FUSIBLE PVC™ PIPE FOR TRENCHLESS APPLICATIONS

FUSIBLE BRUTE™
FUSIBLE SERIES™

MUNICIPAL SYSTEMS

FUSIBLE PVC™ PIPE FOR HDD AND OTHER TRENCHLESS APPLICATIONS

• 100mm – 900mm (4” – 36”) CIOD & IPS Sizes
• 12.2m (40 ft) lengths

We build tough products for tough environments®
IPEX has introduced new Fusible Brute™ and Fusible Series™ PVC pipes. By combining the mechanical properties of PVC with a patented butt fusion process, IPEX provides the only available method of installing a continuous, monolithic, fully restrained PVC pipe system. Capable of being used in a variety of trenchless or conventional direct bury applications, Fusible PVC™ pipe systems have been installed at numerous sites throughout the United States, Canada and Mexico for both pressure and non-pressure installations in the water and sewer industries.

With PVC’s proven long service life, Fusible Brute (CIOD) and Fusible Series (IPS) pipes are available in sizes ranging from 100mm (4”) to 900mm (36”) with larger sizes in development. The proprietary PVC patented fusion process as well as our licensing and training program allow for the consistent, reliable fusion of Fusible Brute and Fusible Series pipes to create piping systems of unparalleled strength.

**THE FUSION PROCESS**

Fusible Brute and Fusible Series PVC pipe have distinctive properties allowing for full strength butt fusion joints. While other thermoplastic materials have been fused routinely, the patented fusion process incorporates a proprietary PVC formulation and a unique combination of heat, pressure and time, using slightly modified standard industry fusion machines.

All fusion times are comparable to other thermoplastic materials. All joints are fully restrained. Testing performed in accordance with ASTM D-638 methods, demonstrates that the tensile strength of the fused joint equals the tensile strength of the pipe.

**INSTALLATION METHODS:**

- Horizontal Directional Drilling (HDD)
- Sliplining
- Pipe Bursting
- Direct Bury

**APPLICATIONS:**

- Water Mains
- Sanitary Sewers
- Process and Raw Water
- Reclaimed Water
- Storm Drains

**PIPE SPECIFICATIONS:**

- Meets CSA B137.3, AWWA C900, AWWA C905, NSF-61 and ASTM cell classification 12454
- Available in CIOD and IPS sizes
- 12.2m (40’) lengths
PVC is the most widely installed material in water systems today. It offers greater pull force rating than HDPE, greater pull force rating than other PVC systems, reduced wall thickness relative to HDPE, resulting in more flow and less material for a given pressure class, lower installation costs versus HDPE due to lighter weight and reduced OD dimensions, creates gasket-free joints, has excellent abrasion and scratch-resistant properties, and continuous pull-in lengths of over 1500 meters have been achieved.

### Features & Benefits

- Higher flow rates
- Connect directly to existing PVC systems for material consistency
- Uses standard CIOD or IPS fittings
- Creates monolithic, fully-restrained pipe systems

### Pressure Ratings

#### Fusible Brute (CIOD)

<table>
<thead>
<tr>
<th>Dimension Ratio</th>
<th>Pressure (psi)</th>
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</thead>
<tbody>
<tr>
<td>DR 14</td>
<td>305</td>
</tr>
<tr>
<td>DR 18</td>
<td>235</td>
</tr>
<tr>
<td>DR 25</td>
<td>165</td>
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#### Fusible Series (IPS)

<table>
<thead>
<tr>
<th>Dimension Ratio</th>
<th>Pressure (psi)</th>
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<tbody>
<tr>
<td>DR 21</td>
<td>200</td>
</tr>
<tr>
<td>DR 26</td>
<td>160</td>
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</table>

### ADVANTAGES

- Higher flow rates
- Connect directly to existing PVC systems for material consistency
- Uses standard CIOD or IPS fittings
- Creates monolithic, fully-restrained pipe systems

### PROJECTS

**Central Experimental Farm, Ottawa, Ontario**
573m (1,880 LF) of 300mm (12") DR18, 353m (1,158 LF) of 250mm (10") DR25, 170m (558 LF) of 450mm (14") DR25

Fusible PVC was chosen because of less disruption to federally protected land and forest. Also because of traffic control constraints.

**Grosse Isle Watermain, Manitoba**
1,000m (3,281 LF) of 150mm (6") DR18, 3,000m (9,843 LF) of 150mm (6") DR25

Fusible PVC was chosen to minimize restoration costs.

**Direct Bury, St-Henri-de-Taillon, Quebec**
5,563.2m (18,252 LF) of 150mm (6") DR25, 10,614m (34,823 LF) of 200mm (8") DR25, 610m (2,001 LF) of 250mm (10") DR25

Fusible PVC was chosen for ease of installation and lower cost.

**Slipline, Epcor 92nd St & 106a Ave, Edmonton, Alberta**
85.4m (280 LF) of 400mm (16") DR25

DR25 Fusible Brute was chosen as it offered the optimal flow characteristics for that slipline.
About the IPEX Group of Companies

As leading suppliers of thermoplastic piping systems, the IPEX Group of Companies provides our customers with some of the largest and most comprehensive product lines. All IPEX products are backed by more than 50 years of experience. With state-of-the-art manufacturing facilities and distribution centres across North America, we have earned a reputation for product innovation, quality, end-user focus and performance.

Markets served by IPEX group products are:

- Electrical systems
- Telecommunications and utility piping systems
- Industrial process piping systems
- Municipal pressure and gravity piping systems
- Plumbing and mechanical piping systems
- Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems
- PVC, CPVC, PP, PVDF, PE, ABS, and PEX pipe and fittings

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A policy of ongoing product improvement is maintained. This may result in modifications of features and/or specifications without notice.