

Polypipe Effast

Tall Buildings

Technical Bulletin

Issue 4 2016 P

Polypipe's range of plastic pressure systems offer a fast and reliable solution to the challenges presented by the requirements of modern supply systems.

The 4 materials available within the range are PVCu, ABS, Polypropylene and PE100 as well as having an extensive range of clamp saddles. By having the ranges available in different materials with different jointing techniques, operating temperatures and chemical resistance, we are able to offer specifiers and installers to design and install with both flexibility and integrity.

Within this technical bulletin we will look at the different systems, jointing techniques and some of the applications that they are suitable for.

GENERAL OVERVIEW AND COMPARISON OF THE 4 SYSTEM MATERIALS					
MATERIAL	SIZES AVAILABLE	MINIMUM OPERATING TEMPERATURE	MAXIMUM OPERATING TEMPERATURE	JOINTING METHODS†	COLOUR
PVCu	Metric 16mm - 315mm Imperial 1/2" - 8"	0°C	60°C	Solvent weld	Dark grey
ABS	Imperial 1/2" - 8"	-40°C	60°C	Solvent weld	Light grey
PP	20 - 110mm	-10°C	95°C (short term 110°C)	Socket fusion	Beige-grey
PE100	32 - 1200mm SDR 17 (10 bar) 20 - 630mm SDR 11 (16 bar)	-40°C	60°C	Butt fusion and electro-fusion welding	Black

^{*} The operating pressure of plastics is reduced with increases in operating temperature. † A range of flanges and threaded fittings are available within all systems.

PVCu

The PVCu Pressure System has a high chemical resistance and good flow characteristics, which make it a safe and secure choice for potable water and food products supply. It's especially well-suited to the following applications:

- Process systems
- Water treatment and chemical dosing
- · Food & beverage processing
- Swimming pools and spas
- Cold water system

ABS

The ABS (Acrylonitrile Butadiene Styrene) Pressure System can tolerate temperatures as low as -40°C and has good flow characteristics, which make it a safe and secure choice for the following applications:

- Chilled water
- Boosted cold water
- Food stuffs
- Beverage applications
- Plant rooms
- Chemical & Pharmaceutical









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Polypropylene

Lightweight with high impact strength and reliable heat fusion welding, the Effast Polypropylene System offers good abrasion resistance and is widely used in industrial processing including:

- Chemical process systems
- Metal finishing
- · Chemical dosing

PE100

The PE100 System is a versatile, fast and durable high density polyethylene supply system for Industrial and Commercial applications. It provides a reliable solution to the challenges presented by modern supply systems and is available in a large range of sizes, in both SDR 11 and 17. PE100 pressure pipe system can be used across a wide range of applications including:

- Water supply and distribution
- Water treatment
- Cooling water
- · Pressurised waste water systems
- Transportation of chemicals

Clamp saddles

Clamp saddles allow for an additional connection to be easily made to any existing plastic metric installation. The saddles can be fixed without the need for any welding to make a quick and permanent connection.

- Available in sizes from 20 315mm
- BSP female threads available from ½" to 4"
- Maximum pressure rating of 6 bar
- Reinforced clamp saddles available







When considering the use of plastic pressure systems v traditional the following points should be considered:

- Pressure plastics provides integrity of joint through different welding techniques
- Robust materials with high impact resistance
- Flexible system that can be fabricated to meet project specific requirements
- Wide range of sizes available in both metric and imperial
- WRAS approved
- A cost-effective alternative to traditional materials with a lower risk of theft from site



Contact Us

To find out more about our range of pressure plastic systems please go to www.polypipe.com/effast

or contact our dedicated sales team on 01622 795 225

Look out for our next Issue or FUZE HDPE.

