





 Plastic Piping Systems
→ Solutions for the Chemical Process Industry





GF Piping Systems

Throughout the world everyone demands a secure supply of clean water. GF Piping Systems meets this challenge by providing complete piping systems for safe operation in virtually all environments. We have developed systems which comprise pipes, fittings, valves and measuring and control devices in high quality corrosion-resistant thermoplastics for the transport of not only clean water, but also gas and other industrial media.

Whether installed above or below ground, in industrial, commercial or domestic applications, GF Piping Systems provides an ideal solution.

Innovation and technology.

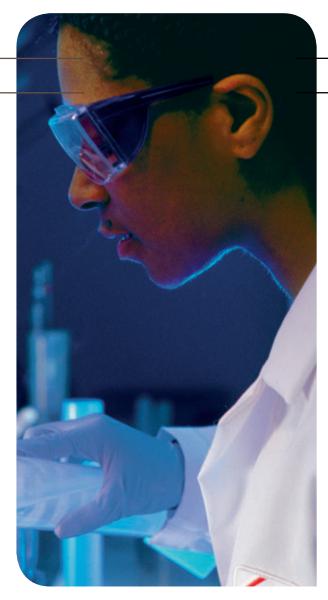
GF Piping Systems, through focussed research, is continually developing new products and technologies, setting new global standards in quality and performance for our customers.

All from one source. GF Piping Systems covers the growing demand for complete solutions from a single source in a wide range of applications.

Quality management. All system components are stringently tested in accredited test laboratories. Management and production procedures are certified to ISO 9001 and ISO 14001 to guarantee form, fit, function and compliance in whatever application they may be used throughout the world.

Sales and service – worldwide.

Our local sales companies and representatives in over 100 countries provide "one-stop" shopping, including planning support, training and product availability. Facts and Figures. GF Piping Systems with its 3200 employees achieves an annual turnover of about CHF 800 million. GF Piping Systems is part of the Georg Fischer Corporation, which was founded in Schaffhausen, Switzerland in 1802. Today the corporation has more than 13,000 employees and an annual turnover of CHF 3.3 billion.



\rightarrow Your benefits

- technological expertise
- "one-stop" shopping
- premier quality and performance
- system solutions
- know-how and experience
- local support

Know-how for a safe environment

+GF+

53

GEORG FISCHER PIPING SYSTEMS

Thermoplastic piping systems have been relied on for decades to convey media, whether it's water for process cooling or hazardous liquids for industrial applications such as:

- \rightarrow chemical production
- ightarrow chemical distribution
- \rightarrow plating industry / surface treatment
- \rightarrow pulp and paper
- \rightarrow textile and leather industry
- \rightarrow refining and mining
- ightarrow power plants

and others.

Corrosion is no longer a problem when choosing the appropriate GF piping system. The harsh environment within chemical plants and the conveyance of chemicals place high demands on the piping systems in terms of safety, economic factors and subsequent maintenance.

Chemical Process Industry



\rightarrow Plastics can do more

111

Most acids and bases are considered dangerous and are classified as substances hazardous to water.

Materials such as PE, B-PP-H, PE 100, PVC-U, PVC-C and PVDF are particularly suitable for this purpose because of their high chemical resistance to most corrosive media used in the chemical process industry. Choosing the most suitable material is prerequisite for each application.

GF Piping Systems offers comprehensive support so that customers know how to select the most suitable piping system, how to design it and how to accomplish a high quality installation. We regularly organize seminars at our headquarters in Schaffhausen as well at our local sites.

Process Cooling - B-PP-H, PE100, PVC-U



Chemical Conveyance - PVDF, PVC-C, PVC-U, ß-PP-H, PE100



Chemical Conveyance – double containment system



Chemical Drainage and Waste Water Treatment





High Purity Fluids - SYGEF® Plus, PROGEF® Natural

\rightarrow Your benefits at a glance

- No corrosion problems
- Safe and economical solutions
- Reduced maintenance costs
- Simple, but high quality installation
- Widest range of plastic piping systems
- Worldwide presence

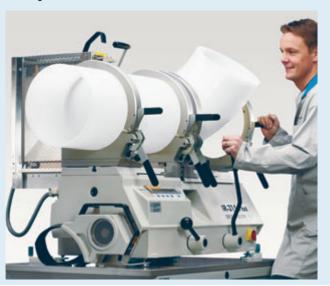
Vacuum – ß-PP-H, PVC, PE100



Measurement and Control – Actuated Valves



Welding – IR



ightarrow Applications – Materials – Systems

Process Cooling

Water for the cooling process, whether temperature controlled or not, is one of the principal demands in the chemical process industry. It is used extensively in heat exchangers and reclaim equipment or high-tech manufacturing processes.

Corresponding to your expectations or given building restrictions, GF Piping Systems can adapt the solution to meet your needs. The PE 100, ß-PP-H or PVC-U product lines are corrosion-free, in addition to the internal pipe surface being free of encrustation. Moreover, the insulation aspect is exceedingly advantageous compared with metal pipelines. Our piping systems ensure the long-term and efficient operation of your cooling systems.

Chemical Conveyance

The transport of chemicals represented one of the first applications for GF Piping Systems products more than 50 years ago. Since then, our products have continually been developed in accordance with market needs and today we are uniquely positioned to provide suitable materials as well as cost-effective and safe methods for conveying corrosive fluids. With PVDF, GF Piping Systems can meet your chemical delivery requirements even up to 140 °C combined with an excellent good chemical resistance.

Our piping systems in PE 100, PVDF, PVC-C, PVC-U and B-PP-H are top quality, reliable solutions for various chemical media. For hazardous fluids CONTAIN-IT Plus pipein-pipe systems satisfy your demands. The internal pipe carries the harsh chemical waste and can be chosen according to your specific needs. The external pipe serves to protect the system and can be combined with additional equipment to indicate possible leaks.

Chemical Drain and Waste Water Treatment

Chemical waste drain as well as water reclaim and recycling applications present environmental challenges to any factory. GF Piping Systems' FUSEAL products in flame-retardant PP or PVDF have been developed especially for such applications with the goal of protecting our environment. This is a cost-effective and safe method for conveying corrosive liquids even at elevated temperatures.

CONTAIN-IT Plus with its excellent properties can be used for hazardous chemical drain as well.

High Purity Fluids

SYGEF® Plus, SYGEF® Standard or PROGEF® Natural are complete high purity piping systems with excellent surface roughness, inertness and corrosion resistance. All components show a very low ionic contamination and guarantee long-term as well consistent quality at a favorable price/performance ratio.

Vacuum

Complete systems for use in applications down to absolute vacuum, including valves in rigid plastics with low pressure loss, e.g. PE 100, ß-PP-H and PVC systems which offer high corrosion resistance and virtually no maintenance.

Compressed Air

Improved efficiency with smooth bore pipes, combined with reliable and simple installation technology. Complete systems in PB and PE 100 with application-specific components and dedicated engineering support.

Measurement and Control

System solutions including actuated valves (pneumatic and electric). Flow, pH and analytical conductivity measurement equipment from SIGNET complement our product range.

Welding

We have developed specific welding technologies for each product group and application. Proven and simple technologies such as butt and socket fusion are complemented with IR and BCF fusion technologies which offer both traceability and repeatability.

High quality and very little stress concentration in the welding zone are given, rendering them less prone to stress cracking corrosion.

GF Piping Systems \rightarrow worldwide



Please find more information concerning the Chemical Process Industry: www.piping.georgfischer.com \rightarrow Solutions \rightarrow Chemical Process Industry

Australia

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

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

Belgium/Luxembourg Georg Fischer NV/SA 1070 Bruxelles/Brüssel Phone +32(0)2/556 40 20 info.be@be.piping.georgfischer.com www.georgfischer.be

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

China

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

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

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

Georg Fischer DEKA GmbH 35232 Dautphetal-Mornshausen Phone +49{0}6468/915-0 info@dekapipe.de www.dekapipe.de

Greece Georg Fischer S.p.A. 10434 Athens Phone +30[0]1/882 04 91 office@piping-georgfischer.gr India George Fischer Piping Systems Ltd 400 093 Mumbai Phone +91(0)22/2820 2362 branchoffice@georgefischer.net

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

Japan Georg Fischer Ltd 556-0011 Osaka, Phone +81(0)6/6635 2691 info@georgfischer.jp 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 info.vgnl@nl.piping.georgfischer.com www.georgfischer.nl Norway Georg Fischer AS 1351 Rud Phone +47(0)67 18 29 00 info@no.piping.georgfischer.com www.georgfischer.no

Poland Georg Fischer Sp. z o.o. 02-226 Warszawa Phone +48(0)22/313 10 50 www.georgfischer.pl

Romania Georg Fischer Rohrleitungssysteme AG 70000 Bucharest - Sector 1 Phone +40[0]1/222 91 36 office@georgfischer.ro

Singapore George Fischer Pte Ltd 417 845 Singapore Phone +65(0)67 47 06 11 info@georgefischer.com.sg www.georgefischer.com.sg

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



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Sweden/Finland

Georg Fischer AB 12523 Älvsjö-Stockholm Phone +46(0)8/506 775 00 info@georgfischer.se www.georgfischer.se

Switzerland

Switzertafild Georg Fischer Rohrleitungssysteme (Schweiz) AG 8201 Schaffhausen Phone +41(D)52 631 30 26 info@rohrleitungssysteme.georgfischer.ch www.piping.georgfischer.ch

United Kingdom/Ireland

George Fischer Sales Limited Coventry, CV2 2ST Phone +44(0)2476 535 535 info@georgefischer.co.uk www.qeorgefischer.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 info@us.piping.georgefischer.com www.us.piping.georgefischer.com

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



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