

# polyethylene

## section guide

Polyethylene is now in widespread use for industrial pipework systems, as well as for buried gas and water pipelines, where it is the dominant material.

One of the major benefits is that Polyethylene is virtually unbreakable due to impact at temperatures above 5°C, and remains very tough at temperatures as low as -40°C. It is also exceptionally resistant to abrasion, and will outlast steel or other hard materials in most slurry handling applications.

Polyethylene is relatively low in weight, and its flexibility makes it suitable for temporary pipelines which are laid on rough ground or where buried in unstable ground conditions.

It has very good chemical resistance, and will withstand most acids and caustic substances. It is insoluble in all organic and inorganic solvents at 20°C, but it will not resist strong oxidising acids.

Polyethylene is joined by heat, and both socket fusion and butt fusion welding equipment is available for sale or hire.

## application guide

- Wide range of sizes from 10mm to 1400mm
- High impact resistance
- Temperature range from -40°C to +60°C
- Exceptionally resistant to abrasion
- Non-toxic
- Resistant to many acids, alkalis, organic and inorganic solvents
- Flexible and therefore suitable for buried or surface pipelines
- UV resistant
- Not resistant to strong oxidising acids
- Special welding equipment required
- Above ground pipes require a lot of support

## standards and approvals

Pipe : DIN 8074 - dimensions  
: DIN 8075 - testing  
Fittings : DIN 16963

Pipe - mm Sizes	310
Socket Fusion Fittings - mm Sizes	312
Socket Fusion Flanges - mm Sizes	313
Electrofusion Fittings - mm Sizes	314
Compression Fittings - mm Sizes	316
Fusion Spigot Fittings - mm Sizes	318
Fusion Spigot Flanges - mm Sizes	325
Ball Valve	327
Electrically Conductive Pipe and Fittings	330
FM Approved Pipe and Fittings	332

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