Media Release

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Branch saddle instead of tee saves time and money

The modular system for large dimensions up to 2000 mm

Water and gas utilities are increasingly putting their trust in large polyethylene (PE) pipelines. For a lateral connection to existing and new large pipes, a complicated procedure with reducing tees was usually required until now. With the help of the ELGEF Plus branch saddle system Topload from GF Piping Systems, branch lines can now be realized easier, faster and more economically.

Large dimensions in use
The application areas are numerous and varied, for example water transport, water treatment as well as industrial process and cooling water systems. Large PE pipes are also utilized in mining, for waste water transport and in gas production and transport. Creating reliable connections of large-sized pipes is the goal and at the same time the challenge. Butt fusion and electrofusion have proven to be ideal jointing methods for PE pipes. The choice largely depends on the actual conditions, i.e. the amount of space available. GF Piping Systems is the only leading manufacturer to offer both jointing technologies from one source.

Lateral connections made easy
Connecting branch lines is a particular challenge. The ELGEF Plus branch saddle system Topload features outstanding flexibility and is designed for mains up to 2000mm and branches up to 500mm – unique in the utilities sector. Functional design and compatible components, such as branch saddles, clamping attachments and hole saws, facilitate installation. The installation set also contains a practically self-explanatory peeling tool, ensuring a consistent chip thickness for fusion prepping. No more difficult and unreliable peeling by hand.
The GF Piping Systems branch saddles are manufactured for a specific mains dimension. This ensures an optimal fit on the respective main pipe. Pressure test plugs are another useful installation aid; they allow performing a leak test between fusion and tapping. Dimension-adapted hole saws ensure flow-optimized drilling into the main pipe.

The system components were developed in close cooperation with installers. The goal was to make work easier and to support a correct and professional installation. This goal has been realized in that ELGEF Plus branch saddle system Topload represents a true alternative to conventional installation technology. Connections can be made on either unpressurized pipes or under pressure. There is no pressure reduction factor, as for reducing tees.

**Measurable benefits compared to conventional methods**

Comparisons show that installation work is significantly reduced. Butt fusion and electrofusion connections with reducing tees were compared with the new saddles. Integrating a reducing tee d630-160mm took 7.5 hours with the butt fusion method and about 4.5 hours with the electrofusion sockets. A branch saddle in the same dimension was installed in just over two hours – a time saving of approx. 70%. Installation costs were slashed by about 80% with the saddle fusion. Additional benefits are the high flexibility in positioning on the main pipe and the low weight. A reducing tee weighs approx. 135 kg, while a branch saddle in the same dimension only weighs 5 kg, making transport of the fittings much easier. Special hoists are no longer necessary on the installation site.

**Support and training are crucial**

Before the joint is made, the suitability of the pipe must be carefully checked. The effects of pipe ovality, flattening, pipe end shrinkage and surface damages can be minimized with targeted corrective measures.

That is why user training is so important to us at GF Piping Systems. A comprehensive range of training courses helps customers to gain confidence in handling the systems and products. Thanks to the global sales network, specialists with experience in large-pipe installations are available to customers locally.
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About GF Piping Systems
GF Piping Systems is a division of the Georg Fischer AG group of companies which also includes GF Automotive and GF AgieCharmilles. Founded in 1802, the Corporation is headquartered in Schaffhausen, Switzerland, and wholly owns 125 individual entities, employing 13,500 employees across 30 countries. In 2012, Georg Fischer AG generated revenues totaling CHF 3.6 billion. Georg Fischer is a globally preferred partner for the safe transport of liquid and gases, vehicle weight reduction and high-precision manufacturing technologies. For more information, visit www.gfps.com.