





Plastic Piping Systems
→ Solutions for Water Treatment





Visible benefits Trea

Improving the quality of water in order to reduce its impact on processes and the environment is always a challenge.

In a wide competitive area of chemical and physical processes you need the right partner who will be able to bring you the solution and expertise for your complete piping system.

With our systems of fittings, pipes, valves automation and instrumentation with a high level of service quality we offer you know how, which will serve you to be more competitive in your market place.



Membrane System Microfiltration





System

Use

- Chemical Process Industry
- Food and Beverage
- Life Science
- Microelectronics
- Ship Building
- Water Utilities

Make Up Water Drinking Water

Industry

Municipal

- Filtration Systems
- Membrane Systems
- Ion Exchanger Systems
- Reverse Osmosis Applications
- Water Injection Systems

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Use

Your benefits at a glance

- System solution and technological expertise
- Added value welding technologies



PVDF BCF® welded

No corrosion or scale build up





- Easy to install and to modify
- Approvals from major classification societies
- Reliable and long-lasting systems
- Highly skilled technical support

Surface Water Underground Water Recycled Water

Natural Disposal **Recycled Water**

Waste Water

Industry

Municipal

- Chemical Injection Systems
- Filtration Systems
- Water Disinfection Systems
- Water Injection Systems

Industrial

\rightarrow Make Up Water & Industrial Water

Chemical Process Industry

The production of chemicals and basic industrial products require treated water as part of the product, the rinse of the product or heat exchange of the product or facility. In each case, the GF Piping Systems solutions from SYGEF® (PVDF) to PVC-U offer economical corrosion-free piping to process the water. GF Piping Systems products offer clean, inert materials that ensure the highest grade of water for all phases of water treatment and water distribution.

The water treatment systems (e.g. reverse osmosis, water softening, filtration, etc.) feeding boilers, cooling systems and pre-treatment to the water systems that produce high-purity water can select GF Piping Systems PVC-U and PVC-C for corrosion-free, price competitive alternatives to metallic piping systems.

GF Piping Systems and instruments play a major role in transporting water and measuring flow, pH, conductivity and ORP throughout chemical, paper, automotive and power generating plants.



Food and Beverage

Whether in water treatment systems, feeding boilers, cooling systems or the simple piping to the filler, GF Piping Systems fittings, valves and instrumentation offer an advanced and competitive solution.

For the state of the art manufacturing of "new age" drinks as well as traditional carbonated drinks GF Piping Systems high purity piping products (SYGEF® (PVDF), PROGEF® (PP-n) and PP-H) offer easy cleanable solutions.

Either with a traditional lime-treated, ferric flocculation water treatment process that results in elevated pH product water or with membrane systems that often produce a more acidic, poorly buffered product water, the use of GF Piping Systems plastic piping plays a critical role in preventing piping corrosion for handling these aggressive ingredient waters.



Life Science

New biotech products, cosmetics and pharmaceuticals are requiring higher quality water for the manufacture of a wide range of products from sun tan lotion to parenteral (WFI). GF SYGEF® (PVDF) and GF® PROGEF® (PP-N) piping with GF Piping Systems fusion technologies are creating the ability to produce pharmaceutical grade water without stainless steel roughing. The GF Piping Systems state-of-the-art welding technology (BCF) provides a smoother surface than an orbital weld.

GF Piping Systems eliminates the need for passivation and as these aggressive techniques become more difficult to conduct from both an environmental and health point-of-view, the GF Piping Systems plastic alternative to sanitary and industrial stainless piping is the system of the future for the life sciences industry.



Water Trea

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> CF® fusion **hemical**

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Microelectronics

With today's advanced semiconductor manufacturing technologies, the water used for product rinsing and other critical manufacturing processes is more important than ever. GF Piping Systems SYGEF® (PVDF), GF Piping Systems PROGEF® (PP-n) and GF Piping Systems PP-H piping using GF Piping Systems fusion technologies make it possible to produce and maintain the highest purity water from a chemical (both organic and inorganic) and a biological standpoint. These inert piping materials allow the water distribution system to maintain its purity throughout the manufacturing facility.

For electronic circuits, GF Piping Systems PVC-U and PVC-C offer economical solutions to treat and distribute water for rinsing purposes where eliminating piping corrosion is the greatest concern. GF Piping Systems flow and analytical instruments and valving control offer complete systems for process water treatment distribution and neutralization of wastewater.



Ship Building

Aquaparks

The key in ship building is to use the materials of the lightest weight, with extensive piping systems found on all vessels, especially cruise ships, piping materials from GF Piping Systems are meeting the low weight demands, while eliminating the corrosion that is an inherent handicap to all metallic products used to build sea-going vessels.

The process of desalination, softening, Reverse Osmosis and chemical dosing will be beneficially accomplished with our combination of plastic valves, fittings, pipes, measurement and control systems.

→ Drinking Water & Waste Water



Municipal

Swimming pools, aquatic parks and aquariums need accurate, reliable and price advanced water treatment facilities. Adapted to the requirements we offer solutions securing fast installation and long-lasting performance.

For public utilities such as drinking water or municipal desalination plants, the challenge of **Drinking Water Plants** corrosion is driven by high levels of chlorine, chlorine dioxide, salts or general exposure to the weather or ground water

> GF Piping Systems piping and instruments play a major role in transporting water, controlling and measuring flow, pH, conductivity and ORP throughout public water utilities without the risk of corrosion. GF Piping Systems has the package for the water works.

Waste Water Plants

Waste Water Plants must be built to last. Our total solutions, from valves to instrumentation are specially made for you. As a total package they offer added value solutions for all your needs.





Water Treatment system for Ship Building



GF Piping Systems \rightarrow worldwide at home



Please find more information concerning Water Treatment: www.piping.georgfischer.com \rightarrow Solutions \rightarrow Water Treatment

Australia George Fischer Pty Ltd Kingsgrove NSW 2008 Phone +61(0)2/95 54 39 77 australia.ps@georgfischer.com www.georgefischer.com.au

Austria Georg Fischer Rohrleitungssysteme GmbH 3130 Herzogenburg Phone +43(0)2782/856 43-0 austria.ps@georgfischer.com www.georgfischer.at

Belgium / Luxembourg Georg Fischer NV/SA 1070 Bruxelles/Brüssel Phone +32[0]2/556 40 20 be.ps@georgfischer.com www.georgfischer.be

Brazil George Fischer Ltda 04795-100 São Paulo Phone +55(0)11/5687 1311

br.ps@georgfischer.com

China

Georg Fischer Piping Systems Ltd Shanghai Pudong, Shanghai 201319 Phone +86(0)21/58 13 33 33 china.ps@georgfischer.com www.cn.piping.georgfischer.com Denmark/Iceland Georg Fischer A/S 2630 Taastrup Phone +45 (0)70 22 19 75 info.dk.ps@georgfischer.com www.georgfischer.dk

France George Fischer S.A.S. 93208 Saint-Denis Cedex 1 Phone +33(0)1/492 21 34 1 fr.ps@georgfischer.com www.georgefischer.fr

Germany Georg Fischer GmbH 73095 Albershausen Phone +49(0)7161/302-0 info.de.ps@georgfischer.com www.vad.georafischer.de

Georg Fischer DEKA GmbH 35232 Dautphetal-Mornshausen Phone +49(0)6468/915-0 deka.ps@georgfischer.com www.dekapipe.de

India George Fischer Piping Systems Ltd 400 093 Mumbai Phone +91(0)22/2820 2362 in.ps@georgfischer.com

Italy Georg Fischer S.p.A. 20063 Cernusco S/N (MI) Phone +3902/921 861 it.ps@georgfischer.com www.georgfischer.it

Japan Georg Fischer Ltd 556-0011 Osaka, Phone +81(0)6/6635 2691 jp.ps@georgfischer.com www.georgfischer.jp

Malaysia Georg Fischer (M) Sdn. Bhd. 47500 Subang Jaya Phone +60 (0)3-8024 7879 conne.kong@georgefischer.com.my

Netherlands Georg Fischer N.V. 8161 PA Epe Phone +31(0)578/678 222 nl.ps@georgfischer.com www.georgfischer.nl

Norway Georg Fischer AS 1351 Rud Phone +47(0)67 18 29 00 no.ps@georgfischer.com www.georgfischer.no Poland Georg Fischer Sp. z o.o. 02-226 Warszawa Phone +48(0)22/313 10 50 poland.ps@georgfischer.com www.georgfischer.pl

Romania Georg Fischer Rohrleitungssysteme AG 70000 Bucharest - Sector 1 Phone +40(0)1/222 91 36 ro.ps@georgfischer.com

Singapore George Fischer Pte Ltd 417 845 Singapore Phone +65[0]67 47 06 11 sgp.ps@georgfischer.com www.georgefischer.com.sg

Spain / Portugal Georg Fischer S.A. 28046 Madrid Phone +34(0)91/781 98 90 es.ps@georgfischer.com www.qeorgfischer.es

Sweden/Finland Georg Fischer AB 12523 Älvsjö-Stockholm Phone +46(0)8/506 775 00 se.ps@georgfischer.com www.georgfischer.se The technical data is not binding and not an expressly warranted characteristic of the goods. It is subject to change. Please consult our General Conditions of Supply.

Switzerland Georg Fischer Rohrleitungssysteme (Schweiz) AG 8201 Schaffhausen Phone +41(0)52 631 30 26 ch.ps@georgfischer.com

United Kingdom/Ireland George Fischer Sales Limited Coventry, CV2 2ST Phone +44(0)2476 535 535

Phone +44(0)2476 535 535 uk.ps@georgfischer.com www.georgefischer.co.uk

USA/Canada/Latin America/Caribbean George Fischer Inc. Tustin, CA 92780-7258 Phone +1(714) 731 88 00, Toll Free 800/854 40 90 us.ps@georgfischer.com www.us.piping.georgefischer.com

Export Georg Fischer Rohrleitungssysteme (Schweiz) AG 8201 Schaffhausen Phone +41(0)52 631 11 11 export.ps@georgfischer.com www.piping.georgfischer.com

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