

PLASTIC PIPE SYSTEMS

WITH A VARIETY OF BRAND LEADING MANUFACTURERS, ALONG WITH THE LATEST TECHNOLOGY, SOME EXCLUSIVE TO SMITH BROTHERS, WE CAN SUPPORT YOUR PROJECT REQUIREMENTS WITH OUR WIDE RANGE OF STOCK.

OUR VITAL STATISTICS BOOKLET IS A USEFUL GUIDE TO HELP DETERMINE WHICH PRODUCTS ARE BEST SUITED IN DIFFERENT ENVIRONMENTS HOWEVER FINAL RELIANCE ON INFORMATION LIES WITH THE CLIENT, ALWAYS CONSULT WITH THE MANUFACTURER WHERE NECESSARY.



MULTIPIPE

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EFFAST

Modern, plastic pressure pipe systems are a lightweight and durable alternative to pressure pipe & fitting systems, made from traditional materials and offer equivalent life cycles. The material has a wide range of benefits over traditional materials in commercial buildings especially where high pressure plumbing is required. Within any pressure piping system, it's vital that the temperature and pressure relationship along with thermal movement is controlled. The Effast system has different material compounds to suit particular application situations with the range including PP (Polypropylene), PVCu, ABS and PE plastics. The range of pipe and fittings have different temperature ranges and jointing techniques, all of which carry WRAS approval and the relevant BSI Kitemark.

/ PVC-U /

The Effast PVC-U pipe and fittings range is a pressure system which has high chemical resistance and good flow characteristics, which make it a safe and secure choice for potable water and food products supply. The solvent welded pipe fittings are especially well-suited to industrial process applications where high pressure systems are required. It becomes a full bore system when used in conjunction with the range of PVC-U ball valves.



FEATURES

- Lightweight
- No specialist tooling required
- Smooth bore pipe reduces pressure loss
- High abrasion resistance
- Operating temperature from 0°C to +60°C subject to pressure requirements
- Solvent welded system
- Class 7 range of pressure pipes and fittings available
- Wide range of applications to transport fluids
- Chemical Resistant
- Available in Metric sizes 16 to 315mm and Imperial sizes 1/2" to 8"

/ ABS /

The Effast ABS (Acrylonitrile Butadiene Styrene) Pressure Pipe System can tolerate temperatures as low as -40°C and has good flow characteristics. This makes the system a safe and secure choice for chilled or potable water, food and beverage applications in a commercial environment. Effast pressure pipe and fittings remain a full bore system when used in conjunction with the range of ABS ball valves.



FEATURES

- Lightweight
- Robust system at low temperatures down to -40°C
- Smooth bore pipe reduces pressure loss
- Operating temperature -40°C to +60 °C subject to pressure requirements
- Solvent weld pipe fitting system
- Suitable for mains water and chilled water applications
- Class T range of pipes and fittings available

EFFAST

/ PPH /

Effast PP-H pressure pipe system is lightweight with high impact strength and reliable heat fusion welding. The Polypropylene pipe fitting system offers good abrasion resistance and is widely used in industrial processing and commercial applications.



FEATURES

- Suitable for socket fusion, butt fusion and electro fusion jointing
- Lightweight
- High abrasion resistance
- Good chemical resistance
- Operating temperature from -10°C to +95°C (short term +110°C) subject to pressure requirements
- Ideally suited to many industrial / processing applications

/ PE /

Effast PE100 (high density polyethylene) pressure pipe system is a fast and reliable solution to the challenges presented by the requirements of modern supply systems. Utilising the benefits of polyethylene jointing technologies and excellent chemical resistance, the 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



FEATURES

- Sizes available
SDR 17 (10 bar) 32mm to 1200mm
SDR 11 (16 bar) 20mm to 630mm
- Operating temperature -40°C to +60°C subject to pressure requirement
- Full range of pipes and fittings with prefabrication service available
- Fusion weld or mechanical installation
- Excellent impact and chemical resistance

+GF+

GF products are manufactured and tested to the highest quality with strict quality control measures. With its own independent accredited test laboratory GF meets all the relevant third party approvals while offering solutions for virtually all applications.



/ PVC-U /

PVC-U is well suited to environments where temperature range is from 0° to +60°C. Ensuring highest possible thermal stability and chemical resistance, PVC-U systems stand up to the most demanding conditions, particularly where fluids such as acids, alkalis, bases and salts are transported. The universal solution covers all aspects of safety, efficiency and reliability required to build, maintain and operate industrial piping systems.

SIZE: EN/ISO: 6mm to 400mm
BS Inch: 3/8" to 8"
ASTM/ANSI: 1/2" to 24" ASTM SCH80

CONNECTION: Tangit gap filling solvent weld system (Tangit DTX or GF Dytex for aggressive chemicals)

TEMPERATURE: 0°C to 60°C

PRESSURE: Up to 16bar

APPLICATIONS

Water treatment, marine, chemical process industry, microelectronics, power plants.

FEATURES

- Low investment for tools and equipment
- Very good chemical and corrosion resistance
- Proven physiological harmlessness



/ PVC-C /

PVC-C piping materials are suitable for high temperature environments with an operational range from 0° to 80°C. The excellent mechanical characteristics such as a high tensile strength, stiffness and impact strength are evident even at increased temperatures.

SIZE: EN/ISO: 16 to 315mm
BS Inch: 1/4" to 24"

CONNECTION: Tangit gap filling solvent cement

TEMPERATURE: 0°C to 80°C

PRESSURE: up to 16 bar (up to 160mm)

APPLICATIONS

Chemical process industry, marine, building technology, microelectronics.

FEATURES

- Very good mechanical characteristics, also at elevated temperatures
- Outstanding chemical resistance
- High burning resistance and self-extinguishing

+GF+

/ ABS /

The outstanding characteristics of ABS is its flexibility allowing its application in a temperature range from -50°C to +60°C. The exceptionally high notched impact strength values, even at low temperatures, indicate the material's high robustness and tolerance to surface damage.

APPLICATIONS

Water treatment, food & beverage / cooling, marine, building technology

FEATURES

- Low operational energy loss
- High impact strength even at low temperatures
- Halogen free



SIZE: EN/ISO: 16 to 315mm
BS Inch: 3/8" to 8"

CONNECTION: Tangit gap filling solvent cement

TEMPERATURE: -50°C to 60°C

PRESSURE: Up to 16bar

/ COOL-FIT PLUS (ABS) /

COOL-FIT Plus is a WRAS approved pre-insulated pipe system for secondary cooling and refrigeration systems operated with brine or glycol solutions. The system is based on cold-shock resistant ABS pipes and fittings, which are insulated with high-quality PUR foam insulation (>45 kg/m³) in addition to a PE UV-resistant outer jacket which is both weather resistant and water tight. The inner surface of the ABS pipe provides minimal pressure loss, while the low thermal conductivity of plastic and the insulation, ensure low energy and running costs for the lifetime of the product. The 3-in-1 construction reduces installation time and the system is ideal for use in cold storage.

FEATURES

- Fast connection, easy suspension
- Excellent insulating properties, low operational and energy costs
- No corrosion
- Low CO₂ emissions

APPLICATIONS

Cold Storage, food and beverage production, supermarkets, process cooling systems



SIZE: 25 to 315mm

CONNECTION: Tangit gap filling solvent cement

TEMPERATURE: -50°C to 40°C

PRESSURE: Up to 10 bar (up to 225mm)

/ COOL-FIT 2.0 (PE) /

COOL-FIT 2.0 is a completely pre-insulated plastic pipe system for secondary cooling and refrigeration systems operated with brine or glycol solutions. The system is based on impact resistant PE100 pipes and fittings, which are insulated with 22mm high energy efficient (HE) foam insulation in addition to a UV-resistant outer jacket which is both weather resistant and water tight. The inner surface of the PE pipe provides minimal pressure loss, while the low thermal conductivity of plastic and the insulation, ensure low energy and running costs for the lifetime of the product.

FEATURES

- Fast connection, easy suspension
- Excellent insulating properties, low operational and energy costs
- No corrosion
- Low CO₂ emissions

APPLICATIONS

Cold Storage, food and beverage production, supermarkets, process cooling systems



SIZE: 32 to 140mm

CONNECTION: Electrofusion

TEMPERATURE: -50°C to 60°C

PRESSURE: Up to 10 bar

+GF+

/ ecoFIT (PE) /

A heavy duty piping system with excellent impact strength in all climatic conditions. Good chemical and abrasion resistance up to ambient process temperatures. Highly cost-efficient system assembled from a comprehensive product range.

APPLICATIONS

Water treatment, energy, marine, cooling, chemical process industry

FEATURES

- UV and weather-resistant
- Outstanding abrasion resistance
- High impact strength
- Wide choice of jointing technologies



TEMPERATURE: -50°C to 60°C

PRESSURE: Up to 16 bar

/ iFIT /

iFIT is an installation system with unique adapter module technology for plumbing and heating. The system enables identical installation options compared to conventional systems, but using 50% less system components. This results in low stocking costs, allows low inventories and maximum flexibility. iFit has the possibility to apply polybutene or multi-layer composite pipes meaning it can meet the highest economic standards. Furthermore, it has view windows and click joints to reduce any human error.

APPLICATIONS

Building technology, marine, hot & cold water installations, heating and cooling systems

FEATURES

- Low stock costs thanks to modular concept
- Fast, easy and safe push-fit technology
- No power supply required
- Low tool investments
- Detachable connection



MATERIALS: Polybutylene, PE-RT/Al / PE-HD, PPSU, Brass

SIZE: d16 – d32

CONNECTION: Push-fit Technology

TEMPERATURE: 0°C to 95°C

PRESSURE: Up to 16 bar

/ PROGEF STANDARD (PP) /

The highly resistant material offers numerous fields of application with outstanding weldability and low heat distortion. High stress fracture, pressure, abrasion, corrosion and temperature resistance are only some of the advantageous characteristic properties for a polypropylene system.

APPLICATIONS

Water treatment, chemical process industry, energy

FEATURES

- Very good abrasion and corrosion-resistance
- High thermal ageing and thermal forming resistance
- High impact strength



TEMPERATURE: 0°C to 80°C

PRESSURE: Up to 10 bar



PROGEF NATURAL (PP-R)

PROGEF Natural is the transparent, pigment-free polypropylene product range offering beneficial properties such as excellent clean, smooth surfaces, high chemical and temperature resistance along with the bead and crevice free jointing technologies. PROGEF Natural provides a cost-efficient solution for high purity applications.

APPLICATIONS

Microelectronics, chemical process industry

FEATURES

- Very good abrasion and corrosion-resistance
- Bead and Crevice Free weldability
- High impact strength



TEMPERATURE: 0°C to 80°C
PRESSURE: Up to 10 bar

AQUASYSTEM

Aquasystem piping system has been designed for hot and cold water as well as heating applications. The integrated WRAS approved system simplifies pipe correct material selection by only offering Faser fibre barrier pipe, avoiding complications. Aquasystem meets the stringent requirements of the water sector while offering a cost effective solution. It is ideal option for piping installations for schools, hospitals, hotels, office blocks and in fields of modular construction.

APPLICATIONS

Building technology, marine, hot & cold water installations

FEATURES

- Low expansion with fibre pipes
- Off-site fabrication
- Cost certainty
- Good chemical resistance
- Minimum pressure losses



MATERIALS: Polypropylene, brass
SIZE: 16mm to 160mm
CONNECTION: Socket fusion, electrofusion, butt fusion
TEMPERATURE: 0°C to 90°C
PRESSURE: Up to 20 bar (at +20°C)

INSTAFLEX

Instaflex is a high tech polybutene system for installations in the building technology and marine sector. Major fields of application are hot and cold water, cooling systems and compressed air. The system offers complete solution packages for buildings ranging in size from single-family detached houses and apartment blocks to public/commercial buildings.

APPLICATIONS

Building technology, marine, industrial applications, hot & cold water installations, compressed air, cooling systems

FEATURES

- Noise-insulating
- Full flow design
- Elasticity to follow building shape
- Cost-effective prefabricated solutions
- One system from point of entry to tap



MATERIALS: Polybutene, brass
SIZE: 16mm to 225mm
CONNECTION: Electrofusion, socket fusion, butt fusion, compression joint
TEMPERATURE: 10°C to +95°C
PRESSURE: Up to 16 bar

AQUATECHNIK



The Safety Pol system by Aquatechnik has a unique flared jointing system, which provides a simple, yet secure, installation method for multi-layer pipes. The Lloyds registered product with high insurance backed warranties gives the user total peace of mind when installing. The fully WRAS approved system utilises an easy to use tool, which expands the end of the pipe in order to accept the fitting. This method unlike other systems, does not reduce the bore of the pipe/fitting keeping flow rates at their optimum. This often means lower sizes are needed compared to other technologies. The fittings are fully demountable and adjustable, allowing installation flexibility whilst maintaining joint integrity.

The safety system is made up of Pe-X/Aluminium/Pe-X pipe and PPSU fittings, which together form a complete solution, providing high thermo-mechanical resistance and long term material stability and reliability.

ADVANTAGES

- Secure, demountable, adjustable and re-useable fitting system
- High resistance against impacts
- Higher flow rates & lower pressure drop against other MLCP systems
- Fast, clean & simple installation process
- Modular & comprehensive fitting system allowing total flexibility
- Resistant to the possibility of corrosion & scaling
- Resistant to lime, cement, plaster, phenomena of electro-chemical aggression
- Suitable for potable, heating and chilled water applications
- Also compatible with a wide range of fluid types, making it suitable for use in many industrial applications including compressed air installations with low oil content
- Low costs & low cost tooling

SIZE: 16mm to 90mm
CONNECTION: Flared Mechanical Jointing System
TEMPERATURE: Up to 95°C
PRESSURE: Up to 10bar
FINISH: White
LENGTHS: Coiled (without memory) & Straight Lengths



MULTI-LAYER



If Aquatechnik doesn't suit your project requirements SBS work with other manufacturers providing MLCP systems. Different products come with various feature benefits listed below but common acceptance is multilayer offers installers greater flexibility which can work together as a branch or manifold plumbing environment.

ADVANTAGES

- Bending pipe without memory (spring back)
- Demountable fittings
- No 'fur/scale' on pipe
- Corrosion resistant
- No hot works on site

/ PUSH-FIT /



To cater for the domestic plumbing market an extensive range of high quality, reliable and time saving plumbing fittings suitable for domestic hot and cold water applications are available. Speedfit and Hep2o can help when installing water pipes in a new home, extending a system or repairing a leak. The push-fit fittings, valves and accessories can make the job easy.

SPEEDFIT

JG Speedfit is a plastic push-fit system suitable for the plumbing of hot and cold water services, central heating applications, UFH, including pressurised and combi systems. The fittings can be demounted if required, are lead free, and remove the risk of any scale build up. Manufactured to British Standards and Kitemarked, the fittings are available in diameters up to 28mm. Its cross linked polyethylene barrier pipe and fittings can be used on both Speedfit and copper pipe, which can offer a complete system for plastic plumbing.



HEP2O

The plumbing system offers a comprehensive range of pipes and fittings in 10, 15, 22 and 28mm nominal diameters. It is suitable for domestic water supply and heating applications along with being fully compatible with both plastic and copper pipe. Hep2O pipe is highly flexible and comes off the coil straight (no memory) making it easy to work with. The fittings feature In4Sure joint recognition with adjustment and demounting possibilities using the Hepkey, and come with a 50 year guarantee. The product can also be used for UFH.



PIPELIFE

Pipelife's push-fit plumbing fittings are fully manufactured to an ISO 9001: 2008 Quality Management System. The fittings are a white PE-X body with the seal achieved by the use of an integral black EPDM "O" ring between the wall of the fitting and the pipe surface. The fittings are suitable for use with Pipelife's PB and PEX pipe which is available in coils or 3 meter straight lengths along with traditional copper pipe. The fully demountable system has excellent thermal stability, are combustion resistant, fully WRAS approved and guaranteed for 25 years at the working pressures & temperatures of 12 bar at 20°C, 6 bar at 65°C and 3 bar at 92°C.



/ MDPE TUBE /

Can be connected to both copper and plastic pipes (please ensure MDPE pipe inserts for plastic pipes). It can reduce installation time and it carries the BBA and WRAS approvals along with being manufactured to British Standards. Pipe is available in various colours depending on application or requirement such as Yellow (Gas) MDPE, Black (water) MDPE, Blue (water) MDPE and Royal Blue (water) HPPE with fittings to accompany the range.

- SIZE: 20mm to 400mm
- FINISH: Yellow, black, blue
- LENGTHS: 6m lengths & coiled up to 180mm



/ PLASSON /



Plasson offer WRAS approved fittings and valves connecting PE pipe applications for water supply, plumbing, agriculture, landscape irrigation, waste water, industrial/M&E and many other applications. The company is BSEN9001 and DSEN140001 certified providing reliable fittings all around the world.

- SIZE: 20mm to 160mm Mechanical,
20mm to 63mm Push-Fit,
20mm to 900mm Electrofusion
- CONNECTION: Compression, Push-fit, Electrofusion
- TEMPERATURE: -10°C to 40°C
- PRESSURE: PN16



/ PRE-INSULATED PIPE /



Through CPV with Hiline and Flexenergy with Flexalen, Smith Brothers are able to offer a range of pre-insulated pipe (single and dual/multiple pipe) for a variety of applications, even custom options for specific requirements. The technology has an array of benefits such as; heat loss, energy efficiency gains, and able to transport some of the harshest chemicals.

APPLICATIONS

- Heating
- Potable Water
- Chilled Water
- Hot Water

