

# Designed for BIG ideas

Solutions for your large-dimension piping network



Our BIG product range

# For your success in big dimensions

**Our large-diameter solutions in plastics make your big projects easier, faster and more economical.**

A safe and reliable connection is the key success factor for your large-sized piping systems, but at the same time can be a challenging task. We understand your need for proper tooling, high-performance jointing technologies and connection parts as well as expert support on site. It is our experience and know-how in building, operating and maintaining big dimensioned piping systems, that enable us to create the right solutions for your varied installations in water and gas transport applications.

## + Our application-oriented solutions

- Cost-efficient installation
- Reliable and durable operation
- Less maintenance and repair efforts
- Exceptional customer services with training and support on site



### Electrofusion pipeline components

Modular range for safe, systematic, economic and efficient installation of your piping system.



### Welding machines

Our diverse range of electro and butt fusion machines from manual up to high-tech traceability machines for your individual need.

### Measurement and control

Our comprehensive automation portfolio for accurate measurement, precise control and reliable actuation.



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for us.

+GF+

### Spigot fittings

Our spigot fittings provide high cost efficiency in addition to maximum quality and durability.



### Mechanical fittings

Our wide range of fittings allows you to quickly make a restraint connection between all pipe materials without using special tools.



### Customizing

Together with you, our experts in materials and techniques find the best solution to suit your particular needs.



### Valves

Our high-performance and durable butterfly valves reliably control the liquid media flow in your pipelines.



### Customer service and support

Benefit from our value-added services and support offering along your project and beyond.



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onger a challenge  
”

Project engineer, Australia



BIG in installation

# Reliable jointing your big piping has never been so easy

The construction of large-dimension pipelines requires specific designs of the pipeline components. Our ELGEF Plus electrofusion couplers for water and gas applications are therefore made to enable a quick and reliable connection of your pipes and spigot fittings. Even under difficult site conditions, our electrofusion couplers made of polyethylene out-perform with a long-lasting and safe connection.

## Proven technologies

**The product range** of ELGEF Plus electrofusion couplers in the dimensions from d355 mm up to d1 200 mm consists of two production technologies.

Couplers with flex groove design (d900-d1 200) grant a good jointing thanks to the special geometry and wall thickness. The proven technology of active reinforcement (pipe-in-pipe) assures a reliable jointing in the dimensions from d355 up to d800 mm.

## A unique operating principle

**The patented principle of active reinforcement** ensures a perfect welding result. The unique functioning of couplers with reinforcement has its origin in the manufacturing technology where the outer pipe section is pressed over the inner pipe section. During the fusion process, the active reinforcement fully effects.

The heat in the fusion zone reduces the stiffness of the inner ring and the reinforcement ring pushes actively from the outside to the inner ring.

Thus, larger gaps can be closed more quickly and the expansion of the coupler is inhibited. During the cooling process the constant pressure from the outside makes the coupler shrink onto the pipe.

## + Features

- Extra-large inner diameter of the coupler permits easy assembly and accomodates pipe ovality
- Reduced installation time without pre-heating, use of additional equipment or special welding machines
- One path-limited fusion indicator in each welding zone, allowing for immediate visual verification
- QR code on each label enables online access of instruction videos and technical documentation



# A unique system to connect your big dimension outlets

Connecting branch lines to existing and newly installed large pipes is a particular challenge. Our innovative ELGEF Plus branch saddle system Topload is ideal for your large polyethylene (PE) pipe installations in gas, water and industrial applications. It is based on the proven principle of the established ELGEF Plus modular system. Thanks to this superior modularity and its flexibility, branch lines in big dimensions can now be realized easier, faster and more economically.



## The solution for your challenges

**The wide dimension range** of the branch fitting family provides you to install big- dimensioned outlets on a wide range of main pipes.

## + Dimension range

- Outlets with diameter dimensions up to 500 mm:  
Ø 160/225/315/500 mm
- Main pipes with diameter dimensions up to 2000 mm:  
Ø 315 - 2000 mm



## Saddle plus installation set saves time

**Functional design and component compatibility** of the modular system render your on-site installations easy, fast and safe. The advanced combination of peeling tool and clamping attachment represents a decisive added value when connecting outlets. Additional advantage is provided by the large outlet dimensions coupled with reliable drilling technology, enabling large flow volumes and less pressure loss. Thanks to the compact installation set, installation time is faster by about 70% compared to butt fusion installation of a reduced tee d630x160 mm.

## Professional tools for more precision

**On construction sites** large-dimension pipes are quite often deformed due to transportation and storage. Inadmissible pipe ovalities or other deformations are remedied with the help of suitable rounding tools. For tapping of the branches dedicated hole saws are available with the possibility to drill pipe wall thicknesses up to 120 mm. The pipe cutout is held in the cutter by the integral clasp on the pilot centering drill. Furthermore, our branch saddles can be welded with all welding machines in our current portfolio.



BIG in installation

# Big diversity with no limits in designing your pipeworks

The changing requirements in piping system construction have prompted us to expand our line of spigot fittings with new dimensions up to d1 000 mm. Whether it's elbows, bends, tees or reducers you need, our entire range of fittings from d20 to d1 000 offers highest diversity and as a result more flexibility and easier planning in designing complex pipeline networks up to biggest dimensions.



## Flexible use

**The diversity** of our spigot fitting versions is their winning feature. By expanding the range with the dimensions d710 to d1000 mm, we ensure our customers complete compatibility with existing pipeline networks in PE 80 and PE 100. The large dimensions with wall thicknesses in SDR 11 and SDR 17 offer plenty of scope in designing complex pipeline networks. While the spigot fittings in short-spigoted versions can be welded only by butt fusion, the long-spigoted versions can be jointed by butt and electrofusion.



## Customer-oriented solutions

**We focus on reliability and efficiency** in the development and production of our products. The use of 100 % virgin material PE 100 provides you a high quality level beyond the standard. That's why our spigot fittings are used whenever challenging piping systems have to be reliably installed or whenever the time factor as well as assembly and installation costs play an important part in your large-scale projects.

## + Flexibility in all dimensions

- Elbows
- Bends
- Tees
- Reducers
- End caps
- Flange adapters

# One coupling that fits all pipe sizes

Regardless of the pipe material you are using, we have the perfect fit when it comes to making transitions for all kinds of piping materials. Resicoat offers you maximum corrosion protection and the long fitting lengths make your installations easier. MULTI/JOINT XL and ST fittings are suitable to repair and maintain your networks of large dimensions up to DN2800 even under extreme conditions.

## Reliable and durable

**The wide range cast iron fitting** MULTI/JOINT XL is specially developed for above and below ground water and gas applications. According to the proven MULTI/JOINT principle, one size fits all, regardless of which pipe material you use. As long as the nominal pipe diameters are the same, a reliable connection can be made. For those situations where it is not possible to connect pipes by using a MULTI/JOINT large tolerance fitting, we offer a tailor-made solution with our ST-System, especially developed for non-standard sizes.

## + Benefits

- Large tolerance coupling reducing stocks
- Simplified and quicker installation thanks to a huge insertion depth
- PN 10 with 50 years of life expectancy
- Long term reliability by the use of high quality ductile cast iron
- On request, fully customized solutions adapted to specific demands and site conditions (PN 10, PN 16 and even PN 25)



BIG in operation

# Lightweight performer up to your biggest challenges

Wherever large amounts of liquid media need to be safely conveyed, you can rely on our modular range of plastic and metal butterfly valves. Up to largest dimensions, our lightweight valves convince by design, functionality and performance. Maximum corrosion and chemical resistance reduces your maintenance and repair costs and more importantly ensures long-term and safe use.



## Plastic butterfly valves type 567

**Specified material properties** and the innovative technical design of our valves provide the highest level of safety and quality in your large diameter installations.

- Low weight thanks to full plastic design
- High corrosion resistance
- Low operation torque
- Double eccentric valve design
- Low wear and tear
- Easy and time-saving maintenance
- Durable

## Metal butterfly valves type 039

**Cost and performance** efficiency, together with the compact construction for safe and easy handling, firmly establish metal butterfly valves in our modular systems.

- High temperature resistance
- High pressure resistance
- High corrosion resistance
- Good price/performance ratio
- Durable

+ DN350-DN600

+ DN350-DN1200



# The all-in-one solution for your big automation needs

Our automation technology offering makes it easy for you to control your processes. We provide all components required, from the spot where a specific process parameter is monitored and measured to the point where your processes or applications are controlled and regulated. Whether it is measurement, control or actuation, all our technologies are not only fully compatible with each other, but also can be seamlessly integrated in your piping systems with no limit in dimension.



- **Easy to install:** Clamp-on flow meters allow installation onto the pipe of a running system without any fitting.
- **Easy to operate:** Intuitive menu structure and clear display of parameters are part of our user-friendly control technologies.
- **Easy to combine and upgrade:** Fast and simple configuration is a convincing benefit, proving that there are no limits to flexibility.

## Accurate measurement

**Our measurement offering** covers a wide range of technologies to measure and analyze media qualities according to parameters such as:

- Flow
- Level
- Temperature
- Pressure
- pH/ORP
- Conductivity
- Resistivity
- Chlorine
- Dissolved oxygen
- Turbidity

Most sensors are available in plastic and are therefore highly resistant to chemicals, waste water or tap water. A large variety of weld-on fittings, saddles and wafer fittings allow an easy sensor installation.

## Precise control

**Clever design** makes life easy. All our measurement parameters can be connected with one and the same transmitter. Our 9900 single channel multiparameter controller ensures safe and efficient operation throughout your entire control loop. Thanks to its modular design, additional functionalities like batch control or communication interfaces can be added anytime. At a glance, parameters of the currently connected sensor are indicated on the large and highly illuminated display.

## Reliable actuation

**The modular set-up** of our actuation portfolio offers you highest configuration flexibility. Valves and actuators can be combined flexibly and additional functionalities like positioners or monitoring devices can be added optionally. According to your needs, our actuators are available for either electrical, magnetic or pneumatic control. Thanks to the proven all-plastic designs, our complete actuation range is capable of withstanding even harsh environments with aggressive chemicals or sea water.

BIG in service

# Your complete welding range up to biggest dimensions

The jointing technique and, resulting from this, the strength of the joint are important factors during the implementation of your large-diameter piping projects since these influence the total service life of your system to a crucial extent. As a pioneer in the field, we offer a wide range of welding machines, providing you highest reliability, process control and simplicity in operation.

## Butt fusion machines

**The robust and reliable design** of our butt fusion range makes them ideal for use in hard conditions like water and gas distribution, water treatment or mining projects. Our machines can be equipped with welding recorder or with comfortable semi-automated CNC hydraulic controller with touch screen operation interface. A proper range of accessories such as electrical hoist or flange adapter clamping units is providing solutions for the various demands on your construction site.

## Electrofusion machines

**Reliable and easy to operate** electrofusion units are designed for various applications like water and gas distribution, irrigation or industrial applications. The range of machines includes monovalent (limited fusion voltage range dedicated to ELGEF system) and polyvalent welding units. Manual fusion data input or comfortable and safe barcode reading is provided by the units. Furthermore, the functionality to trace the welding and component data, including the automatic recording of GPS data, is supported within the range.

## + Covering all your needs

- All dimensions from d16 up to d1 600
- Different materials including PE, PP, PB and PVDF
- Manual, semi-automated (CNC) or fully automated welding machines
- Usage in pre-fabrication, installation, regular maintenance and repair activities



# With our project support we keep hold of the big picture

You can rely on our additional services in the same way you rely on the quality of our products. We support your big dimensioned construction projects from initial planning talks through to the final installation on site and beyond. Value-added services such as technical support, training or customizing complete our product portfolio.



## Global trainings

**Our specialists are always close by.** Worldwide, a comprehensive range of training courses is conducted by our local expert teams, specialized in large-pipe installations. Our trainings are focused on methods with high practical relevance. Geared specifically toward your individual priorities as well as to your level of knowledge, our courses offer a high degree of quality and exclusivity. On site, the training pays off. Since instructing pipe fitters in the specific aspects of the installation prior to the actual construction work saves you valuable time on site.



## Customizing

**Special fittings or prefabrication on request** is what makes a solution your solution. Our customizing teams work closely together with our production and engineering specialists around the globe to develop the best solutions for you. According to your specific application needs, we produce individual custom parts such as special spigot fittings. This service includes one-off production as well as small production runs. In addition, our prefabrication offering is time saving and avoids inconveniences on site.

## Rental Pools

**Adequate installation equipment** is a must when constructing large-dimensioned systems. Not always purchasing the equipment is the most cost-efficient solution. In many countries, we operate rental pools providing you machines and tools for various jointing technologies like butt fusion, electrofusion and mechanical connections.



## Technical documentation

**QR codes** attached to the products supplement the training program and enable you direct access to technical details, installation instructions and videos from anywhere in the world. Additional documents such as quality certificates and approvals can also be obtained quickly on site.

# Worldwide at home

Our sales companies and representatives ensure local customer support in over 100 countries

[www.gfps.com](http://www.gfps.com)

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