

METAL PIPE SYSTEMS

A WIDE RANGE OF TUBES, FLANGES AND FITTINGS MADE FROM COPPER, CARBON STEEL AND STAINLESS STEEL. THE TECHNIQUE TO JOIN THE PRODUCTS VARIES AND MATERIALS USED OFTEN DEPENDS ON APPLICATION/APPROVALS ALONG WITH THE SUBSTANCE BEING TRANSPORTED.

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.



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STEEL TUBE



SBS distribute both cold formed and hot finished tube of the highest standard (BS1387/EN10255/EN10217-1) both robust and reliable to meet all requirements relevant to its application or pressure. Remaining true to only offering quality products, our stocked steel tube is British Standard, dual certified CE-marked to meet the construction products directive (CPD) and pressure equipment directive (PED). API tube available in shed 40, 80, 160 and standard weight plain ended in full randoms.

- SIZE: EN10255: 8mm (1/4") to 150mm (6")
API: 8mm (1/4") to 900mm (36")
- CONNECTION: Screwed & socketed, plain end, grooved
- FINISH: Galvanised, red, self colour (upon request)
- LENGTHS: Full & half randoms available
- WEIGHT: Medium, heavy

For tube size, weight & thickness refer to the vital statistics section.



MALLEABLE IRON FITTINGS



A comprehensive range of British Standard (BS EN 10242) malleable iron fittings are available from stock including one's which are kite-marked certified if required.

- SIZE: 6mm (1/8") to 150mm (6") depending on fitting
- CONNECTION: Taper/taper and taper/parallel threads available
- TEMPERATURE: -20°C to 320°C
- FINISH: Black, galvanised

For comparison code numbers of each fitting please view the vital statistics section.



FLANGES

An extensive variety of flanges from stock in both black and galvanised finishes. Upon request larger sizes can be made for any bespoke solution. Accompanying joint rings, nuts & bolts and flange packs are also available.

SIZE: Flanges: 15mm (1/2") to 900mm (36")
Gaskets & joint rings: 15mm (1/2") to 900mm (36")

CONNECTION: Screwed, slip-on, weld-neck, blank to BS10, ANSI, EN 1092-1 (BS4504) plate, forged

FINISH: Black, galvanised

For flange charts please refer to the vital statistics section.



WELDING FITTINGS

A wide selection of butt weld fittings from stock to BS EN10253 (BS1965) to ASTM A234WPB (BS1640) in standard Weight and XS.

SIZE: 15mm (1/2") to 600mm (24")

WEIGHT: Medium, heavy, standard weight & XS



MILD STEEL & FORGED STEEL

A full range of mild steel BS EN10241 (BS1740) fittings in stock with availability of forged steel fittings to ANSI B16.11 (BS3799).

SIZE: Mild steel: 6mm (1/8") to 150mm (6")
Forged steel: 15mm (1/2") to 100mm (4")

CONNECTION: NPT, BSP, socket weld end connections

FINISH: Mild steel & forged steel



GRINNELL



SBS offers grooved piping products for HVAC and Building Services (Heating, Cooling, Chilled and Potable) through Grinnell which includes pipe couplings and fittings, butterfly and ball valves, strainers, check valves, circuit balancing valves and pipe end grooving equipment. This piping solution is suited to installations within confined areas. Grooved pipe jointing provides a means of installing a clean and maintenance free piping system safely and quickly. Grinnell solutions are utilised in Building Services in many industries including; Hospitals, Universities, Food Processing, Commercial Offices, Airports etc.

All products come with a 10-year limited warranty and are supported by more than 3,000 engineering, sales and manufacturing personnel. Grinnell can offer a stainless steel WRAS approved system to meet the more demanding projects. A typical Dry Riser installation can be seen below highlighting some key Grinnell products regularly used.

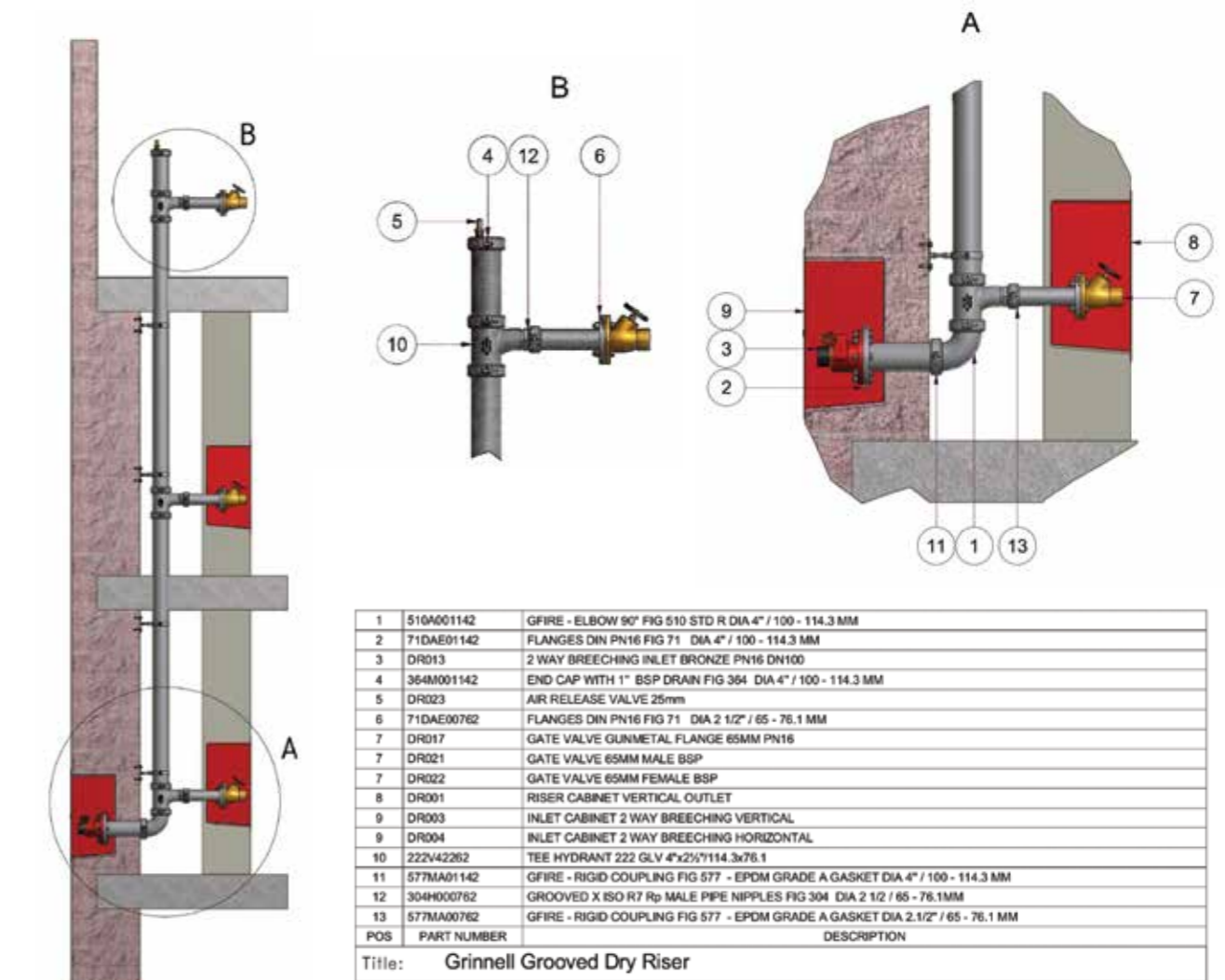
SIZE: Diameter: 32mm (1 1/4") to 305mm (12")

CONNECTION: Grooved

TEMPERATURE: -34°C to 121°C



INSTALLATION EXAMPLE



／ FLEXIBLE GAS FITTINGS ／



TRACPIPE

TracPipe stainless steel semi-rigid gas piping system is used on commercial and residential projects for LPG or natural gas from the meter to the appliance. TracPipe is BSi Kitemarked and approved to BS7838 and EN15266, and is supplied in long lengths, which can be bent by hand (so no elbows are required, and the number of joints is greatly reduced). The AutoFlare end fittings are simply attached without any special tools or hot work.

TracPipe is considered a faster and easier install option when compared to copper or steel, reducing the total cost of the installation. The flexible system allows for simple routing through buildings with pre-marked metre markings for easy measuring of coils.

SIZE: 12mm (DN12: 3/8") to 50mm (DN50: 2")

CONNECTION: AutoFlare

PRESSURE: Working pressures to 75mbar for: 1st (manufactured gases), 2nd (natural gases), 3rd (LPG-propane, butane) family gases

FINISH: Yellow

LENGTHS: Various length coils



GASTITE

The flexible gas piping system is able to transport natural gas or liquefied petroleum gas to appliances. Simple hand tools such as tubing cutters, wrenches and utility knives are all that are needed to work with the system, which is fully approved to BS7838 with Kitemark certification. Gastite offers flexibility and durability with easy routing through complex building structures and designs with coils pre-marked by the metre for easy measuring and installation.

SIZE: 12mm (DN15: 1/2") to 50mm (DN50: 2")

APPLICATION: CSST

FINISH: Yellow

LENGTHS: Various length coils



／ STAINLESS STEEL TUBE & FITTINGS ／

Smith Brothers supply all of the commonly required forms of stainless steel with a full range of pipe, fittings, flanges and fixings for a wide range of applications. In addition to a comprehensive range of standard products, specific items often referred to as 'specials' can be ordered with numerous specialist products and alloys satisfying the needs of a broad range of industries.

Tubes sold are from companies conforming to BSI standards and virtually all tube will be embossed with the following information;

- Nominal pipe size (nominal bore)
- Schedule (wall thickness)
- Specification
- Grade
- Method of manufacture (seamless or welded)
- Heat number
- Manufacturer's name or symbol



PIPES

ASTM A312 Welded Pipes Grades 304 and 316L

- 6mm (1/4") to 300mm (12") NB schedule thicknesses from Sch. 5s to Sch. 80

ASTM A269 Seamless Pipes Grades 304 and 316L

- Metric and Imperial sizes

Hygienic Pipes to BS4825 and ISO standards, Descaled and Polished finishes Gr 316

- 1/2" od to 6" OD

FITTINGS

BSP threaded fittings to ISO 4144 150lb

Butt-Weld fittings to ANSI B16.9

Flanges to ASA/BS10/BSEN1092-1 Slip-On Weld and BSP

Hygienic Fittings with IDF and RJT connections BS48258 pt 5 and BS4825 pt 4

We also supply stainless steel;

- Ball Valves (2 piece and 3-piece)
- Dosing Pots
- Grooved Systems (Grinnell)
- Press-Fit Systems (Isotubi)
- Nuts, Bolts, Support Systems and Ancillaries

／ COPPER TUBE ／



PLUMBING

Plumbing copper for both commercial and domestic use is all supplied to EN 1057 (BS2871) in plain tube and coils, as well as plastic coated and chrome plated options when required. Strength and reliability is assured with virtually all stocked copper supported by Kitemark, ISO 9001 and CE certifications along with a minimum 25 year guarantee, meaning Smith Brothers sources quality copper from leading manufacturers.

- SIZE:** 6mm to 219mm
FINISH: Chrome plated, plastic coated, table Y, table X, table W, medical gas, MiniBore
LENGTHS: 3m, 6m lengths, various other coils & lengths available upon request



AIR CONDITIONING

Refrigeration and air conditioning copper all complies to EN 12735-1 supported by an ISO 9001 environment and are designed specifically for the industry being cleaned, nitrogen-purged and capped before SBS receive delivery. Available in both straight lengths and coils to various gauges (SWG), it is available along with a range of ancillaries and refrigerant gas to support your air conditioning installation and maintenance projects.

- COILS: 3/16" to 7/8"
- GAUGE: 19 to 22
- LENGTHS: 3/8" to 4 1/8"
- GAUGE: 11 to 21
- COILS: 6m, 15m & 30m
- LENGTHS: 3m & 6m



FIELDS OF APPLICATION

- Drinking water
- Gas
- Central heating
- Hot & cold water
- Sanitation
- Air Conditioning
- Refrigeration

For tube thickness and maximum working pressures please refer to the vital statistics section.

／ ENDFEED/ENDBRAZE ／



Manufactured in copper and brass, the WRAS approved product complies with international standards being made to EN 1254 (BS864). Each fitting is made within an ISO9001 environment and comes with a 25 year guarantee against manufacturing defects when installed in accordance with the manufacturer's guidelines.

- SIZE:** Endfeed: 6mm to 54mm
 Endbrazed: 67mm to 159mm
CONNECTION: Endfeed



／ SOLDER RING ／



The WRAS approved fittings are manufactured in copper and brass, complying with international standards and made to EN 1254 (BS864). A ring of high quality lead free solder is located in each fitting which comes with a 25 year guarantee against manufacturing defects when installed in accordance with manufacturer's guidelines. Each fitting is made within an ISO9001 environment ensuring quality management is present.

- SIZE:** 6mm to 67mm
CONNECTION: Solder ring



／ COMPRESSION ／



Compression fittings create a mechanical joint when tightening the nut, compressing the ring onto the tube. This range of fittings can be used with a variety of materials including light gauge plain and chrome plated copper tube, stainless steel, carbon steel tube, PEX, PB and polyethylene pipe. The fittings are WRAS approved to EN1254 (BS864) and come with a full manufacturer's guarantee.

- SIZE:** 6mm to 159mm
CONNECTION: Compression



／ PRESS-FIT SYSTEMS ／



Smith Brothers offer a comprehensive and flexible range of press systems for all modern building services providing customers with an easy, fast, cost effective and reliable jointing solution. Leak path, heat free and long guarantees are a few features of the technology which can be used in a wide variety of applications. With stainless, copper and carbon systems along with the ability to press on to 4" NB thick walled steel, the scope for application is wider than ever.

Typical Applications; *Heating, Drinking Water, Fire Protection, Gas, Solar, Compressed Air, Oil*

Please note: Jaw profiles can vary between manufacturer and some ranges are limited on size. Refer to pipe application tables in vital statistics to compare all press systems available.

PEGLER YORKSHIRE

Xpress is the complete M profile press-fit system from Pegler Yorkshire offering leak before press and various approvals in a diverse range suitable for most installation environments. A brief overview of their range is listed below:

COPPER

BSI Kitemark (BS 8537:2010) and WRAS approved system is suitable for solar (Viton green o-ring) and comes with a 25 year warranty. The chrome plated range is also available for visible pipework.

SIZE: 12mm to 108mm (54mm for solar, Viton green o-ring)

TEMPERATURE & PRESSURE

BLACK O-RING: -20°C to 110°C up to 16 bar

GREEN O-RING: -20°C to 200°C up to 10 bar

CARBON

Cost effective system with a size range of 15mm to 108mm. Temperature capacity going from -35°C to 135°C with pressures up to 16 bar and 5 year warranty. Plastic coated and internally galvanised tube range available along with 67mm sizes.

STAINLESS

A WRAS approved and gas safe (HNBR yellow o-ring) system which can be used for water purification by reverse osmosis and where high levels of hydrogen sulphide are present. The size range is from 15mm to 108mm complete with a 25 year warranty.

TEMPERATURE & PRESSURE

BLACK O-RING: -35°C to 135°C up to 16 bar

YELLOW O-RING: -20°C to 70°C up to 1 bar inside and up to 5 bar outside

SANHA

Able to offer lead free press fittings from 12mm to 108mm compatible with V (only up to 54mm), M and SA-profile jaws giving excellent flexibility. The fully guaranteed system with leak path feature offers a pressure rating of at least 16bar with technical gases (non toxic) and water/aqueous solutions. The comprehensive and flexible press fitting range is suitable for all modern building services, providing easy, fast, cost effective and reliable joints. The range includes Copper, Carbon and Stainless systems, please consult technical literature or vital statistics for size, pressure, warranty and temperature differences of each material.

TEMPERATURE & PRESSURE

BLACK O-RING: -30°C to 120°C up to 16 bar

YELLOW O-RING: -20°C to 75°C (100°C stainless)

RED O-RING: -20°C to 200°C up to 10 bars



／ PRESS-FIT SYSTEMS ／



ISOTUBI

With over 25 years of stainless steel manufacturing and global experience, IsoTubi's WRAS approved stainless steel Numepress system comfortably meets EN 10312 standards. It is available from 15mm to 108mm with a maximum working pressure of 16 bar along with a 25 year warranty. The M profile product is suitable for oil, steam, drinking water, solar, gas, compressed air and many other applications. Although the gas system (yellow o-ring) is already exported worldwide, the UK approval is not yet in place coming early 2018.

KEY INFORMATION

TUBE: 6m lengths available in 304 and 316L

FITTINGS: 316L

BLACK (EPDM) O-RING: -20°C to 110°C

GREEN (FKM) O-RING: -20°C to 200°C

RED (FKM) O-RING: -10°C to 200°C

YELLOW O-RING: -20°C to 70°C

VIEGA

The V profile system has a wide application range with SC-Contur (leak-path) feature and includes Megapress, capable of pressing thick walled steel pipe up to 4" NB with the facility to also transport gas (HNBR yellow o-ring).

MEGAPRESS (STEEL)

The only thick walled press system available with sizes from 3/8" to 4" which can be used on seamless, welded, black, galvanised, epoxy-resin-coated and industrially painted pipes. Comes with 25 year warranty and will work up to a maximum pressure of 16 bar.

TEMPERATURE & PRESSURE

BLACK O-RING: -5°C to 110°C

YELLOW O-RING: -20°C to 70°C (only up to 2")

PROFIPRESS (COPPER AND GUNMETAL)

WRAS approved, gas safe (FKM yellow o-ring) and suitable for solar (FKM matt black o-ring) with a 25 year warranty.

TEMPERATURE & PRESSURE

BLACK O-RING: -5°C to 110°C, up to 16 bar, 12mm to 108mm

YELLOW O-RING: -20°C to 70°C, up to 5 bar, 12mm to 64mm

MATT BLACK O-RING: 0°C to 140°C, up to 16 bar, 12mm to 35mm

PRESTABO (CARBON)

Cost effective system with a size range of 12mm to 108mm. Temperature capacity going from -5°C to 110°C with pressures up to 16 bar and 5 year warranty.

SANPRESS INOX (STAINLESS)

WRAS approved and gas safe (FKM yellow o-ring) with a 25 year warranty with a size range of 15 to 108mm.

TEMPERATURE & PRESSURE

BLACK O-RING: -5°C to 110°C up to 16 bar

YELLOW O-RING: -20°C to 70°C up to 5 bar



EXPANSION & FLEXIBLE SOLUTIONS

STOURFLEX
Specialty Metal Products Limited

The comprehensive range contains expansion joints (including WRAS approved), rubber bellows, hoses, anchors and pipe guides which absorb vibrations and noise, compensating for thermal expansion and pressure differences as well as other kinds of movements.

SIZE: Expansion joints: DN 25 to DN 7000
Bellows: DN 3 to DN 125
Hoses & hose assemblies: DN 5 to DN 300

CONNECTION: Screwed & socketed, plain end, grooved, flanged, crimped

TEMPERATURE: -150°C to 650°C

PRESSURE: Absolute vacuum to 200 bar

ADVANTAGES

- Vibration resistance
- Noise Control
- Cleanliness (clean rooms classed ISO 5, 6, 7)
- Corrosion resistance, whatever the fluid or environmental conditions
- Guides, anchors & skids available



PRIMOFIT

+GF+

A compression fitting made of malleable iron which offers full end load capability ideal for use within heating, ventilation, air conditioning and even for gas systems. No special tooling is required and it is perfect for efficiently connecting smooth-ended steel and PE pipes. Various sealing materials enable pressure-proof connections to be made for a wide variety of applications.

SIZE: 15mm (1/2") to 76mm (3")

CONNECTION: Compression

FINISH: Black, galvanised

Advantages:

- Versatile connection
- No special tools required
- Angular deviation possible
- Handy for 'awkward' places



PUSH-FIT SYSTEMS

SharkBite **Tectite**

SHARKBITE

Sharkbite is a low-lead DZR push-fit range from RWC which is demountable from the pipe with the use of a simple tool. The system provides quick and easy install in both wet and dry conditions with heat free installation, ideal for use where flame jointing is not permitted. All fittings are electrically continuous when used in conjunction with metal pipes. The material used to manufacture the fittings is low-lead DZR compliant with European Drinking Water Directive 98/83/EC and is WRAS approved.

Range: 10mm to 54mm (including 'slip' couplings and tees)

Fittings suitable for following pipes:

- Copper (including chrome copper) pipes to BE EN 1057 R250 and R290
- PEX Barrier Pipes to BS7921
- Polybutylene (PB) pipes to BS7921
- Galvanised Carbon Steel pipes to EN10305 (as used with Press Systems)



TECTITE

This WRAS approved push-fit system comes in sizes from 10mm to 54mm and provides a heat-free installation with a choice of demountable or non-demountable fittings. When using Tectite flexi-metal, PEX and PB plastic pipe, the correct support liner must be inserted into the pipe. Ideal for applications as diverse as domestic maintenance, refurbishment, new build and large scale public sector projects but not available for the use on gas. The fittings can be used with many different types of materials including; copper tube, Tectite flex-metal, PEX and PB pipe, plus a variety of steel including stainless and carbon.

CLASSIC

Manufactured from DZR brass alloy it is compatible with copper and plastic piping available in sizes from 10mm to 28mm. Ideal for hot and cold water services in low temperatures, hot water and heating applications.

SPRINT

Manufactured from copper and DZR brass, Sprint is available in sizes from 10mm to 54mm, compatible with copper and plastic pipe. The range is ideal for hot and cold water services in low temperatures, hot water and heating applications.

PRO

A demountable fitting which is compatible with copper has a size range of 15mm to 54mm.

316

The stainless steel range with fittings available in sizes from 15mm to 54mm.

