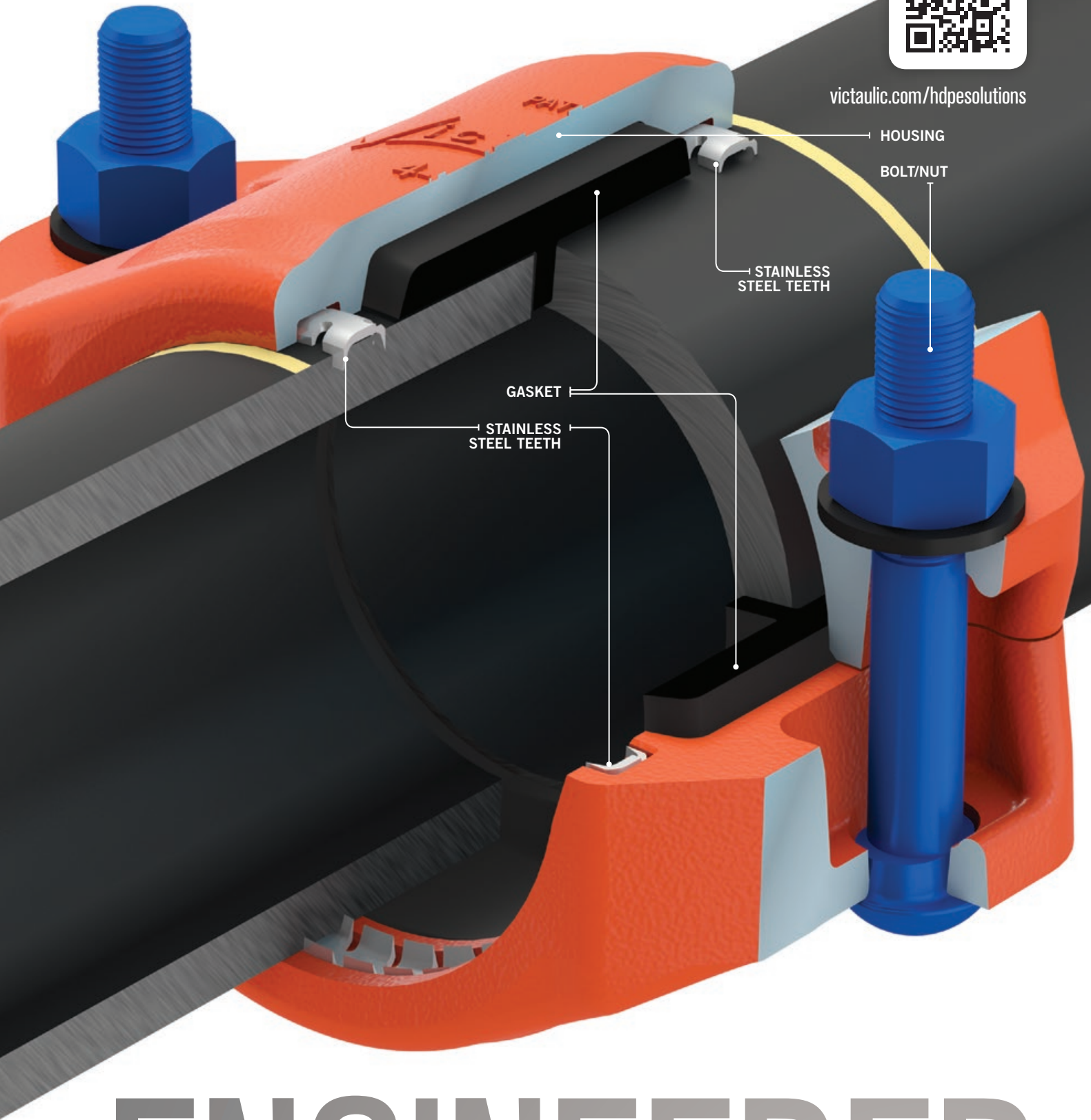


# SYSTEM SOLUTION FOR HDPE PIPE





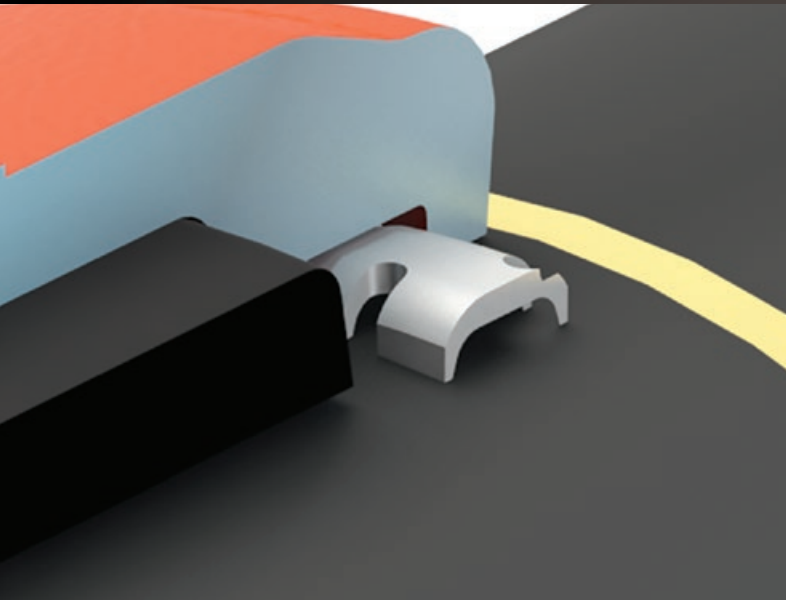
victaulic.com/hdpesolutions



# ENGINEERED

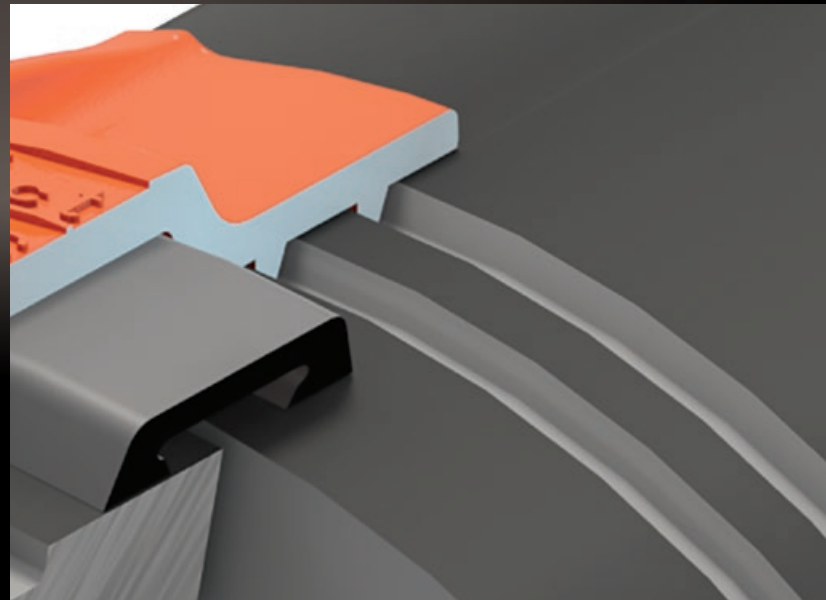
# VICTAULIC® HDPE PIPE JOINING TECHNOLOGY

## HOW DOES IT WORK?



### SMALL DIAMETER

Dual rows of stainless steel teeth engage into the outside diameter of plain end HDPE as coupling housing halves are tightened bolt pad to bolt pad, allowing for visual confirmation of correct assembly.



### LARGE DIAMETER

Coupling “keys” engage into double grooved HDPE pipe as coupling housing halves are tightened bolt pad to bolt pad, allowing for visual confirmation of correct assembly.

# TOUGH



DESIGNED  
FOR BURIED,  
SUBMERGED,  
OR ABOVE  
GROUND  
APPLICATIONS



# MAKE HDPE EASY



## INSTALLS UP TO 10× FASTER

Join HDPE pipe in half the time. Installing in tight or vertical spaces has never been easier; Victaulic's system solution for HDPE pipe goes anywhere and everywhere — that's a time savings you've never seen before.



## INSTALLATION IS WEATHER INDEPENDENT

Whether it's rain, shine, or just downright frigid and fierce, Victaulic® products for HDPE pipe can be installed. No need to check the weather forecast or worry about protection or project delays any longer.

# HDPE joints completed per hour on 4" SDR 11 HDPE pipe



“WITH THIS COUPLING, IT’S SO EASY... JUST MARK THE DEPTH, SLIDE THE PIPE IN AND TIGHTEN IT UP... MUCH FASTER THAN FUSING.”

Dave, Stone Hill Contracting



## MEETS OR EXCEEDS PRESSURE RATINGS OF HDPE PIPE

Small diameter solutions call for dual rows of razor-sharp teeth that sink into the O.D. of HDPE pipe, forming a sealed hold that never lets go. Large diameter solutions enlist a rugged double groove to seal the deal. Push it, pull it, and drag it to the max.



## INSTALLS WITH SIMPLE TOOLS

A simple socket wrench or cordless impact driver will do the job — no special crew training required.



# PIPE JOINING

SYSTEMS THROUGH 36" | 900 mm



INSTALLATION-  
READY™



### Certifications/Listings:



[Download publication 10.01](#) for Fire Protection Certifications/Listings  
[Download publication 02.06](#) for ANSI/NSF Potable Water Approvals/Listings

## Coupling for Plain End HDPE Pipe STYLE 905

[Download publication 19.07](#) for complete information

- Designed for plain end HDPE pipe (SDR 7–SDR 26)
- Sizes from 2–14" IPS and 63–355 mm ISO





**Certifications/Listings:**



[Download publication 10.01](#) for Fire Protection Certifications/Listings  
[Download publication 02.06](#) for ANSI/NSF Potable Water Approvals/Listings

## Transition Coupling for HDPE-to-Steel Pipe

STYLE 907 and STYLE W907

[Download publication 19.10](#) for complete information

- Designed to provide a single transition from plain end HDPE pipe (SDR 7–SDR 26) to grooved steel sized piping system components
- Sizes from 2–14" IPS HDPE to 2–14" | DN50–DN350 grooved steel
- Sizes from 63–355 mm ISO HDPE to 2–14" | DN50–DN350 grooved steel

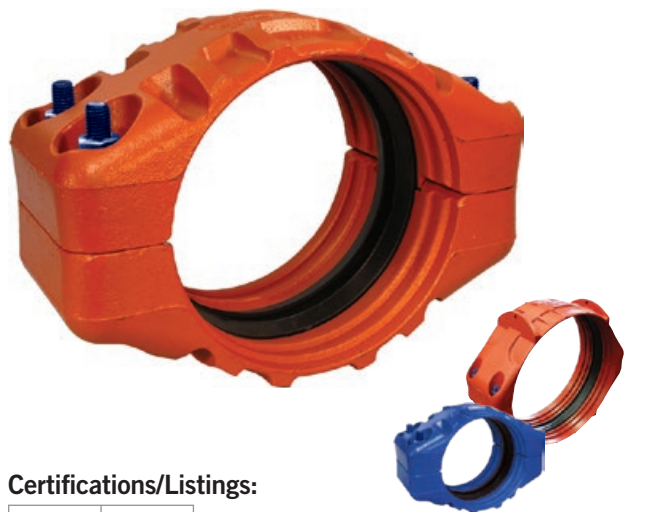


## Flange Adapter for HDPE-to-Flanged Pipe

STYLE 904

[Download publication 19.12](#) for complete information

- Designed to provide a single transition from plain end HDPE pipe (SDR 7–SDR 21) to flanged piping system components
- Sizes from 3–8" IPS HDPE to 3–8" IPS ANSI Class 150 Flange



**Certifications/Listings:**



[Download publication 10.01](#) for Fire Protection Certifications/Listings  
[Download publication 02.06](#) for ANSI/NSF Potable Water Approvals/Listings

## Coupling for Double Grooved HDPE Pipe

STYLE 908

[Download publication 19.09](#) for complete information

- Designed for double grooved HDPE (SDR 7–SDR 21)
- Sizes from 8–36" IPS and 250–900 mm ISO
- Larger diameter couplings have lifting lugs for easy maneuvering around the job site
- Standard Victaulic coupling assembly procedure used for installation





# FITTINGS, OUTLETS AND TOOLS







## Fittings for HDPE Pipe

[Download publication 19.11](#) for complete information

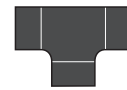
- Available in SDR 7, SDR 9, SDR 11, and SDR 17
- Sizes from 2–8" IPS and 63–225mm ISO
- Full flow fittings
- Compatible for use with Styles 905, 907, and 904



**No. H10**  
90° Elbow



**No. H11**  
45° Elbow



**No. H20**  
Tee



**No. H50**  
Reducer

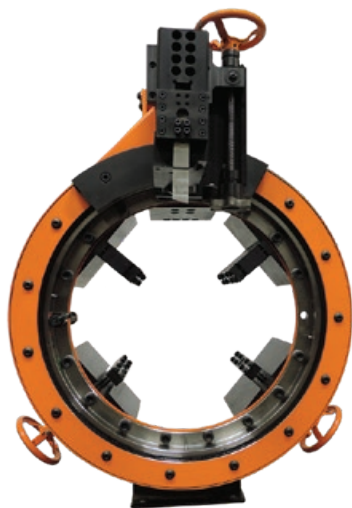


## Mechanical-T Spigot Outlet

STYLE 926

[Download publication 11.07](#) for complete information

- Designed to provide an outlet connection on HDPE, steel, and ductile iron pipe materials in IPS, ISO, and AWWA pipe sizes
- 4" outlets available for 10–32" IPS pipe diameters
- 114.3 mm outlets available for 250–800 mm ISO pipe diameters
- 6" outlets available for 16 – 48" IPS pipe diameters
- 168.3 mm outlets available for 400–1200 mm ISO pipe diameters



## Cut Grooving Tool for HDPE Pipe

**CG3100** 8–18" IPS | 250–450mm ISO

**CG3300** 16–26" IPS | 400–630mm ISO

**CG3500** 24–36" IPS | 630–900mm ISO

[Download publication 24.06](#) for complete information

- Designed for cut grooving HDPE (SDR 7–SDR 21) pipe
- Provides the only grooved joining solution for large diameter HDPE pipe
- Faces and cuts parallel grooves into the end of the pipe

WEATHER INDEPENDENT | LIGHTWEIGHT | PORTABLE | SMALL FOOTPRINT

# SERIES 906

## KNIFE GATE VALVE FOR PLAIN END HDPE PIPE

INSTALLATION-  
READY™



### One-piece Replacement Cartridge

Eliminates the need for a second “maintenance” valve, significant reduction of inventory costs

Eliminates need to rebuild worn out valves – reduce maintenance risk



### Integrated Coupling Design

No additional couplings needed

Simple hand tools such as a cordless drill or socket wrench can install the valve in any position, reducing capital needs



### Bolt Pad to Bolt Pad Assembly

Valve is Installation-Ready™ with no loose parts



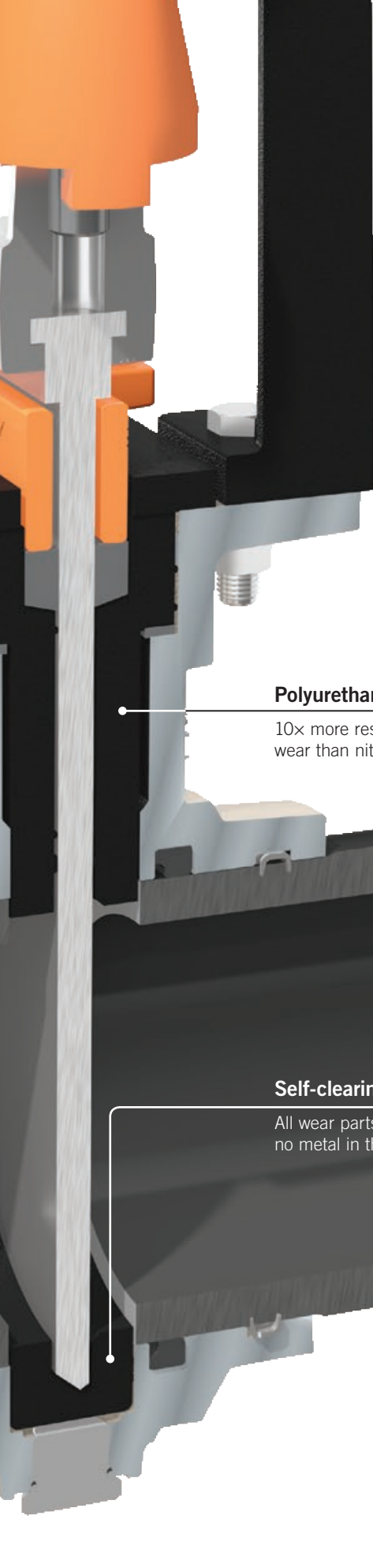
### Type 316 Stainless Steel Gate

Up to 4× thickness of a “push-through” designed knife gate – increases valve life expectancy

### Type 316 Stainless Steel Teeth

Connect to plain end pipe to eliminate the need for flanging and provide a fully restrained joint





**Polyurethane Seat and Packing**

10x more resistant to abrasive wear than nitrile elastomer

**Self-clearing Seat**

All wear parts are in the cartridge kit, no metal in the flow path



**PNEUMATIC, HYDRAULIC, AND MANUAL ACTUATION AVAILABLE**

- Sizes from 3–8" IPS HDPE
- Pressures up to 150psi | 1034 kPa | 10 bar



# CASE STUDY

## Type of Project:

Storm Drainage System

## Victaulic Solutions:

Ease and Speed of Installation  
Corrosion Resistance  
Labor Savings  
Space Constraints  
Reliability  
Visual Verification of Correct Installation

## Owner:

Port of Baltimore

## Contractor:

Marine Technologies, Inc.

## Engineer/Consultant:

Whitney Bailey Cox & Magnani, LLC



## Services:

Storm Drain Discharge Piping

## Pipe Materials:

DR 13.5 HDPE

## Pipe Size Range:

36" IPS

## DUNDALK MARINE TERMINAL STORM DRAIN DISCHARGE PIPING

Dundalk Marine Terminal in Baltimore, Maryland was in dire need of a drainage overhaul after a series of heavy rains flooded hundreds of new auto imports, rendering them totaled and jeopardizing auto-handling business for the Port of Baltimore. A new drainage system designed to handle large amounts of water – even those that would come with a 500-year flood – was built during the summer of 2017. The discharge piping on the storm drain project, which would transfer storm water several thousand feet away from the port and into the nearby Colgate Creek, needed to be durable and meant to last, even in a corrosive, buried environment. During construction, the port placed restrictions on the contractor with regard to the length of time each trench section could remain open, along with the size of each section, so installation efficiency and minimizing trench size were key.

Due to its resilient, corrosion-resistant composition, HDPE was specified as the pipe material for the 3,700' | 1,128m, 36" IPS buried discharge line. Victaulic's designed-to-be-buried Style 908 couplings were chosen to join (37) 100' | 112.8m lengths of pipe because they could be installed in minutes with no downtime and in a narrower trench than would be required to accommodate a fusion machine, both of which provided cost savings. In choosing to use the combination of HDPE pipe with Style 908 couplings, there was no

post-joining corrosion protection work to be completed as there would have been if welded steel pipe had been chosen.

The HDPE pipe was grooved prior to it arriving onsite, which provided additional time savings, allowing the contractor, Marine Technologies, Inc., to drop the pipe into the trench as soon as the trench was prepared. The contractor was also able to have confidence in correct installation using "bolt pad-to-bolt pad" visual confirmation, allowing for a quick move to the next joint. Luke Browning, Project Manager, noted that he works on a lot of projects and felt like the Dundalk project opened his eyes to mechanically joining HDPE: **"I will be more likely to use HDPE on future projects, given that reliable mechanical joining technology is available."**

On this project, Victaulic's simple and durable system solution for HDPE pipe allowed contractors to bypass the limitations of butt fusion and electrofusion couplings, including space, cost, the need for a heat source, downtime, time scraping and cleaning pipe ends, and weather conditions. This project illustrates the many benefits of using mechanically joined HDPE pipe. Ultimately, the contractor enjoyed the benefits and reliability of Victaulic's mechanical solution and the Port of Baltimore saw less of an opportunity cost in terms of lost auto-handling revenue during construction.



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