# ENCASE ACID WASTE PP DOUBLE CONTAINMENT

1-1/2" - 12

# Encose

At the heart of our patented Encase polypro system is its electrofusion fitting with a groundbreaking heavy-gauge resistance wire molded into the socket. The result is a premier system that offers considerable reduction of installation time and the highest quality bubble-tight joints available. DID YOU KNOW?

Encase is a polypropylene piping system that uses proven Enfusion joining methods to provide an easyto-install, safe, reliable and costeffective method to convey chemical waste under gravity-flow conditions.

# ADVANTAGES

## **Polypropylene Material**

- 30 years of success in chemical waste applications
- High corrosion resistance
- Wide temperature range
- Excellent chemical resistance

## Same Material Inside and Out

- Eliminates differential expansion problems
- Chemical resistance is the same for the entire piping system
- System integrity is maintained in the event of a primary pipe leak

## **Restrained System**

- Expansion anchor plates are installed on each fitting to control expansion
- No expansion loops necessary

# Full Product Range

- 1-1/2" to 8" primary sizes available
- Manufactured in both non-flame retardant as well as flame retardant material for above ground installation

# Drainage Pattern Fittings

- Ensures smooth chemical flow.
- Enfield piping has been used for chemical waste for over 23 years

## Modular Design

- Components are factory fabricated. The only site joining necessary is the fusion of couplings to pipes and fittings
- Reduces labor costs

# **Fast Joining Method**

- All site joints are made by electrofusion using an Enfusion Hand Held Unit.
- Quick and simple to make without the need for costly and cumbersome butt fusion machines
- Proven technology
- Narrower trench widths than for butt fusion, resulting in quicker and cheaper installation
- Joints can be made in the trench which reduces installation time
- Automatic microprocessor-controlled Enfusion unit ensures joint repeatability

# Easy System Testing

- The primary pipe can be inspected and tested prior to closing the secondary joint (impossible with butt-welded systems)
- Any suspect primary joints can be re-fused prior to final closure of the secondary pipe

## Leak Detection Compatible

- Encase is compatible with all common types of leak detection systems
- Upon request, pipe is furnished with knot-free twine to allow insertion of a pull rope for leak detection cable installation minimizing installation time.

# Full Product Backup

- Expert personnel are available to assist in every facet of the Encase product

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Material	Carrier	Containment
PP	1-1/2" - 8"	4" - 12"



## SHORT FORM SPECIFICATIONS

#### GENERAL

Acid waste double containment drain lines shall be Encase, manufactured by IPEX, with no substitutions. Pipe and fittings shall be manufactured from Schedule 40 polypropylene and joined by the Enfusion method.

#### MATERIAL

Pipe, fittings, internal pipe supports and anchor plates shall be manufactured from Type 1 homopolymer or Type 2 copolymer polypropylene material as described in ASTM D4101.

#### PIPE AND FITTINGS – CONSTRUCTION

All pipe fittings shall be factory assembled and of unitized construction, with the primary and secondary components integrally anchored together to prevent movement of the primary pipe/fitting with in the containment pipe/fitting. All piping components shall be manufactured to Schedule 40 dimensions. The primary pipe shall be adequately supported by means of support plates welded to the primary pipe. Anchor plates shall be provided at each end of the pipe/fitting section to restrain pipe expansion. All anchor plates must be mechanically located in a machined recess on the inside of each secondary pipe/fitting and welded to both the primary and secondary pipe/fitting sections.

#### FACTORY WELDED JOINTS

All factory joints shall be made either by butt fusion or Enfusion. Joining by means of fillet welding is expressly forbidden.

#### SITE JOINTS

All site joints shall be made using Enfusion couplings, manufactured from polypropylene with a nickel/chrome resistance wire, molded in place. Components with copper wire elements are prohibited. Solvent, butt-welded or fillet-welded site joints are also prohibited.

#### INSTALLATION

Installation shall be in accordance with the contract drawings, the manufacturer's recommendations and the local plumbing code. The entire installation shall be installed in proper alignment and free of stress.

#### TESTING

The system shall be tested in accordance with the manufacturer's recommendations and the local plumbing code. The primary pipe shall be tested prior to making the secondary joints. If Secondary pipe cannot be hydro-tested, as determined by the engineer or authority having jurisdiction, then the use of nitrogen or air at a MAXIMUM 5 psi (gauge) shall be allowed. It is imperative that a working-pressure regulator be used during the pneumatic test to ensure that over-pressurization of the PVC, beyond 5 psi, cannot occur. The following must also be noted: Air or nitrogen under pressure is compressed and therefore poses a potential hazard. If a failure of the pipe or fitting occurs during such test, the air exits at the failure point and expands rapidly. This increase in velocity can cause the system to fail in a catastrophic mode. Therefore during such air test all personnel involved in the test or present in the test surrounding area must be aware of such a possibility and take all necessary precautions. Precautions include, but are not limited to, taking extreme care not to impact or damage the system in any way. Such procedure is a limited exception to IPEX standard policy which forbids the use of its rigid systems with any compressed gases.

# **PRODUCT SELECTION CHART – ENCASE**

Dimen	sion inches	significant	Product
Primary	Secondary	Number	Code

Dimension inches	significant	Product
Primary Secondary	Number	Code

Schedule 40 P	ipe Soc x S	Sp (20' N	ominal Len	gths)
/	1-1/2	4	264150	246040
	2	4	264200	246050
	3	6	266300	246060
	4	8	268400	246070
	6	10	261060	246020
	8	12	261280	246030

Schedule 40 Pipe	Spool	Soc x	Soc (5'	Nominal	Lengths)

	1-1/2	4	314150	231313
	2	4	314200	231314
	3	6	316300	231315
	4	8	318400	231316
	6	10	311060	231311
	8	12	311280	231312

1/4 Bend Soc x Sp
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1/8 Bend Soc x Sp

	1-1/2	4	044150	231134
	2	4	044200	231135
	3	6	046300	231136
	4	8	048400	231137
	6	10	041060	231132
	8	12	041280	231133

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### Secondary Coupling Soc

	-	4	024000	231114
	-	6	026000	231116
	-	6	028000	231118
	-	10	021000	231110
	-	12	021200	231112

#### 45° Wye Soc x Sp x Soc

<b>A</b> .	1-1/2	4	124150	231153
	2	4	124200	231154
	3	6	126300	231155
	4	8	128400	231156
	6	10	121060	231151
	8	12	121280	231152

## Primary Coupling Soc

	1-1/2	-	L161	257141
	2	-	L162B	257147
	3	-	L163B	257150
	4	-	L164B	257154
	6	-	L166B	257158
	8	-	L168B	257161

### Reducing Wye Soc x Sp x Soc

	2 x 1-1/2	4 x 4	154215	231187
	3 x 1-1/2	6 x 4	156315	231188
	3 x 2	6 x 4	156320	231189
	4 x 2	8 x 4	158420	231190
	4 x 3	8 x 6	158430	231191
	6 x 2	10 x 4	151062	231181
	6 x 3	10 x 6	151063	231182
	6 x 4	10 x 8	151064	231183
	8 x 3	12 x 6	151283	231184
	8 x 4	12 x 8	151284	231185
	8 x 6	12 x 10	151286	231186

## Secondary Repair Coupling Soc

 -	4	014000	231004
-	6	016000	231006
 -	8	018000	231008
-	10	011000	231010
-	12	011200	231009

#### Combination Wye & 1/8 Bend Soc x Sp x Soc

		1-1/2	4	174150	231203
		2	4	174200	231204
		3	6	176300	231205
	4	8	178400	231206	
	6	10	171060	231201	
	8	12	171280	231202	

Encase components should only be joined using IPEX Control Units.

NFRPP is the standard material of construction for all Encase components. FRPP is available on request.