1	32 11⁄4	40 1½	50 2	60 2½	80 3	90 3½	100 4	125 5	150 6	200 8
	Steel						40-	-80					
	Stainless						40-	-80					
VG	Aluminum <sup>2</sup>						40-	-80					
	PVC Plastic						40-	-80					
	Ductile Iron									Cl. 53		Class 5	3 Min.

Indicates pipe size capacity. For wall thickness capacity and general tool ratings see separate Vic-Easy® Tool Rating Data by downloading submittal 24.01.

<sup>&</sup>lt;sup>2</sup> 6061-T4 or 6063-T4 alloy must be used.



# Plastic Groovers VPG26

#### Download submittal 24.01 for complete information

- Features a high speed, router-type tool bit which cuts a radial groove, to full depth, in one manual rotation of the tool around the pipe
- Rotation Drive: Manual (clockwise)
- Power Requirements: 110 volt, single phase, 60 hertz, 7 amp
- Weight: 19 kg | 41 lbs.

Tool Ratings — N	Maximum Capacity		Pipe	Size (	DN in	)/Sche	dule	
Model	Pipe Material	50 2	60 2½	80 3	90 3½	100 4	125 5	150 6
VPG26	PVC Plastic				40 – 80			



Tool Ratings — N	Maximum Capacity	Pipe	Size (	DN   in	)/Sche	dule
Model	Pipe Material	200 8	250 10	300 12	350 14	400 16
VPG824	PVC Plastic			40-80		

### **Plastic Groovers**

#### VPG824

- Features a high speed, router-type tool bit which cuts a radial groove, to full depth, in one manual rotation of the tool around the pipe
- Rotation Drive: Manual (Clockwise)
- Power Requirements: 110 volt, single phase, 60 hertz, 7 amp
- Weight: 21 kg | 47 lbs.



### **Aquamine® Grooving Tools** APG

#### **Download submittal 24.01 for complete information**

- Manually operated tool used for producing a cut spline groove and beveled end on Aquamine® PVC pipe
- Prepares DN100-DN300 | 4-12" Aquamine® pipe to receive an Aquamine® coupling
- Orbital tool which is rotated around a stationary, secured pipe
- May be operated on pipe held in a pipe vise or on supported in-place piping that is depressurized and drained
- Weight: 5.9 kg | 13 lbs.



### **Hole Cutting Tools**

#### **HCT908**

- One-piece hole cutting tool designed to cut holes up to DN120 | 4½" in carbon and stainless steel pipe; for pipe sizes up to DN200 8"
- Allows use of Mechanical-T®, Vic-Let®, and Vic-O-Well outlets
- Power Requirements: 110 volt, single phase, 60 hertz. 7 amp
- Weight: 10 kg | 23 lbs.



### **Hole Cutting Tools**

#### **VHCT900**

#### **Download submittal 24.01** for complete information

- Three-piece hole cutting tool designed to cut holes up to DN90 | 3½" in diameter for Mechanical-T®, Vic-Let®, and Vic-O-Well® outlets
- Base unit clamps quickly onto the pipe in vertical, horizontal or overhead positions
- Available extended chain for DN250-DN600 | 10-24" pipe
- Power Requirements: Grounded 220 volt, single phase, 50 hertz, 5 amp electrical supply (120 volt, single phase, 60 hertz, 10 amp available on request)
- Weight: 16 kg | 36 lbs.



### **Hole Cutting Tools**

VIC-TAP® II

- Hole cutting tool including Style 931 Vic-Tap® II Mechanical-T® unit for tapping into steel pipe systems under pressure up to 500 psi | 3447 kPa | 34 bar
- Hole size 60.5 mm | 2%"
- Power Requirements: 115 volt, single phase, 60 hertz, 7.5 amp
- Weight:
  Drill guide base: 6.8 kg | 15 lbs.; Drill motor and feed assembly: 7.3 kg | 16 lbs.; Style 931/Valve unit, 5.4-6.8 kg | 12-15 lbs., depending upon size (DN100, DN125, DN150, DN200 | 4, 5, 6 and 8" available)
- Standard Capability: DN100-DN200 | 4-8" Run outlet only × DN65 mm | 2½" (IPS) Outlet

### **Pipe Cut-Off Tools**

#### VCT1 MANUAL

#### **Download submittal 24.01 for complete information**

- Lightweight and portable pipe cut-off tool handles DN100-DN600 | 4-24" pipe, up to 12.7 mm | 0.5" thick
- Worm gear drive crank handle provides smooth, manual travel, easy control and accurate cutting
- Wall thickness: 1.65-12.7 mm | 0.065-0.500" (with tips supplied)
- Tips: Acetylene 1 ea. #00, #0, #1
- Power Requirements: NA
- Weight: 10 kg | 22 lbs.



### **Pipe Cut-Off Tools**

#### **VCT2 AUTOMATIC**

- Rotation is powered by a small 120 VAC motor with SCR remote control
- Unique distributor design has stainless steel insert which extends tip life, eases cleaning and reduces backfire
- Wall thickness: 1.65-12.7 mm | 0.065-0.500" (with tips supplied)
- Tips: Acetylene 1 ea. #00, #0, #1
- Motor rating: 15 W, 10,000 rpm
- Power requirements: 120 volt, single phase, 60 hertz, 15 amp
- Weight: 15 kg | 33 lbs.



# Vic-Press® Tools PFT510

#### **Download submittal 24.01 for complete information**

- Designed for securing Vic-Press<sup>®</sup> Schedule 10S products onto Schedule 10S stainless steel pipe
- Tool package includes:
  - (1) PFT510 tool.
  - (2) 18V Lithium Ion batteries,
  - (1) battery charger,
  - (1) tool carrying case,
  - (1) jaw carrying case,
  - (1) each of jaws sized DN15  $\mid$  ½", DN20  $\mid$  ¾", DN25  $\mid$  1", DN40  $\mid$  1½", and DN50  $\mid$  2", and (1) adapter jaw
- Not compatible with PFT505 and/or PFT509 tools/components
- Power Requirements: Battery pack 220 volt or 230 volt, 50 hertz, 1.1 amp (110 volt, 60 cycle, 6.5 amp option available)
- Weight: 9.5 kg | 21 lbs.
   (PFT510 with DN25 | 1" jaw)



#### **Tool Accessories**

#### **VPD752 POWER DRIVE**

- Can be used as the power drive unit for the VE226, VE26, VE46, VE416FS and VE272SFS roll grooving tools provided each tool is equipped with the correct base plate
- Operated with a safety foot switch
- Power Requirements: 220 volt, 6 amp, 50/60 cycle (115 volts, 15 amp, 50/60 hertz option available)
- Weight: 63.4 kg | 140 lbs.

Hole Cut

HDPE



### **Tool Accessories**

#### **POWER MULE II**

#### **Download submittal 24.01 for complete information**

- Ideal for driving individual Victaulic® cut grooving tools
- Heavy-duty, two wheeled unit drives Victaulic® cut grooving tools at the speed/power necessary for accurate grooving
- Rotating head for horizontal and vertical applications
- Power Mule II equipped with forward-off-reverse control and integral safety foot switch
- Full load speed: 35 rpm
- Power Requirements: 115 volts, 15 amp, 50/60 cycle (130 volts, 50 hertz, 8 amp option available)
- Weight: 86 kg | 190 lbs.



### **Tool Accessories VAPS112 ADJUSTABLE PIPE STAND**

- Designed for supporting pipe to be roll grooved
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting pipe from stand
- Forward/traverse movement
- Capacity: DN20-DN300 | 34-12" IPS pipe
- Load rating: 490 kg | 1,075 lbs.
- Vertical stroke: 368 mm | 14½" for adjusting rod, 216 mm | 8½" leg adjustment 584 mm | 23"
- Minimum pipe height from floor: 584 mm | 23" on DN300 | 12" pipe and 533 mm | 21" on DN25 | 1" pipe
- Weight: 86 kg | 190 lbs.



#### **Tool Accessories**

#### **VAPS224 ADJUSTABLE PIPE STAND**

#### **Download submittal 24.01** for complete information

- Designed specifically for supporting pipe to be roll grooved
- Self-standing, heavy-duty unit permits free pipe rotation and traversing on ball transfers
- Capacity: DN50-DN600 | 2-24" IPS pipe
- Load rating: 816 kg | 1,800 lbs.
- Vertical stroke: 584 mm | 23"
- Minimum pipe height from floor 325 mm | 13"
   on DN600 | 24" IPS pipe
- Maximum pipe height from floor 965 mm | 38"
   on DN50 | 2" IPS pipe
- Weight: 118 kg | 260 lbs.



# Tool Accessories VAPS1672 ADJUSTABLE PIPE STAND

- Designed specifically for supporting pipe to be roll grooved
- Self-standing, heavy duty unit permits free pipe rotation and traversing on ball transfers
- Designed for use with VE436MC and VE460 tools
- Capacity: DN400 DN1800 | 16 72" IPS pipe
- Load rating: 4535 kg | 10,000 lbs.
- Vertical Stroke 425 mm | 17"
- Minimum pipe height from floor 406 mm | 16"
   on DN1800 | 72" pipe
- Maximum pipe height from floor 711 mm | 28"
   on DN400 | 16" pipe
- Weight: 218 kg | 480 lbs.



- Designed specifically for supporting pipe to be roll grooved
- Self-standing, heavy duty unit permits free pipe rotation and traversing on ball transfers
- Designed for use with VE108H, VE270FSD, VE271FSD and VE272SFS grooving tools
- Capacity: DN20-DN300 | 34-12" pipe
- Load rating: 300 kg | 660 lbs.
- Turnstile design allows grooving of both pipe ends without dismounting pipe from stand
- Minimum pipe height from floor: 930 mm | 37"
- Maximum pipe height from floor: 630 mm | 25"
- Weight: 20 kg | 44 lbs.



# Service of the servic



# Tool Accessories PT101 AND PT102

#### **Download submittal 24.01** for complete information

- Go/No-Go, pocket-sized steel tapes for taking circumferential measurements of pipe
- Go/No-Go side can be used to check cut or roll grooved pipe for conformance to Victaulic® grooved specifications
- Tapes notched on the lead end to allow proper overlap within the groove for more accurate measurement
- PT101 contains Go/No-Go markings for use with DN20-DN600 | ¾-24" pipe; tape marked with 0.25 mm | 0.01" increments on the opposite side
- PT102 contains Go/No-Go markings for use with Original Groove System sizes DN200-DN300 | 8-12" and Advanced Groove System sizes DN350-DN1800 | 14-72"; tape marked in 0.5 mm | 0.02" increments on the opposite side
- Go/No-Go side of tapes may not be used to measure cast iron, ductile iron, or copper tube sizes



### Style 809 Ring Clamps

LARGE RING CLAMP SMALL RING CLAMP

#### Download submittal 15.02 for complete information

 For specific information on the appropriate tool by coupling, please download individual coupling product submittals

### Manual Victaulic® Bolted Split-Sleeve Products (VBSP) Closure Tools

CTM-01 SMALL MANUAL TOOL CTM-02 LARGE MANUAL TOOL

#### **Download submittal 24.01** for complete information

 For specific information on the appropriate tool by coupling, please download individual coupling product submittals

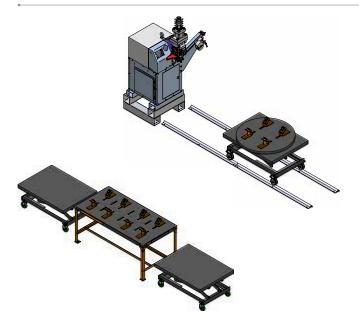


### **Hydraulic VBSP Closure Tools**

CTH-01 SMALL 10-TON HYDRAULIC TOOL CTH-02 LARGE 25-TON HYDRAULIC TOOL

#### **Download submittal 24.01** for complete information

 For specific information on the appropriate tool by coupling, please download individual coupling product submittals



### **Fabrication Cell**

#### **VAP131**

#### **Download submittal 24.01** for complete information

- Turn-key, fab-shop solution
- Maximize productivity gains associated with Victaulic® grooved systems
- Includes hydraulic adjustable pipe stand and tracks, tool support, two adjustable positioner tables, an assembly table, as well as caster wheels and ball transfers



#### **Fabrication Cell**

#### **VAPS 131R HYDRAULIC ADJUSTABLE PIPE STAND**

- Designed to support pipe for roll grooving
- Permits free pipe rotation and traversing on ball transfers
- Turnstile design allows pipe to be spun around for grooving of both pipe ends without dismounting from pipe stand
- Capacity: DN100-DN600 | 4-24" IPS pipe; load rating: 907 kg | 2000 lbs.
- Vertical stroke: 775 mm | 30.5"
- Minimum pipe height from floor: Compatible with Victaulic® production roll grooving tools
- Power Requirements: 230 volt, 6 amp, 50 hertz (120 volt, 12 amp, 60 hertz option available)
- Weight: 227 kg | 500 lbs.

Intro



# Fabrication Cell VAPS 131F HYDRAULIC POSITIONER

#### **Download submittal 24.01** for complete information

- Designed to support grooved pipe, valves, and fittings when used in conjunction with the VAPS 131T Assembly Table
- Foot control provided for hands-free operation
- Swivel caster wheel design for better mobility
- Capacity: DN100-DN600 | 4-24" IPS pipe; load rating: 544 kg | 1200 lbs. with wheels installed, 907 kg | 2000 lbs. without wheels
- Vertical stroke: 743 mm | 29.25"
- Power Requirements: 230 volt, 6 amp, 50 hertz (120 volt, 12 amp, 60 hertz option available)
- Weight: 181 kg | 400 lbs.



# Fabrication Cell VAPS 131T ASSEMBLY TABLE

#### Download submittal 24.01 for complete information

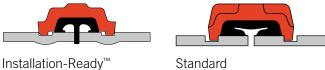
- Designed to support grooved pipe, valves, and fittings when used in conjunction with VAPS 131F Hydraulic Positioner
- Ball transfer assemblies can be positioned to accommodate pipe from DN50−DN600 | 2−24"
- Capacity: DN100-DN600 | 4-24" IPS pipe; load rating: 3629 kg | 8000 lbs.;
   ball transfers load rating 318 kg | 700 lbs.
- Vertical stroke: 743 mm | 29.25"
- Weight: 227 kg | 500 lbs.

#### **Elastomer Gasket Seals**

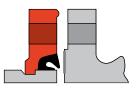
Victaulic® offers a broad variety of synthetic rubber gaskets suitable for a wide range of applications. Victaulic® gaskets provide high- and low-temperature limits, tensile strength, chemical resistance and shelf life.











Standard

Reducing

Vic-Flange®



FlushSeal®



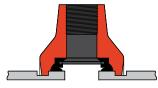
**Grooved Copper Tubing** with FlushSeal® Gasket



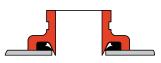
Advanced Groove System (AGS)



EndSeal®



Outlet



Mechanical-T®



Shouldered Steel System



Plain End

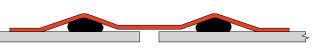


Plain End Piping System for HDPE Pipe



unpressed

Vic-Press® for Schedule 10S Stainless Steel



Victaulic® Bolted Split-Sleeve Products (VBSP)



**FRP** 

Intro

#### **Gasket Materials**

Victaulic® offers a wide variety of synthetic rubber gaskets for a broad range of applications. For most water applications, the Victaulic® Grade "E" EPDM (ethylene propylene diene monomer) gasket compound is compatible. Victaulic® Grade "E" material has premium performance properties with respect to aging and resistance to heat and hot water. Heat aging tests at +121°C | +250°F conducted on this material show essentially no change in physical properties. This situation is further enhanced when this rubber is subjected to an essentially non-oxidative environment, such as a gasket in a water piping system. For example, aging tests in a non-oxidative atmosphere show essentially no change in physical properties of this material even when tested at temperatures up to +177°C | +350°F.

Since water has no deteriorating effect on the elastomer, temperature is the only limiting factor to be considered in determining the life expectancy of the elastomer in water service. The superior performance of the Grade "E" elastomer permits its use for hot water service up to +110°C | +230°F. The Grade "E" gasket is superior to previous gasket materials by all performance barometers, including high and low temperature limits, tensile strength, chemical resistance and shelf life.

#### Gasket/Seal/O-Ring Data

Victaulic® offers a variety of synthetic rubber gaskets/ seals/o-rings for the widest range of applications. To assure the maximum life for the service intended, proper gasket selection and specification in ordering is essential. The foremost consideration is temperature, along with concentration of product, duration of service and continuity of service. Temperatures beyond the compatibility limits have a degrading effect on the polymer.

Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets/seals/o-rings are not compatible. Reference should always be made to the latest Gasket Chemical Services Guide (download publication **GSG-100**) for specific service guidelines and for a listing of services which are not compatible.

Gasket guidelines apply only to Victaulic® gaskets, seals and o-rings. Guidelines for a particular service do not necessarily imply compatibility of the coupling housing, related fittings or other components for the same service.

These guidelines do not apply to rubber-lined or rubber seal valves or other rubber-lined products. Victaulic® gaskets are clearly marked as part of the mold with the gasket size, style and compound for easy identification.

#### **Potable Water Listings and Classifications**

Grade "E" EPDM, Grade "E" Vic-Plus™, Grade "E2", Grade "EHP" and Grade "EHP" Vic-Plus™ gaskets are UL Classified in accordance with ANSI/NSF 61 for cold  $(+30^{\circ}C \mid +86^{\circ}F)$  and hot  $(+82^{\circ}C \mid +180^{\circ}F)$  potable water service and ANSI/NSF 372. Download publication 02.06 for more details.

Victaulic® Grade "M" halogenated butyl gasket material (which is typically used with our AWWA sized products) is UL Classified in accordance with ANSI/NSF 61 for cold (+30°C | +86°F) potable water service and ANSI/ NSF 372. Download publication 02.06 for more details.

Vic-Press® Schedule 10S couplings and fittings: UL Classified in accordance with ANSI/NSF 61 for cold +23°C | +73°F and hot +82°C | +180°F potable water service with "E" and "H" o-rings and ANSI/NSF 372. Download publication 02.06 for more details.

In addition to the above, the standard black asphalt coating used on our cement lined AWWA size fittings is NSF 61 Listed. As the coating is the only material that comes in contact with the water, NSF 61 compliant coatings are commercially available and may be applied to our products. For more details about Victaulic® gasket construction and testing, download submittal 05.01.

#### **Gasket Lubricant**

Thorough lubrication of the gasket exterior, including the lips and/or pipe ends and housing interiors, is essential for proper installation. Use Victaulic® Lubricant for installation. Other compatible material, such as silicone and others may be used on Grades "E" or "L" gaskets. Victaulic® Lubricant is available in a box of (12) 114 milliliter | 4 fluid ounce tubes or in 946 milliliters | 1 quart containers.

Important Note: Victaulic® Lubricant is not compatible for use with high-density polyethylene (HDPE) pipe.

ALWAYS USE LUBRICANT FOR PROPER COUPLING ASSEMBLY.

#### **Valve Seals**

Victaulic® Gasket Selection Guide (05.01) does not include Victaulic® seals for valves. Refer to the individual Victaulic® valve submittal for information on the seals available for each valve.

# **WARNING**

To assure maximum life for the service intended, proper gasket selection and specification in ordering is
essential. For specific chemical and temperature compatibility, refer to the Gasket Selection and Chemical
Services sections. The information shown defines general ranges for all compatible fluids.

Failure to select the proper rubber compound may result in personal injury or property damage, improper installation, joint leakage or joint failure.

# Standard Gaskets—IPS

Grade	Temp. Range 1	Compound	Color Code	General Service Guidelines
E	-34° C to +110° C -30°F to +230°F	EPDM	Green Stripe	May be specified for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL Classified in accordance with ANSI/NSF 61 for cold $+23^{\circ}\text{C}$ $\left  +73^{\circ}\text{F} \right $ and hot $+82^{\circ}\text{C}$ $\left  +180^{\circ}\text{F} \right $ potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.
<b>EHP</b> <sup>2</sup>	-34°C to +120°C -30°F to +250°F	EPDM	Red and Green Stripes	May be specified for hot water service within the specified temperature range. UL Classified in accordance with ANSI/NSF 61 for cold +23°C   +73°F and hot +82°C   +180°F potable water service and ANSI/NSF 372.  NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.
T	-29° C to +82° C -20°F to +180°F	Nitrile	Orange Stripe	May be specified for petroleum products, hydrocarbons, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not compatible for use with hot, dry air over +60°C   +140°F and water over +66°C   +150°F.  NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.
(Type A) <sup>3</sup>	Ambient	EPDM	Violet Stripe	Applicable for wet and dry (oil-free air) sprinkler services only. For dry services FlushSeal® gaskets may be specified. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.
<b>E2</b>	Ambient	EPDM	Double Green Stripe	UL Classified in accordance with ANSI/NSF 61 for cold +23°C   +73°F and hot +82°C   +180°F potable water service and ANSI/NSF 372.  NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.

- For specific chemical and temperature compatibility, refer to the <u>Gasket Selection Guide (05.01)</u> which includes the Gasket Chemical Services Short Report or refer to the <u>Gasket Chemical Services Guide Long Report (GSG-100)</u> located on <u>victaulic.com</u>. The information shown defines general ranges for all compatible fluids.
- $^{2}\,\,$  The Grade EHP gasket is only available on Style 107, 607 and 177 couplings.
- ³ Vic-Plus<sup>™</sup> pre-lubricated gasket.



# OGS

# Special Gaskets—IPS

Grade	Temp. Range 1	Compound	Color Code	General Service Guidelines
M2	-40° C to +71° C -40°F to +160°F	Epichlorohydrin	White Stripe	Specially compounded to provide superior service for common aromatic fuels at low temperatures. Also suitable for certain ambient temperature water services.
V	-34° C to +82° C -30°F to +180°F	Neoprene	Yellow Stripe	May be specified for hot lubricating oils and certain chemicals. Good oxidation resistance. Will not support combustion.
0	-7° C to +149° C +20°F to +300°F	Fluoroelastomer	Blue Stripe	May be specified for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons.  NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.
L	-34° C to +177° C -30°F to +350°F	Silicone	Red Gasket	May be specified for dry heat, air without hydrocarbons to +177°C   +350°F and certain chemical services.
A	-7° C to +82° C +20°F to +180°F	White Nitrile	White Gasket	No carbon black content. May be used for food. Meets FDA requirements. Conforms to CFR Title 21 Part 177.2600.  Not compatible for use with hot, dry air over +60°C   +140°F and water over +66°C   +150°F. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES.
<b>HMT</b> (T EndSeal®)	–29°C to +66°C –20°F to +150°F	Nitrile	Orange and Silver Stripes	Specially compounded with excellent oil resistance and a high modulus for resistance to extrusion. May be specified for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. For maximum gasket life under pressure extremes, the temperature should be limited to +49°C   +120°F.  NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OVER +66°C   +150°F OR FOR HOT, DRY AIR OVER +60°C   +140°F.
EF	-34°C to +110°C -30°F to +230°F	EPDM	Green "X"	May be specified for hot and cold water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. Also meets hot and cold potable water requirements per DVGW, KTW, ÖVGW, SVGW and French ACS (Crecep), approved for W534, approved for EN681-1 Type WA cold potable and Type WB hot potable water service.  NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.
EW	-34°C to +110°C -30°F to +230°F	EPDM	Green "W"	May be specified for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. WRAS approved material to BS 6920 for cold and hot potable water service up to +65°C   +149°F UL Classified in accordance with ANSI/NSF 61 for cold +23°C   +73°F and hot +82°C   +180°F potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.

For specific chemical and temperature compatibility, refer to the <a href="Gasket Selection Guide">Gasket Selection Guide</a> (05.01) which includes the Gasket Chemical Services Short Report or refer to the <a href="Gasket Chemical Services Guide Long Report">Gasket Chemical Services Guide Long Report</a> (GSG-100) located on <a href="Victamical-com">victaulic.com</a>. The information shown defines general ranges for all compatible fluids.

#### **Elastomer Gasket Seals**

# Vic-Press® Seals

0 1 1000	Ocais			
Grade	Temp. Range 1	Compound	Color Code	General Service Guidelines
н	-29°C to +98°C -20°F to +210°F	Hydrogenated Nitrile Butadiene Rubber (HNBR)	Two Orange Stripes	May be specified for hot petroleum/water mixtures, hydrocarbons air with oil vapors, vegetable and mineral oils, engine oil and transmission oil. UL Classified in accordance with ANSI/NSF 61 for cold +23°C   +73°F and hot +82°C   +180°F potable water service and ANSI/NSF 372.
	Sta	andard Seal: Vic-Pres	s® products will sh	ip with Grade "H" seal unless otherwise specified on order.
E	-34°C to +121°C -30°F to +250°F	EPDM	Green Stripe	May be specified for hot water service, dilute acids, oil-free air, chemical services. UL Classified in accordance with ANSI/NSF 61 for cold +23°C   +73°F and hot +82°C   +180°F potable water service and ANSI/NSF 372.  NOT COMPATIBLE FOR USE WITH PETROLEUM OR STEAM SERVICE.
0	+6°C to +149°C +20°F to +300°F	Fluoroelastomer	Blue Stripe	May be specified for oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids, and air with hydrocarbons.  NOT COMPATIBLE FOR USE WITH HOT WATER OR STEAM SERVICE

For specific chemical and temperature compatibility, refer to the <u>Gasket Selection Guide (05.01)</u> which includes the Gasket Chemical Services Short Report or refer to the <u>Gasket Chemical Services Guide Long Report (GSG-100)</u> located on <u>victaulic.com</u>. The information shown defines general ranges for all compatible fluids.

## **VBSP O-rings**

Grade	Temp. Range <sup>1</sup>	Compound	Color Code	General Service Guidelines
E	-34°C to +110°C -30°F to +230°F	EPDM	N/A	Cold and hot water within allowable temperature range; dilute acids; excellent resistance to the deteriorative effects of ozor oxygen, heat and most chemicals not involving hydrocarbons.  NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES.
L	-34°C to +177°C -30°F to +350°F	Silicone	N/A	Dry, hot air applications; excellent resistance to many chemicals.  NOT COMPATIBLE FOR USE WITH HOT WATER OR STEAM SERVICE
I	-40°C to +71°C -40°F to +160°F	Isoprene	N/A	Water; saltwater; sewage; good resistance to oxygen and dilute aci

For specific chemical and temperature compatibility, refer to the <u>Gasket Selection Guide (05.01)</u> which includes the Gasket Chemical Services Short Report or refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.

# **VBSP Gaskets**

Grade	Temp. Range 1	Compound	Color Code	General Service Guidelines
Т	-28°C to +82°C -20°F to +180°F	Nitrile	N/A	Water; petroleum products, vegetable and mineral oils; air with oil vapors within allowable temperature.
0	-7°C to +149°C +20°F to +300°F	Fluoroelastomer	N/A	Outstanding resistance to heat and most chemicals.
V	-34°C to +82°C -30°F to +180°F	Neoprene	N/A	Water and wastewater; good resistance to ozone, effects of UV and some oils.

<sup>&</sup>lt;sup>1</sup> For specific chemical and temperature compatibility, refer to the **Gasket Selection Guide (05.01)** which includes the Gasket Chemical Services Short Report or refer to the Gasket Chemical Services Guide Long Report (GSG-100) located on victaulic.com. The information shown defines general ranges for all compatible fluids.

#### **Design Data**

#### Introduction

This Victaulic® General Catalog has been written for the piping system installer, designer, specification writer and owner as a basic reference guide for data about Victaulic® mechanical piping methods. This catalog is organized to provide information in the context and form most readily usable. For easy identification of major sections of interest, see the condensed table of contents on pg. i, for a fully detailed index, see pg. 115. For more detailed information, download Design Data 26.01.

#### **Important Information**

Victaulic® standard grooved pipe couplings are designed for use with pipe grooved to meet Victaulic® groove specifications and Victaulic® grooved end fittings, valves, and related grooved end components only. They are not intended for use with plain end pipe and/or fittings. Victaulic® plain end couplings are designed for use only with plain end or beveled end steel pipe (unless otherwise indicated) and Victaulic® plain end fittings. Victaulic® plain end couplings must not be used with grooved end or threaded end pipe and/or fittings. Nor are they intended for use with Advanced Groove System (AGS) components used on DN350–DN1800 | 14–72" pipe sizes.

Pipe must be prepared to meet Victaulic® specifications outlined for each specific product style. Performance data listed herein is based on proper pipe preparation. The proper gasket must be selected for the service intended. It should be noted that there are various services for which Victaulic® gaskets are not recommended. Reference should always be made to the latest Victaulic® Gasket Selection Guide (download submittal 05.01) for specific gasket service recommendations and for a listing of services which are not recommended. Gaskets for Victaulic® products always must be lubricated for proper assembly.

Gasket lubricant must meet manufacturer's specifications. Thorough lubrication of the gasket exterior, including the lips and/or pipe ends and housing interiors, is essential to prevent gasket pinching. Lubrication assists proper gasket seating and alignment during installation.

Victaulic® has a complete line of tools for preparing pipe to Victaulic® specifications. Use of these tools is recommended in preparing pipe to receive Victaulic® products. Always read and understand the Tool Operating Instructions supplied with every Victaulic® tool prior to using any tools. All data contained herein, is subject to change without notice.

#### **Notice**

The technical and performance data, weights, dimensions and specifications published in this catalog supersede all previously published data.

Victaulic® maintains a policy of continual product improvement and, therefore, reserves the right to change product specifications, designs, and standard equipment without notice and without incurring obligation.

For the most up-to-date Victaulic® product information, please visit **victaulic.com**.

The material presented in this catalog is intended for piping design reference in utilization of Victaulic® products for their intended application. It is not intended as a substitute for competent, professional assistance which is an obvious requisite to any specific application.

#### Design

Reference should always be made to design information available at no charge on request from Victaulic®. Good piping practices should always prevail. Specific pressures, temperatures, external or internal loads, performance standards and tolerances must never be exceeded. Many applications require recognition of special conditions, code requirements and use of safety factors. Qualified engineers must make these decisions.

While every effort has been made to ensure its accuracy, Victaulic®, its subsidiaries and affiliated companies, make no express or implied warranty of any kind respecting the information contained in this catalog or the material referred to herein.

Anyone making use of the information or material contained herein does so at their own risk and assumes any and all liability resulting from such use.

#### Installation

Reference should always be made to the specific Victaulic® Field Installation Handbook for the product you are installing. The following is a list of handbooks that can be requested for free from Victaulic®:

I-100 General Handbook
I-P500 Vic-Press® Handbook
I-600 Copper Products Handbook
I-900 HDPE Products Handbook

Handbooks are included with each shipment of Victaulic® products for complete installation and assembly data, and are available in PDF format on our website at victaulic.com.

# OGS

## **Global Pipe Size Designations**

Victaulic® product data is utilized worldwide and all technical data is shown in both imperial (U.S.) and metric terms. The following chart shows a comparison between typical metric and IPS pipe sizes.

Nominal Imperial Inches – Size Group	Outside Diameter mm/Spec Ref	DN mm	JIS mm	ANSI inches	China Standard (GB) mm
1/2	21.3 mm	DN15 21.3 mm	15 A 21.7 mm	1/2	15*   21.3 mm
3/4	26.7 mm	DN20 26.9 mm	20 A 27.2 mm	3/4	20*/26.9 mm
1	33.4 mm	DN25 33.7 mm	25 A 34 mm	1	25*/33.7 mm
1¼	42.2 mm	DN32 42.4 mm	32 A/42.7 mm	1 1/4	32*/42.4 mm
1½	48.3 mm	DN40   48.3 mm	40 A/48.6 mm	1 1/2	40*/48.3 mm
2	60.3 mm	DN50   60.3 mm	50 A/60.5 mm	2	50*/60.3 mm
21/2	73.1 mm	73.1 mm	_	21/2	_
3	76.1 mm DIN/ISO (3 OD)	DN65 76.1 mm	65 A/76.3 mm	_	65*/76.1 mm
	88.9 mm	DN80 88.9 mm	JIS 80 A	3	80*/88.9 mm
4	108.0 mm China and old DIN	108.0 mm	_	_	108 mm
	114.3 mm	DN100   114.3 mm	JIS 100 A	4	100*/114.3 mn
5	133 mm China and old DIN	133.0 mm	_	_	133 mm
	139.7 mm DIN/ISO (5.5 OD)	DN125   139.7 mm	125 A/139.8 mm	_	125*/139.7 mn
	141.3 mm	141.3 mm	_	5	_
6	159 mm China and old DIN	159.0 mm	_	_	159 mm
	165.1 mm JIS (6.5 OD)	165.1 mm	150 A/165.2 mm	_	_
	168.3 mm	DN150   168.3 mm	_	6	150*/168.3 mn
8	216.3 JIS	_	JIS 200 A	_	_
	219.1 mm	DN200 219.1 mm	_	8	219.1 mm
10	267.4 JIS	_	JIS 250 A	_	_
	273 mm	DN250 273.0 mm	_	10	273 mm
12	318.5 JIS	_	JIS 300 A	_	_
	323.9 mm	DN300 323.9 mm	_	12	323.9 mm
14	355.6 mm	DN350 355.6 mm	JIS 350 A	14	355.6 mm
	377 mm China	_	_	_	377 mm
16	406.4 mm	DN400   406.4 mm	JIS 400 A	16	406.4 mm
	426 mm China	_	_	_	426 mm
18	457.2 mm	DN450 457.2 mm	JIS 450 A	18	457.2 mm
	480 mm China	_	_	_	480 mm
20	508 mm	DN500   508.0 mm	JIS 500 A	20	508 mm
	530 mm China	_	_	_	530 mm
22	558.8 mm	558.8 mm	JIS 550 A	22	559 mm

Continued on next page.

AGS

**VBSP** 

Hole Cut

HDPE

FRP

#### Design Data

Nominal Imperial Inches – Size Group	Outside Diameter mm/Spec Ref	DN mm	JIS mm	ANSI inches	China Standard (GB) mm
24	610 mm	DN600   610 mm	JIS 600 A	24	610 mm
	630 mm China	_	_	_	630 mm
26	660 mm	660 mm	JIS 650 A	26	660 mm
28	711 mm	DN700 711 mm	_	28	711 mm
30	762 mm	762.0 mm	_	30	762 mm
32	813 mm	DN800   813 mm	_	32	813 mm
34	864 mm	_	_	34	864 mm
36	914 mm	DN900   914 mm	_	36	914 mm
40	1016 mm	DN1000   1016 mm	_	40	1016 mm
42	1067 mm	DN1050   1067 mm	_	42	1067 mm
44	1118 mm	DN1100   1118 mm	_	44	1118 mm
46	1168 mm	DN1150   1168 mm	_	46	1168 mm
48	1219 mm	DN1200   1219 mm	_	48	1219 mm
54	1372 mm	DN1350   1372 mm	JIS 1372	54	1372 mm
56	1422 mm	DN1400   1422 mm	JIS 1422	56	1422 mm
60	1524 mm	DN1500   1524 mm	JIS 1524	60	1524 mm
62	1574 mm	DN1550   1574 mm	JIS 1574	62	1574 mm
72	1828 mm	DN1800   1828 mm	JIS 1828	72	1828 mm

#### **GENERAL NOTES:**

Nominal designations are used where the actual OD of the pipe matches the ANSI size. Otherwise both the nominal and actual OD are listed. China sizes are listed as actual OD in mm. China sizes in shaded boxes are tubing sizes.

<sup>\*</sup> Nominal sizes

# OGS

AGS

VBSP

Hole Cut

#### Imperial (U.S.)/Metric Conversion Chart

This chart is provided as a guide for converting imperial and metric measurements provided within this catalog.

Convert Imperial (U.S.) to N	letric					
					Coi	nvert Metric to Imperial (U.S.)
25.4	×	Inches (In.)	$\Leftrightarrow$	Millimeters (mm)	×	0.03937
0.3048	×	Feet (Ft.)	<b>⇔</b>	Meters (m)	×	3.281
0.4536	×	Pounds (Lbs.)	⇔	Kilograms (kg)	×	2.205
28.35	×	Ounces (Oz.)	⇔	Grams (g)	×	0.03527
6.894	×	Pressure (psi)	⇔	Kilopascals (kPa)	×	0.145
0.069	×	Pressure	⇔	Bar	×	14.5
4.45	×	End Load (Lbs.)	⇔	Newtons (N)	×	0.2248
1.356	×	Torque (Lb. Ft.)	⇔	Newton Meters (N•m)	×	0.738
F – 32 ÷ 1.8		Temp.(°F)	⇔	Celsius (°C)		C + 17.78 × 1.8
745.7	×	Horsepower (hp)	⇔	Watts (w)	×	1.341 × 10 <sup>-3</sup>
3.785	×	Gal. per Min. (GPM)	⇔	Liters per Min. (L/M)	×	0.2642
3.785	×	10⁻³ Gal. per Min. (GPM)	⇔	Cubic Meters per Min. (m³/m)	×	264.2

### Index

**Original Groove** 

System (OGS)	
Ball Valve	17
Brass Body Valve —	
Threaded	18
Butterfly Valve	14
Composite Flexible	2
Coupling Delta-Y Assemblies	3 20
Diverter Valve	16
EndSeal® System	23
Expansion Joint	13
Fittings — Adapters,	13
Nipples, Caps and Plugs	
Fittings — Elbows	9
Fittings — Reducers	12
Fittings — Tees, Crosses, Wyes and Laterals	10
-	4
Flexible Coupling High Pressure Coupling	22
High Pressure	22
Rigid Coupling	6
High Pressure	00
Ring Coupling  Mechanical-T® Spigot	22
Assemblies	24
Mover® Expansion Joint	13
MTS Plug Valve	19
Outlet Coupling	5
QuickVic® Flexible Coupling	
QuickVic® Rigid Coupling	, –
darantia tubia acabiii.9	3
Reducing Coupling	3 5
Reducing Coupling Snap-Joint® Coupling	5
Reducing Coupling Snap-Joint® Coupling Suction Diffuser	5 5
Snap-Joint® Coupling Suction Diffuser	5
Snap-Joint® Coupling	5 5
Snap-Joint® Coupling Suction Diffuser Swinger® Swing	5 5 21
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve	5 5 21 16
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve	5 5 21 16 18
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™	5 21 16 18 19 15
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve	5 21 16 18 19 15
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve	5 21 16 18 19 15
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve	5 21 16 18 19 15
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve Vic-Boltless® Coupling	5 5 21 16 18 19 15 14 17
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve Vic-Boltless® Coupling and Tool Vic-Check® Valve	5 5 21 16 18 19 15 14 17
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve Vic-Boltless® Coupling and Tool	5 5 21 16 18 19 15 14 17 6 15
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve Vic-Boltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter	5 5 21 16 18 19 15 14 17 6 15 8
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve VicBoltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter Vic-Plug® Valve Vic-Ring® Coupling Vic-Strainer® Tee Type	5 5 21 16 18 19 15 14 17 6 15 8 18
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve VicBoltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter Vic-Plug® Valve Vic-Ring® Coupling Vic-Strainer® Tee Type Vic-Strainer® Wye Type	5 5 21 16 18 19 15 14 17 6 15 8 18 7
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve VicBoltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter Vic-Plug® Valve Vic-Ring® Coupling Vic-Strainer® Tee Type Vic-Strainer® Wye Type XL Couplings for use	5 5 21 16 18 19 15 14 17 6 15 8 18 7 21
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve VicBoltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter Vic-Plug® Valve Vic-Ring® Coupling Vic-Strainer® Tee Type Vic-Strainer® Wye Type XL Couplings for use with XL Fittings	5 5 21 16 18 19 15 14 17 6 15 8 18 7 21
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve Vic-Boltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter Vic-Plug® Valve Vic-Ring® Coupling Vic-Strainer® Tee Type Vic-Strainer® Tee Type XL Couplings for use with XL Fittings XL (Extended Life) System	5 5 21 16 18 19 15 14 17 6 15 8 18 7 21
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve VicBoltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter Vic-Plug® Valve Vic-Ring® Coupling Vic-Strainer® Tee Type Vic-Strainer® Tee Type XL Couplings for use with XL Fittings XL (Extended Life) System for Rubber-lined	5 5 21 16 18 19 15 14 17 6 15 8 18 7 21 6
Snap-Joint® Coupling Suction Diffuser Swinger® Swing Check Valve Three Port Diverter Valve Triple Service Assemblies Venturi Check Valve Vic-300® MasterSeal™ Butterfly Valve Vic®-Ball Valve Vic-Boltless® Coupling and Tool Vic-Check® Valve Vic-Flange® Adapter Vic-Plug® Valve Vic-Ring® Coupling Vic-Strainer® Tee Type Vic-Strainer® Tee Type XL Couplings for use with XL Fittings XL (Extended Life) System	5 5 21 16 18 19 15 14 17 6 15 8 18 7 21

### Advanced Groove System (AGS)

0,010 (, 10.0)	
AGS Butterfly Valve	30
AGS Expansion Joint	30
AGS Fittings	29
AGS Flexible Coupling	27
AGS Rigid Coupling	27
AGS Stainless Steel Rigid Coupling	27
AGS Suction Diffuser	32
AGS Tee Type Vic-Strainer®	32
AGS Triple Service Valve Assemblies	31
AGS Vic-300® Butterfly Valve	30
AGS Vic-Check®  Dual Disc Valve	31
AGS Vic-Flange® Adapter	28
AGS Vic-Ring® Flexible Coupling	28
AGS Vic-Ring® Rigid Coupling	28
AGS Wye Type Vic-Strainer®	32

#### Victaulic® Bolted Split-Sleeve Products (VBSP)

Sieeve i loudets (VDSI	,
Non-Restrained Flexible Coupling for Carbon Steel Pipe	33
Non-Restrained Flexible Coupling for Stainless Steel Pipe	34
Restrained Flexible Single-Gasket Coupling for Carbon Steel Pipe	34
Restrained Flexible Single-Gasket Coupling for Stainless Steel Pipe	34

## Hole Cut System

Mechanical-T® Outlet	35
Outlet Coupling	36
Vic-Let® Strapless Outlet	36
Vic-O-Well® Strapless Thermometer Outlet	36

#### **Expansion Joints**

AGS Expansion Joint	38
Expansion Joint	38
Expansion Joint Coupling	40
Mover® Expansion Joint	38
Non-Restrained Flexible Expansion Coupling for Carbon Steel Pipe Non-Restrained Flexible	39
Expansion Coupling for Stainless Steel Pipe	39

# Plain End Systems for Carbon Steel

Fittings	42
Roust-A-Bout® Plain End	
Coupling	41

### Stainless Steel System

ANSI Schedule

10S Fittings	47
ANSI Schedule	
40S Fittings	48
Butterfly Valve	49
Duplex Flexible Coupling	45
Duplex Lightweight	
Flexible Coupling	46
Duplex Rigid Coupling	44
MTS Plug Valve	51
Rigid Coupling	46
Swinger® Check Valve	49
Three-Piece Vic-Press®	
Ball Valve	50
Type 316 Flexible Coupling	45
Type 316 Lightweight	
Flexible Coupling	45
Type 316 Rigid Coupling	44
Vic-300® MasterSeal™	
Stainless Steel	
Butterfly Valve	49
Vic-Ball® Valve	50
Vic-Ball® Valve	50
Vic-Flange® Adapter	46
Vic-Press® for	
Schedule 10S	
Stainless Steel	
Type 304	52
Vic-Press® for	
Schedule 10S	
Stainless Steel	
Type 316	53

#### **Copper System**

Butterfly Valve for Copper	59
Dielectric Waterway	
Fitting	57
Fittings for Copper	58
Mechanical-T® Bolted	
Branch Outlet and	
Cross Assemblies	
for Copper	59
QuickVic® Rigid Coupling	56
Rigid Coupling	56
Vic-Flange® Adapter	
for Copper	57

#### **Shouldered Steel System**

Flexible Coupling for	
Shouldered Steel Pipe	62
Shouldered Butterfly Valve	64
Shouldered Gate Valve	64
Shouldered Steel Fittings	63
Transition Coupling	
for HDPE to	
Shouldered Steel	62

# Hydronic Balancing Solutions

Grooved End Metering Station (Orifice Type)	65
Oventrop Double	
Regulating and	
Commissioning Valve	65

### **HDPE System**

HDPE to Steel	
Transition Coupling	68
Plain End Coupling	
for HDPE Pipe	67
Vic-Flange® Plain End	
Adapter for HDPE Pipe	68

#### Aquamine® PVC System

Aquamine® Ball Valve	72
Aquamine® Butterfly Valve	72
Aquamine® Fittings	71
Aquamine® Plain End	69
Coupling	69
Aquamine® PVC Pipe	72
Aquamine® Transition Coupling for PVC to Grooved Steel	70
Aquamine® Transition Coupling for PVC	
to HDPE	70



VBSP

# **Grooved PVC System**

Composite Flexible Coupling	73

#### FRP System

Index

Coupling for Fiberglass	
Reinforced Plastic Pipe	74

Pipe Preparation Tools		
APG	94	
CTH-01 Small 10-Ton		
Hydraulic Tool	102	
CTH-02 Large 25-Ton		
Hydraulic Tool	102	
HCT908	94	
Large Ring Clamp	101	
Small Ring Clamp	101	
PFT510	97	
Power Mule II	98	
PT101 and PT102	101	
VAP131	103	
VAPS112 Adjustable Pipe Stand	00	
·	98	
VAPS 131F Hydraulic Positioner	104	
VAPS 131R Hydraulic	104	
Adjustable Pipe Stand	103	
VAPS 131T		
Assembly Table	104	
VAPS224 Adjustable		
Pipe Stand	99	
VAPS270 Adjustable		
Pipe Stand	100	
VAPS1672 Adjustable	00	
Pipe Stand	99	
VCT1 Manual	96	
VCT2 Automatic	96	
VE12 Groove In-Place	77	
VE26/46 Power Drive Kit	78	
VE26 Groove In-Place	77	
VE46 Groove In-Place	78	
VE106/VE107 Groove-N-Go	90	
VE226 Portable Groover	80 79	
	79 79	
VE226 Power Drive Kit VE268		
	86	
VE270FSD/VE271FSD	82	
VE272SFS	81	
VE414MC	87	
VE416FS	83	
VE416FSD/VE417FSD	84	
VE450FSD	85	
VE460	88	
VE872	89	
VG28GD (Gear Drive)	90	

VG28GD-ABR (Abrasion)	90
VDG26GD (Double Groove)	90
VG824 (OGS)	91
VG824-ABR	
(Abrasion OGS)	91
VG824DG (Double Groove)	91
VG828 (AGS)	91
VG VIC®-GROOVER	92
VHCT900	95
VIC-TAP® II	95
VPD752 Power Drive	97
VPG26	93
VPG824	93

#### Gaskets

Special Gaskets—IPS	108
Standard Gaskets—IPS	107
VBSP Gaskets	110
VBSP O-rings	110
Vic-Press® Seals	109

#### Warranty

#### WARRANTY:

We warrant all products to be free from defects in materials and workmanship under normal conditions of use and service. Our obligation under this warranty is limited to repairing or replacing at our option at our factory any product which shall within one year after delivery to original buyer be returned with transportation charges prepaid, and which our examination shall show to our satisfaction to have been defective.

THIS WARRANTY IS MADE EXPRESSLY IN LIEU
OF ANY OTHER WARRANTIES, EXPRESS OR
IMPLIED, INCLUDING ANY IMPLIED WARRANTY
OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR
PURPOSE. THE BUYER'S SOLE AND EXCLUSIVE
REMEDY SHALL BE FOR THE REPAIR OR REPLACEMENT
OF DEFECTIVE PRODUCTS AS PROVIDED HEREIN.
THE BUYER AGREES THAT NO OTHER REMEDY
(INCLUDING, BUT NOT LIMITED TO, INCIDENTAL
OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS,
LOST SALES, INJURY TO PERSON OR PROPERTY OR
ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS)
SHALL BE AVAILABLE TO HIM.

Victaulic® neither assumes nor authorizes any person to assume for it any other liability in connection with the sale of such products.

This warranty shall not apply to any product which has been subject to misuse, negligence or accident, which has been repaired or altered in any manner outside of a Victaulic® factory or which has been used in a manner contrary to Victaulic® instructions or recommendations. Victaulic® shall not be responsible for design errors due to inaccurate or incomplete information supplied by Buyer or its representatives.

Items purchased by Victaulic® and resold will have the original equipment manufacturer's warranty extended to Victaulic® customers.

## **Regulatory Compliance**

#### PRODUCT CERTIFICATIONS:

#### Fire Protection

ACTIVFIRE - ActivFire Register of Fire Protection Equipment (Australia)

CCCF - China Certification Center for Fire Protection Products (China)

CFPSC - Chinese Fire Protection Safety Center (Taiwan)

CNBOP – Centrum Naukowo-Badawcze Ochrony Przeciwpozarowej (Poland)

CNPP- Centre National de Prévention et de Protection (France)

CTPC - Consiliul Technic Permanent Pentru Constructii (Romania)

cULus - Underwriter's Laboratories, LLC (USA)

EMI - Epitesugyi Minosegellenorzo Innovacious (Hungary)

FDNY - City of New York Fire Department (USA)

FM - FM Approvals (USA)

HDB - Singapore Housing Development Board (Singapore)

KFI - Korea Fire Industry Technology Institute (Korea)

LPCB – Loss Prevention Certification Board (UK)

SBSC - Svensk Brand & Säkerhets Certifiering AB (Sweden)

TFRI – Tanjin Fire Research Institute of Ministry of Public Security (China)

TSU – Technický Skúšobný Ústav Pieštany, š.p. (Slovakia)

TSUS – Technický Skúšobný Ústav Stavebný, n.o. (Slovakia)

TZUS – Technický a Zkuševní Ústav Stavební Praha, s.p. (Czech Republic)

UKRFIRESERT - State Certification Center (Ukraine)

UL - Underwriter's Laboratories, LLC (USA)

ULC - Underwriter's Laboratories of Canada (Canada)

VdS – Verband der Schadenverhütung GmBH (Germany)

VKF – Vereinigug Kantonaler Feuerversicherungen (Switzerland)

Zagrebinspekt (Croatia)

#### **Potable Water**

ÁNTSZ – Állami Népegészségügyi És Tisztiorvosi Szologálat (Hungary)

ARPA – Agenzia Regionale per la Protezione dell'Ambiente (Italy)

DVGW - Deutscher Verein des Gas- und Wasserfaches e.V. (Germany)

Eurofins - ACS: Attestation de Conformité Sanitaire (France)

HZJZ - Croatian National Institute of Public Health (Croatia)

NSF - NSF International (USA)

ÖVGW - Österreichische Vereinigung für das Gas-und Wasserfach (Austria)

PZH - Panstwowy Zaklad Higieny (Poland)

RUVZPP – Regionálny úrad verejného zdravotníctva so sídlom v Poprade (Slovakia)

SAI - SAI Global (Australia)

SPAN – Suruhanjaya Perkhidmatan Air Negara (Malaysia)

SVGW - Schweizerischer Verein des Gas- und Wasserfaches

UL - Underwriter's Laboratories, LLC (USA)

WRAS – Water Regulations Advisory Scheme (UK)

ZUOVA – ZDRAVOTNÍ ÚSTAV se sídlem v Ostrave (Czech Republic)

#### Maritime

ABS - American Bureau of Shipping (USA)

BV – Bureau Veritas (France)

CCG - Canadian Coast Guard (Canada)

CRS - Croatian Register of Shipping (Croatia)

CCS - China Classification Society (China)

DNV – Det Norske Veritas (Norway)

DNV GL (Global)

GL - Germanischer Lloyd (Germany)

KRS - Korean Registry of Shipping (Korea)

LR - Lloyd's Register of Shipping (UK)

RINA - Registro Italiano Navale (Italy)

USCG - US Coast Guard (USA)

#### **HVAC**

CSTB - Centre Scientifique et Technique du Bâtiment (France)

ITB - Instytut Techniki Budowlanej (Poland)

Sercons Europe BV (Russia)

#### Plumbing

IAPMO - International Association of Plumbing & Mechanical Officials (USA)

ICC-ES - International Code Council- Evaluation Service (USA)

NSF - NSF International (USA)

WaterMark (Australia)

#### **COMPLIANCE:**

#### Codes/Standards

ANSI - American National Standards Institute (USA)

API - American Petroleum Institute (USA)

APSAD - Assemblée Plenière Société Assurance Dommage (France)

AS/NZS - Standards Australia and Standards New Zealand (AU & NZ)

ASTM - American Society for Testing and Materials (USA)

AWWA - American Water Works Association (USA)

BOCA - Building Officials and Code Administrators (USA)

CSA - Canadian Standards Association (Canada)

CSFM - California State Fire Marshal (USA)

EN – European Standards

GOST R – Gosstandart (Russia)

IPC - International Plumbing Code (USA)

ISO - International Standards Organization (Global)

NACE - National Association of Corrosion Engineers (USA)

NFPA – National Fire Protection Association (USA)

SBCCI - Southern Building Code Congress International (USA)

UPC - Uniform Plumbing Code (USA)

#### Pressure Equipment Safety

(97/23/EC) PED - Pressure Equipment Directive (Europe)

CSA B51 - "Boiler, Pressure Vessel, and Pressure Piping Code" (Canada)

CRN - Canadian Registration Number per CSA B51 (Canada)

#### Chemical Safety / Recycling

(EC/1907/2006) REACH-Registration, Evaluation, Authorization, and Registration of Chemicals (Europe)

(2002/95/EC) RoHS -Restriction of Hazardous Substances Directive (Europe)

(2002/96/EC) WEEE - Waste Electrical and Electronic Equipment Directive (Europe)

#### **Building Services**

(EU/305/2011) CPR -Construction Products Regulation-Fire safety products (Europe)

NBC - National Building Code (Canada)

PSB - TUV SUD PSB Singapore (Singapore)

#### **Explosive Environments**

(94/9/EC) ATEX - Equipment and protective systems for potentially explosive atmospheres (Europe)

#### Seismic

OSHPD - Office of Statewide Health Planning and Development (USA)

#### **Tools and Machinery**

(2006/42/EC) MD - Machinery Directive (Europe)

© Copyright 2014, Victaulic® Company. All rights reserved.

No part of this Victaulic® catalog may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopy, recording or otherwise, without the prior written permission of Victaulic® Company.

victaulic.com G-103-INT REV P

# VICTAULIC® WORLDWIDE

#### North and South America

#### **UNITED STATES AND** WORLD HEADQUARTERS

4901 Kesslersville Road Easton, PA 18040 USA 1 800 PICK VIC 1 800 742 5842 (within North America) 1 610 559 3300

#### pickvic@victaulic.com

#### CANADA

123 Newkirk Road Richmond Hill Ontario L4C 3G5 Canada 1 905 884 7444

#### viccanada@victaulic.com

#### MEXICO

Calle Circuito del Marques No 8 al 11 Parque Industrial El Marques Municipio El Marques Queretaro, Mexico CP 76246 52 442 253 0066 vical@victaulic.com

#### **BRAZIL**

Av. Marquês de São Vicente 446 Cj 1303 Várzea da Barra Funda -São Paulo-SP CEP 01139-000 - Brazil 55 11 3548 4280 vicbr@victaulic.com

#### Europe, Middle East, Africa and India

Prijkelstraat 36 9810 Nazareth, Belgium 32 9 381 15 00

#### viceuro@victaulic.com

#### UNITED KINGDOM

Units B1 & B2. SG1 Industrial Park Cockerell Close, Gunnels Wood Road Stevenage, Hertfordshire, UK SG 12NB

44 1438 310 690

viceuro@victaulic.com

#### **GERMANY**

LOGICPARK Gutenbergstrasse 19 D-64331 Weiterstadt, Germany 49 6151 9573 0

#### viceuro@victaulic.com

#### ITALY

Via M. Biagi 23/25/27 27022 Casorate Primo, Italy 39 02 900 58 256

#### viceuro@victaulic.com

#### **UNITED ARAB EMIRATES**

P.O. Box 17683, Unit XB 8 Jebel Ali Free Zone Dubai, United Arab Emirates 971 4 883 88 70

#### viceuro@victaulic.com

#### INDIA

India Land Global Industrial Park Plot 4, Hinjewadi, Phase-1, Mulshi Pune 411057, India 91 20 67 919 300 viceuro@victaulic.com

#### **Asia Pacific**

#### **CHINA**

Unit 808, Building B Hongwell International Plaza No.1602 West Zhongshan Road Shanghai, China 200235 86 21 6021 9400

#### vicap@victaulic.com

#### **KOREA**

4F, Seoil Building, 1430-5, Seocho-Dong, Seocho-Gu Seoul, Korea 137-070 82 2 521 7235

#### vicap@victaulic.com

No. 55, NanGong Rd, LuJhu Township TaoYuan County, Taiwan 338 886 3 222 3220

#### vicap@victaulic.com

#### **AUSTRALIA AND NEW ZEALAND**

7 Chambers Road Unit 1 Altona North, Victoria Australia 3025 1 300 PIC VIC 1 300 742 842 (within Australia) 0 508 PICK VIC 0 508 7425 842 (within New Zealand) 61 3 9392 4000

vicaust@victaulic.com

For additional locations, information and support, visit victaulic.com/contactus

#### victaulic.com





















Victaulic and all other trademarks used herein are trademarks or registered trademarks of Victaulic Company, and/or its affiliated entities, in the U.S. and/or other countries. The terms "Patented" or "Patent Pending" refer to design or utility patents or patent applications for articles and/or methods of use in the United States and/or other countries © 2014 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

