# ENCASE ACID WASTE PP DOUBLE CONTAINMENT

1-1/2" - 12"

Encase™

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 easy-to-install, safe, reliable and cost-effective method to convey chemical waste under gravity-flow conditions.

## ADVANTAGES

1. **Polypropylene Material**
   - 30 years of success in chemical waste applications
   - High corrosion resistance
   - Wide temperature range
   - Excellent chemical resistance
2. **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
3. **Restrained System**
   - Expansion anchor plates are installed on each fitting to control expansion
   - No expansion loops necessary
4. **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
5. **Drainage Pattern Fittings**
   - Ensures smooth chemical flow.
   - Enfield piping has been used for chemical waste for over 23 years
6. **Modular Design**
   - Components are factory fabricated. The only site joining necessary is the fusion of couplings to pipes and fittings
   - Reduces labor costs
7. **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
8. **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
9. **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.
10. **Full Product Backup**
    - Expert personnel are available to assist in every facet of the Encase product

| 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.

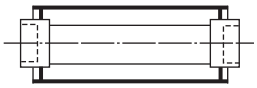
### TESTING
The system shall be tested in accordance with the manufacturer's recommendations and the local plumbing code. The primary pipe shall be tested prior to making the secondary joints. If Secondary pipe cannot be hydro-tested, as determined by the engineer or authority having jurisdiction, then 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

## Schedule 40 Pipe Soc x Sp (20' Nominal Lengths)

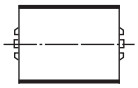
| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 1-1/2 | 4 | 264150 | 246040 |
| 2 | 4 | 264200 | 246050 |
| 3 | 6 | 266300 | 246060 |
| 4 | 8 | 268400 | 246070 |
| 6 | 10 | 261060 | 246020 |
| 8 | 12 | 261280 | 246030 |

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



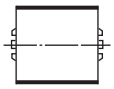
| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 1-1/2 | 4 | 314150 | 231313 |
| 2 | 4 | 314200 | 231314 |
| 3 | 6 | 316300 | 231315 |
| 4 | 8 | 318400 | 231316 |
| 6 | 10 | 311060 | 231311 |
| 8 | 12 | 311280 | 231312 |

## Secondary Coupling Soc



| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| - | 4 | 024000 | 231114 |
| - | 6 | 026000 | 231116 |
| - | 6 | 028000 | 231118 |
| - | 10 | 021000 | 231110 |
| - | 12 | 021200 | 231112 |

## Primary Coupling Soc

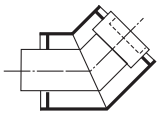


| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 1-1/2 | - | L161 | 257141 |
| 2 | - | L162B | 257147 |
| 3 | - | L163B | 257150 |
| 4 | - | L164B | 257154 |
| 6 | - | L166B | 257158 |
| 8 | - | L168B | 257161 |

## Secondary Repair Coupling Soc

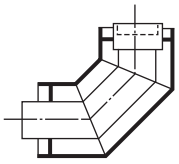
| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| - | 4 | 014000 | 231004 |
| - | 6 | 016000 | 231006 |
| - | 8 | 018000 | 231008 |
| - | 10 | 011000 | 231010 |
| - | 12 | 011200 | 231009 |

## 1/8 Bend Soc x Sp



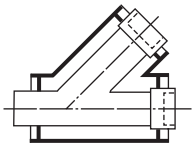
| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 1-1/2 | 4 | 064150 | 231141 |
| 2 | 4 | 064200 | 231142 |
| 3 | 6 | 066300 | 231143 |
| 4 | 8 | 068400 | 231144 |
| 6 | 10 | 061060 | 231139 |
| 8 | 12 | 061280 | 231140 |

## 1/4 Bend Soc x Sp



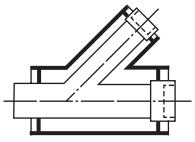
| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 1-1/2 | 4 | 044150 | 231134 |
| 2 | 4 | 044200 | 231135 |
| 3 | 6 | 046300 | 231136 |
| 4 | 8 | 048400 | 231137 |
| 6 | 10 | 041060 | 231132 |
| 8 | 12 | 041280 | 231133 |

## 45º Wye Soc x Sp x Soc



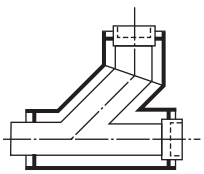
| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 1-1/2 | 4 | 124150 | 231153 |
| 2 | 4 | 124200 | 231154 |
| 3 | 6 | 126300 | 231155 |
| 4 | 8 | 128400 | 231156 |
| 6 | 10 | 121060 | 231151 |
| 8 | 12 | 121280 | 231152 |

## Reducing Wye Soc x Sp x Soc



| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 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 |

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



| Dimension inches Primary | Secondary | significant Number | Product Code |
|---|---|---|---|
| 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.