

# Environmental Piping System

## Poly-Flo<sup>®</sup>

**DOUBLE  
SAFETY!**

### Advanced PE and PP-R Double Containment



**Another  
Corrosion  
Problem  
Solved.<sup>™</sup>**



**ASAHI/AMERICA<sup>®</sup>**  
Your Experts in Plastics<sup>™</sup>

[www.asahi-america.com](http://www.asahi-america.com)



## Plastics. Purity. Performance. Problem Solved.

Asahi/America pioneered the market for thermoplastic valves in the United States and Latin America during a time when there was no viable alternative to metal for piping systems. Asahi/America began by promoting valves from a company known as Asahi Organic Chemical Industry Co., Ltd. and piping through AGRU GmbH in Austria. Through distributor and end-user education and acceptance, the use of thermoplastics has grown. Asahi/America now manufactures and distributes thermoplastic products including valves, actuators, single and double wall piping systems and specialty components throughout the United States and Latin America.



*Asahi/America Corporate Headquarters in Lawrence, MA*

Asahi/America is a diversified ISO9001:2008 certified manufacturer and supplier of corrosion resistant fluid flow products. Headquartered in Lawrence, Massachusetts, where we operate a 200,000-square-foot manufacturing and warehouse facility, Asahi/America supports all of our products with a comprehensive selection of in-depth technical documents and product catalogs. To access any of Asahi/America's technical documentation, testing information, or product catalogs, visit the company's web site at [www.asahi-america.com](http://www.asahi-america.com) or contact our Customer Service department at 1-800-343-3618.

## Another Corrosion Problem Solved.

Our valves, actuators and piping systems have been solving corrosion problems in the world's leading industrial, municipal and entertainment installations for more than four decades. From the harshest chemicals to the toughest weather conditions, our family of fluid flow solutions provides extended life cycle and dependable performance to a wide range of applications.

# Another Corrosion Problem Solved.™



## Poly-Flo® - Advanced PE & PP-R

Poly-Flo's® unique unitary construction saves time and labor on each project. Low cost and easy installation makes Poly-Flo® the ideal system for drainage systems, pressurized transfer lines and industrial applications.

Typical Poly-Flo® installations include water and wastewater treatment applications using sulfuric acid, caustic soda and sodium hypochlorite; and chemical processing and semiconductor applications handling sodium hydroxide, aluminum nitrate, and sulfuric and hydrofluoric acid.



## Supply Range

**Standard Sizes:** 1x1-1/2 (32x50mm), 2x3 (63x90mm) and 4x6 (110x160mm)

**Materials:** Proline® PP-R, Advanced PE

**Welding Methods:**

Simultaneous butt fusion

## Features and Benefits

- Unique co-extruded and molded system. In other double containment pipe systems, the inner and outer components are made separately and then assembled into a double wall configuration.
- The carrier and containment pipe have OD consistent with metric dimensions.
- Assembled using simultaneous butt fusion only.
- Available with manual and low point leak detection sensors only.

## Sample Specification

System shall be Asahi/America's Poly-Flo® PP and Advanced PE co-extruded double containment pipe. System shall meet the pressure and materials requirements of the specifications. Poly-Flo® co-extruded pipe has a carrier pipe rating of SDR11 rated for 150psi at 68°F, and containment pipe rating of SDR17 rated for 90psi at 68°F.

Please consult Asahi/America for expanded product sample specification.

## Why Choose Poly-Flo®?

Poly-Flo® pipe and fittings are stocked in our Massachusetts warehouse, which reduces lead times when compared to other double containment piping systems.

Poly-Flo's® smaller profile dimensions are ideally suited for installations that possess tighter space constraints such as chemical rooms.

Poly-Flo® is self-restraining making it ideal for horizontal directional drilling (HDD).

## Poly-Flo® Ideal Applications

- Horizontal directional drilling
- Applications where there are fluctuations in temperature
- Installations with tight space constraints
- Chemical piping





### OIL AND GAS

Fracking  
Petrochemical  
Exploration  
Flow-Lines



### INDUSTRY

Chemical  
Steel Galvanization  
Automotive



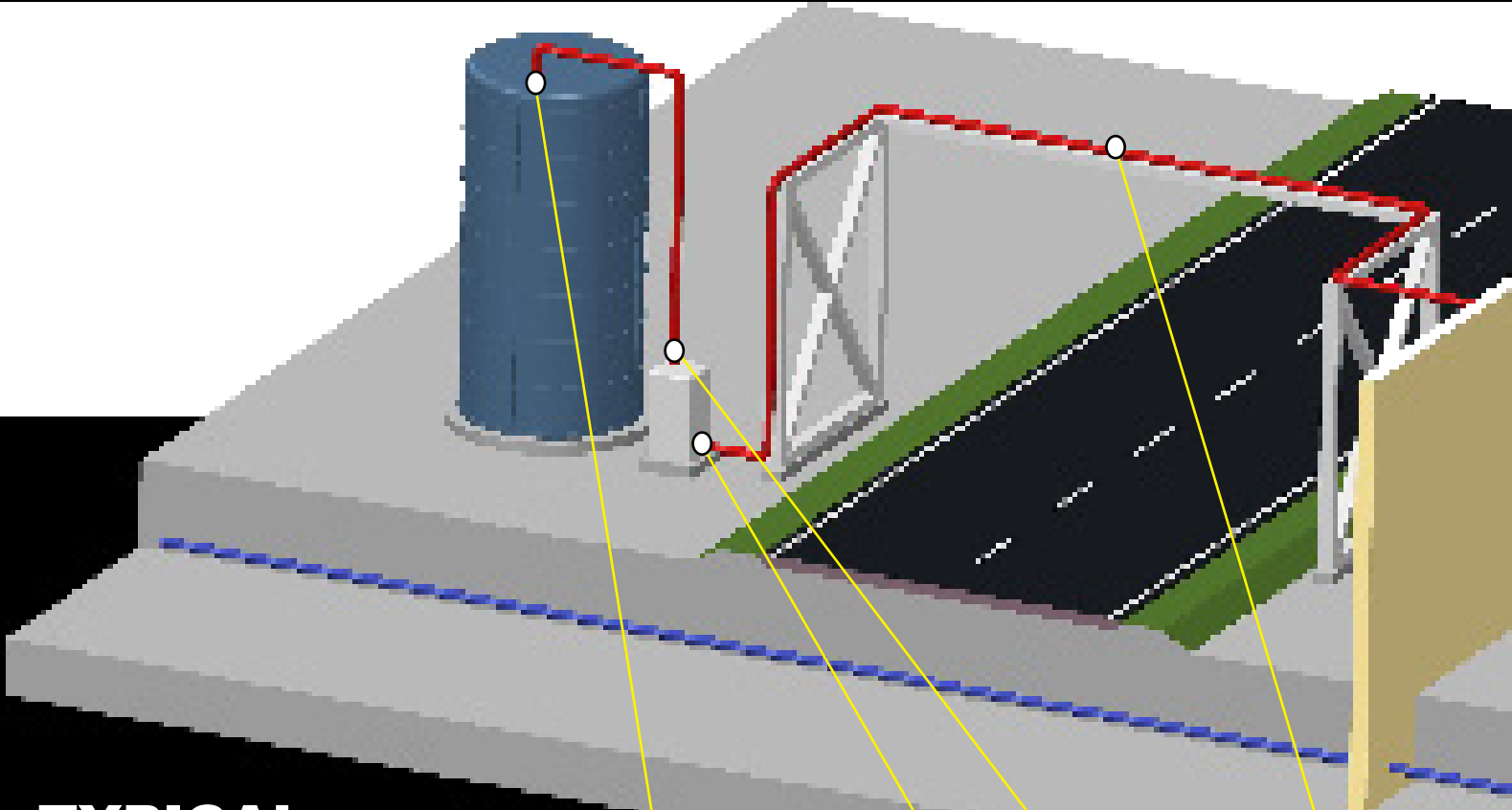
### MINING

Chemical  
Slurry  
Waste

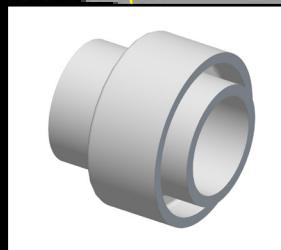


### INFRASTRUCTURE

Airports  
Power Plants  
(Water Drains)

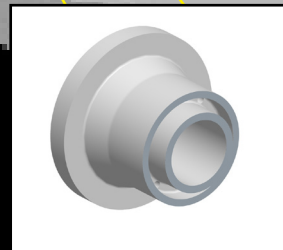


# TYPICAL APPLICATIONS FOR POLY-FLO® PIPING SYSTEMS



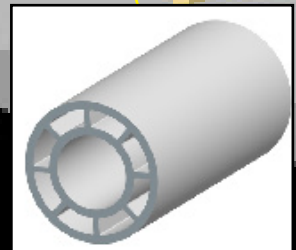
**DOGBONE®**  
End Termination

Transition from double to single wall piping systems



**FLANGE ADAPTER**

For mechanical connections and for where welding is not possible



**POLY-FLO® PIPE**

Suitable for above ground installations and direct burial without bedding





### FOOD & BEVERAGE

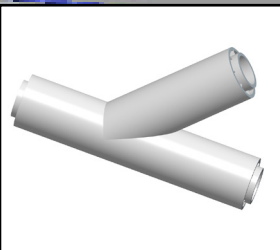
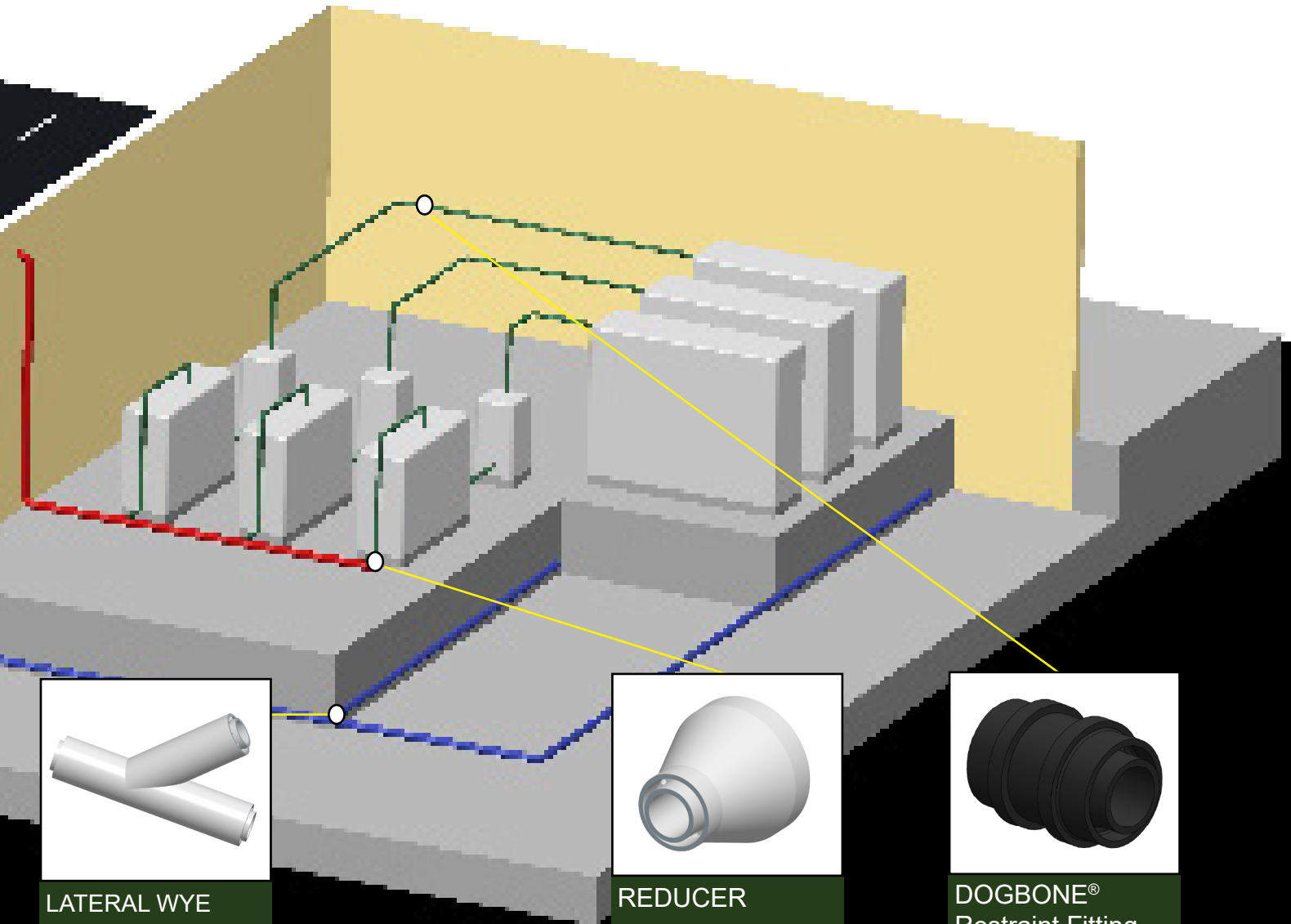
Microelectronic  
Life-Science Industry  
Laboratories  
Waste Drain Pipe  
Chemical Process Piping



### WATER & WASTE TREATMENT

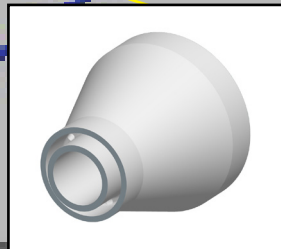
Chemical Feed Lines  
Chlorination Pipes

# APPLICATION AREAS FOR POLY-FLO® PIPING SYSTEMS



### LATERAL WYE

For drainage branch connections



### REDUCER

Transition from large to small diameter



### DOGBONE® Restraint Fitting

Secures the piping system from thermal expansion





## Piping system with double safety

Asahi/America's double containment pipes have been used very successfully in a wide range of applications for many years. They fulfill today's top requirements in the field of chemical processing. Our redesigned Poly-Flo® system compliments our existing fabricated double containment systems which have proven their worth over decades of use.

Poly-Flo® is installed using simultaneous butt fusion which ensure an easy and cost effective installation. Additionally, the installation space is reduced due to the smaller outside diameter of the system. Poly-Flo® is ideal for differential expansion/contraction with the carrier and containment pipe and is perfectly suited for horizontal directional drilling as well. Several leak detection options exist which can be installed to alert the operator of a breach of media into the containment section.

### Advanced PE construction

- Excellent chemical and corrosion resistance
- UV resistant for above ground applications
- Below ground installations - no special backfill required in the trench
- Superior stress cracking and abrasion resistance
- High creep rupture strength
- Wide temperature range (between -22°F - 140°F)
- Exceptional weldability



# POLY-FLO® WELDING METHOD

## SIMULTANEOUS WELDING

### TOOL SELECTION

In partnership with McElroy, Asahi/America provides a complete line of butt and socket fusion welding equipment for purchase or rental. For more information and proper tool selection, visit our welding selection tool by scanning the QR code below or visiting our website at [www.asahi-america.com](http://www.asahi-america.com).



Download a copy of the full welding selection tool by scanning the QR code above!

PIPING MATERIAL	SDR	PRODUCT NAME	PROWELD® TOOL NAME										
			Miniheat® System powered by Midway Polysun™ LT	Maxiplast® System powered by Midway Polysun™	Acrobat™ 160	Acrobat™ 180 IPS	Acrobat™ 250	Acrobat™ 315	Acrobat™ 355/400	Acrobat™ 450/500	Acrobat™ 560/630	QuickFit Prod. Pkg	Rolling 618
PP	SDR 11	PRO150 PP-Pure® PolyPure®	1/2" - 4" 20-110mm	2" - 6" 63-160mm	2" - 6" 63-160mm	-	2" - 10" 63-250mm	8" - 12" 200-315mm	14" - 16" 355-400mm	18" - 20" 450-500mm	22" - 24" 560-630mm	10" - 24" 250-630mm	6" - 18" 160-450mm
	SDR 17	PRO90	2" - 4" 63-110mm	2" - 6" 63-160mm	2" - 6" 63-160mm	-	2" - 10" 63-250mm	8" - 12" 200-315mm	14" - 16" 355-400mm	18" - 20" 450-500mm	22" - 24" 560-630mm	10" - 24" 250-630mm	6" - 18" 160-450mm
	SDR 33	PRO45	3" - 4" 90-110mm	3" - 6" 90-160mm	3" - 6" 90-160mm	-	2" - 10" 63-250mm	8" - 12" 200-315mm	14" - 16" 355-400mm	18" - 20" 450-500mm	22" - 24" 560-630mm	10" - 24" 250-630mm	6" - 18" 160-450mm
PE	SDR 7	Air-Pro® Chem Proline®	1/2" - 4" 20-110mm	2" - 6" 63-160mm	2" - 6" 63-160mm	-	2" - 10" 63-250mm	8" - 12" 200-315mm	14" - 16" 355-400mm	18" - 20" 450-500mm	-	-	6" - 18" 160-450mm
	SDR 11	Air-Pro® Chem Proline®	1/2" - 4" 20-110mm	2" - 6" 63-160mm	2" - 6" 63-160mm	-	2" - 10" 63-250mm	8" - 12" 200-315mm	14" - 16" 355-400mm	18" - 20" 450-500mm	22" - 24" 560-630mm	10" - 24" 250-630mm	6" - 18" 160-450mm
	SDR 17	Chem Proline®	1" - 4" 32-110mm	2" - 6" 63-160mm	2" - 6" 63-160mm	-	2" - 10" 63-250mm	8" - 12" 200-315mm	14" - 16" 355-400mm	18" - 20" 450-500mm	22" - 24" 560-630mm	10" - 24" 250-630mm	6" - 18" 160-450mm
	SDR 33	Chem Proline®	2-1/2" - 4" 75-110mm	3" - 6" 63-160mm	2" - 6" 63-160mm	-	3" - 10" 90-250mm	8" - 12" 200-315mm	14" - 16" 355-400mm	18" - 20" 450-500mm	22" - 24" 560-630mm	10" - 24" 250-630mm	6" - 18" 160-450mm

ASAHI/AMERICA  
Rev 2309A

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Powered by McELROY



Simultaneous welding



# Another Corrosion Problem Solved.™



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