

what's new in the

pipeline

Issue 28 February 2006

FM Approved Polyethylene Piping

AGRU – Frank has become the first European manufacturer to achieve Factory Mutual (FM) Approval for High Density Polyethylene (PE100) pipes and fittings for underground fire protection service. The FM approval means that the pipes and fittings correspond to the highest requirements - ensuring consistent quality of the product range - achieved by means of a third party audit undertaken by FM.

PE100 piping is ideal for buried applications. It has exceptional ductility and will withstand very unfavourable ground conditions. It is also very easy to install using a simple butt fusion or electro-fusion welding technique.

Many industrial and automotive groups require FM approval for infrastructure piping systems within their factories. This need can now be satisfied with a comprehensive range of approved pipes and fittings. The FM approval has been issued for the dimension range 63mm to 400mm, and it includes a wide and diverse range of fittings. The system is approved for use at a service pressure of up to 12 bar.

IPS can supply the complete range of FM approved AGRU piping systems together with documentation, as well as welding equipment for butt or electro fusion jointing. Comprehensive welder training is readily available on request.

For further information about the AGRU FM approved PE100 piping system, contact our sales team.



**APPROVED
FM1610**



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Gauge guard prevents corrosion

Isolating pressure gauges from aggressive process fluids is crucial if gauges are to operate accurately and without corrosion from chemical attack.

To deal with this problem, a new corrosion resistant diaphragm pressure gauge guard has been developed by ASV Stübbe. Suitable for use with both neutral or aggressive liquids, or gaseous media without abrasive particles, the MDM902 gauge guard is rated for use at operating pressures of up to 10 bar.

The gauge guard is used to connect the pressure gauge to the pipeline. An internal diaphragm isolates the gauge from the process fluid. The internal pressure from the pipe acts upon the diaphragm so that it transmits the line pressure through the transmitter fluid (glycerine) causing the pressure gauge to register the line pressure.

Uniquely, the MDM902 gauge guards are manufactured without bolted covers, so they can be safely located in chemical laden environments without the risk of external corrosion. Instead, the gauge guard features a high visibility orange polypropylene bonnet which connects to the base section with a high strength mechanical threaded connection.

The gauge guard is manufactured from PVC-U, Polypropylene (both standard and natural grades) or PVDF, with a PTFE (EPDM backed) diaphragm. The female threaded connection can be supplied in 1/4" or 1/2" thread sizes, and a range of complementary pressure gauges and accessories can also be provided. If required the MDM902 can be supplied complete with the pressure gauge already assembled, and ready for installation.

For further information please contact our sales office and request a copy of the MDM902 diaphragm pressure gauge guard data sheet.



Multi-bend gives improved flow

Using unique injection moulding technology, a new range of 90° elbow fittings has been manufactured by AGRU.

The 90° "Multi-bend" features superior internal surfaces that provide 30% lower flow resistance when compared to standard elbow fittings. The fitting also offers improved levels of safety, minimal ovality of the fitting ends and a choice of welding techniques.

The fitting provides the optimum clamping arrangement for butt and infra-red welding techniques. Using extended spigot legs on each fitting, double clamping of the bend or wide clamping jaws can now be used to ensure a stable position for welding. It is also possible to use electro-fusion couplings without the need to modify the standard bend.

The new 90° Multi-bend is being introduced in a wide range of materials, sizes and pressure ratings:

Size Range Available (mm O.D.)

Material	SDR 33	SDR 21	SDR 17	SDR 11
PP			63 to 225	20 to 225
PP-Pure				20 to 225
Polypure				20 to 225
PE100			63 to 225	20 to 225
PVDF	90 to 110	20 to 110		
PVDF UHP	90 to 110	20 to 110		
ECTFE		32 to 110		



Plastic actuator resists corrosion

The IPS range of ball and butterfly valves can now be fitted with a pneumatic actuator that has a technopolymer plastic housing.

This new actuator is compact in size, and the modular construction connects easily to our range of sturdy plastic actuator mounting platforms. The actuator can also carry a range of switchboxes and position indicators also manufactured with corrosion resistant plastic housings. Lightweight and robust, the actuator is available with both spring return and double acting operation.

Because of the improved chemical and corrosion resistance, this new actuator can be used in aggressive environments without problems. It is part of our wide range of specialist actuation solutions. To discuss applications contact Tony Welsh or email him on twelsh@ips-plastics.com.



Compact ball valve has unique features



A little known fact is that the first injection moulded plastic ball valve was manufactured during 1961 in Germany by ASV Stübbe. A more surprising fact is that this valve, known as the "Compact 16", is still in production today.

The Compact 16 ball valve is unique because the ball and seat are moulded in place, preventing the possibility of the ball being displaced. In addition the full bore design provides an extremely high Kv value, with negligible pressure drop when fully open. These special features, combined with extremely long term reliability, have led to the Compact 16 valve becoming one of the best selling ball valves worldwide.

Manufactured from PVC-U or PE in sizes from 16mm to 160mm (3/8" to 6"), the valves are supplied with strong lever handles for manual operation. The handle also functions as a position indicator. As an option, pneumatic or electric actuation packages may be fitted.

Although also available with spigot end or union connections, the Compact 16 is most popular supplied as a flanged unit. Factory fitted glass fibre reinforced or polypropylene coated steel cored backing rings are pre-fitted, with dimensions according to DIN 2501 - PN10/16.

Because of the unique production method, the valve is extremely compact in size. It is ideal for a wide range of applications handling neutral or aggressive fluids at operating pressures up to 10 bar.

AGRUAIR - an engineered compressed air piping system



Compressed air is used throughout industry as an economical source of clean energy. To maintain air quality and to minimise energy loss from leaks, thermoplastic piping can offer a number of key advantages for this application. In particular, corrosion resistance, ease of handling, and a smooth surface finish that provides an extremely low pressure drop across the system.

AGRUAIR is a piping system specifically designed for the transportation of compressed air in industrial environments. Manufactured from PE100 polyethylene, this high quality piping system has a wide range of sizes and component parts to satisfy the most demanding of applications.

The system is joined by socket fusion welding using hand-held or bench mounted tools, or by electro-fusion welding. The joints remain leak-proof for the lifetime of the installation. Special fittings complete with metal male or female threaded parts can be used as transition fittings to connect to other materials and equipment.

The range includes pipes, valves and fittings in diameters from 20mm to 110mm. It is designed for a maximum operating pressure of 16 Bar (PN16), including a safety factor of 2.0 - which is required for pressurised gaseous media.

Even in the case of damage caused by external impact, the material will prevent crack propagation which could otherwise destroy a piping system made from a more brittle material.

AGRUAIR also has excellent chemical resistance - especially to compressor oils.

Contact our sales team for more information on this unique system.

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Expansion almost completed

During the past six months we have been busy creating what we believe to be the U.K.'s largest single stock facility for plastic piping products. Our building has doubled in size providing over 50,000 square feet of warehouse and offices in addition to a large secure outdoor compound.

The effect on our stockholding capability is dramatic. Before expansion we held over 74,000 metres (46 miles) of pipe in stock in our daily picking area. Our new facility increases this by 14%, but in addition we have created a high-bay store for bulk quantities of pipe that more than doubles our overall capacity.

Fittings and valves racking has been increased by 53%. Together with new mezzanine floors to hold bulk storage, our overall stock facility has been massively improved.

During the early part of 2006 we will be working through an inventory programme that will make yet further improvements to ex-stock availability for our products. It will deliver even better service to our customers.

We are very proud of our facility. If you would like to visit us to see it first-hand, please contact us.



Request for information

Please send me the following:-

February 2006

Information on these product(s):.....

A copy of the IPS Handbook

A copy of the IPS Handbook on CD

Name:.....

Job Title:.....

Company Name:.....

Address:

.....

.....

Postcode:.....

Telephone:.....















Main Business Activity:.....

Please also send information to my colleagues:-

Name:..... Job Title:.....

Name:..... Job Title:.....

Name:..... Job Title:.....

	PVC-U Systems
	PVC-C Systems
	ABS Systems
	Polypropylene Systems
	Polyethylene Systems
	PVDF Systems
	PURAD High Purity Systems
	Compressed Air Piping
	Pumps
	Double Containment Systems
	Process Measurement
	Fixings & Supports
	Tools & Installation Equipment
	Sheet & Rod

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