GF Piping Systems

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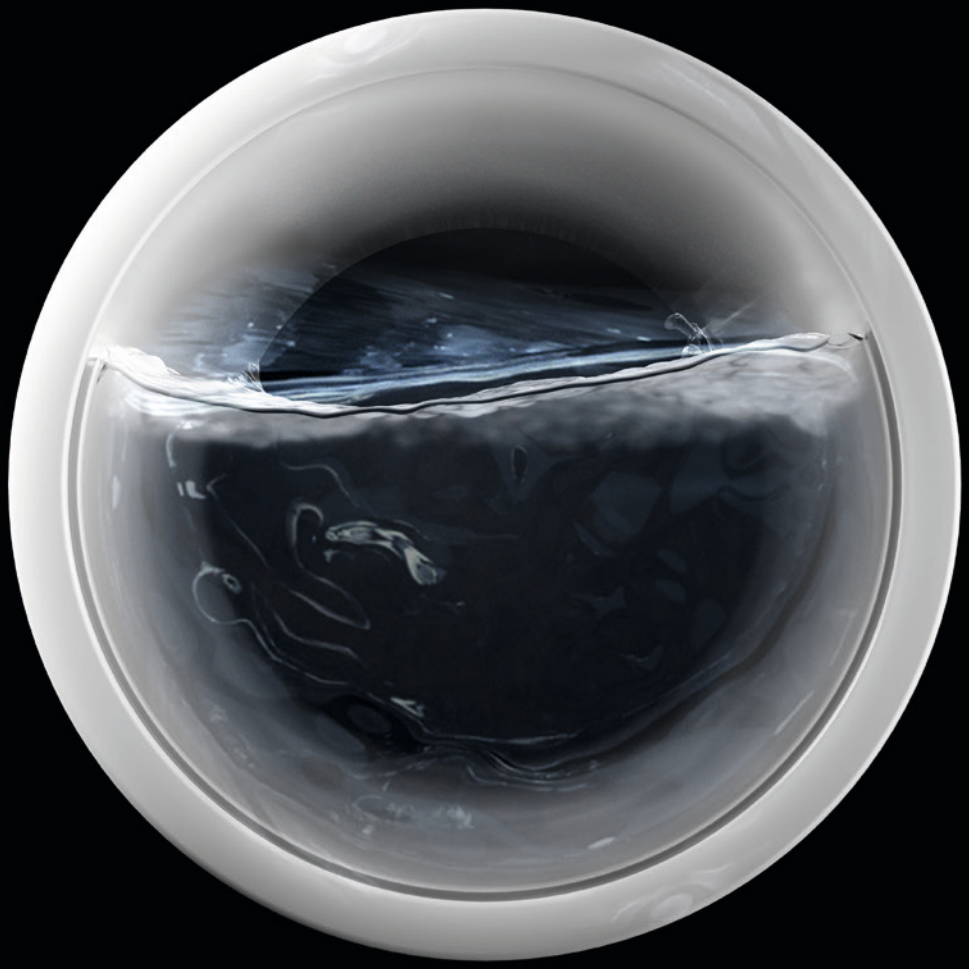
Beyond performance

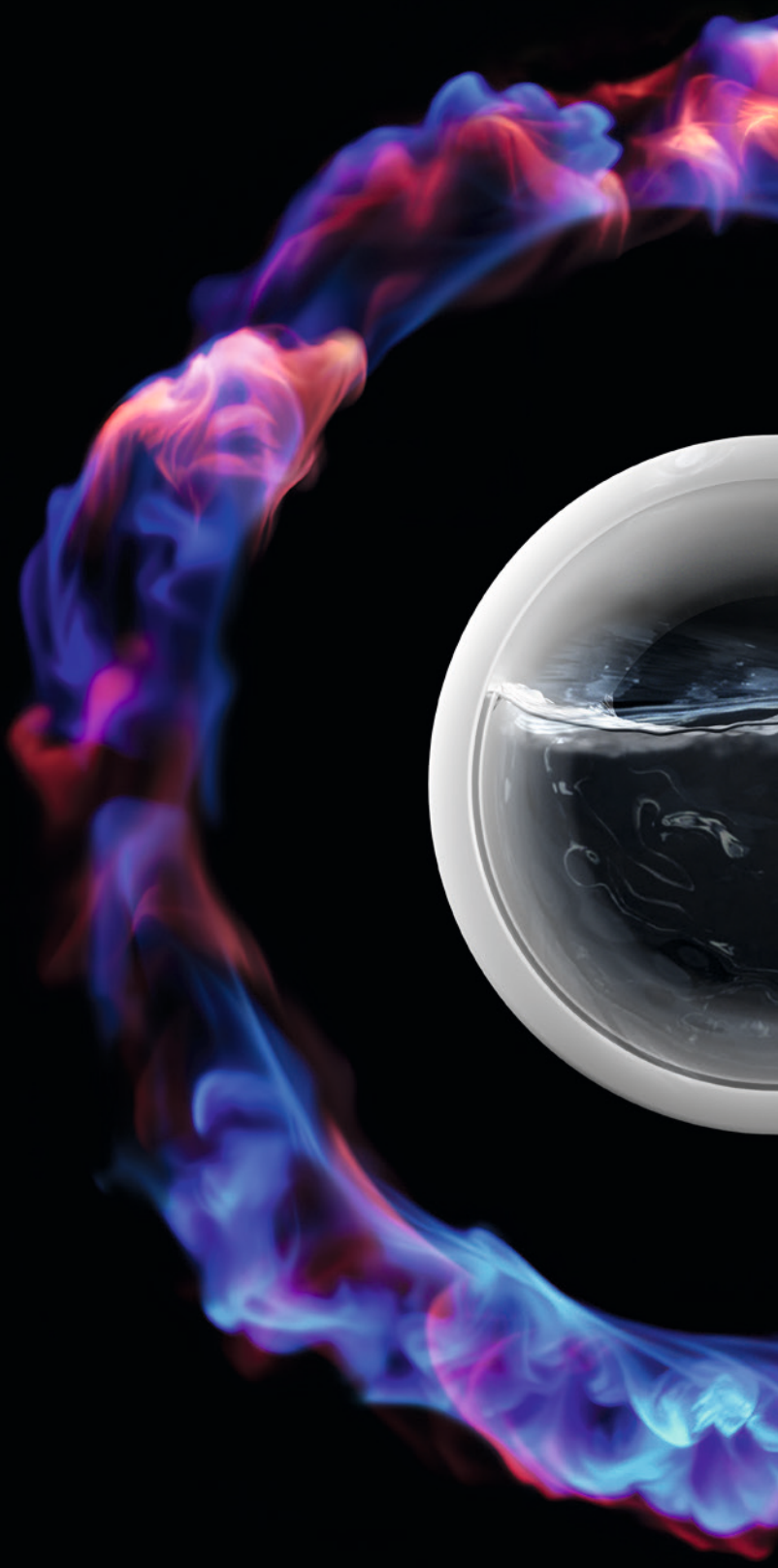
SYGEF PVDF



SYGEF Standard

Beyond resistance

PVDF piping system



SYGEF Standard
SYGEF Standard PVDF is a polyvinylidene fluoride piping system suitable for harsh conditions. It is specially designed for corrosive environments by offering excellent mechanical strengths for temperatures from -20°C up to 140°C and chemical resistance to aggressive substances. Paired with our different welding solutions, it's ideal for creating a durable, safe piping system in extreme industrial settings.

Excellent
chemical resistance

Outstanding
temperature range

UV and weather
resistant

Superior fire
behaviour

Exceptional
abrasion resistance

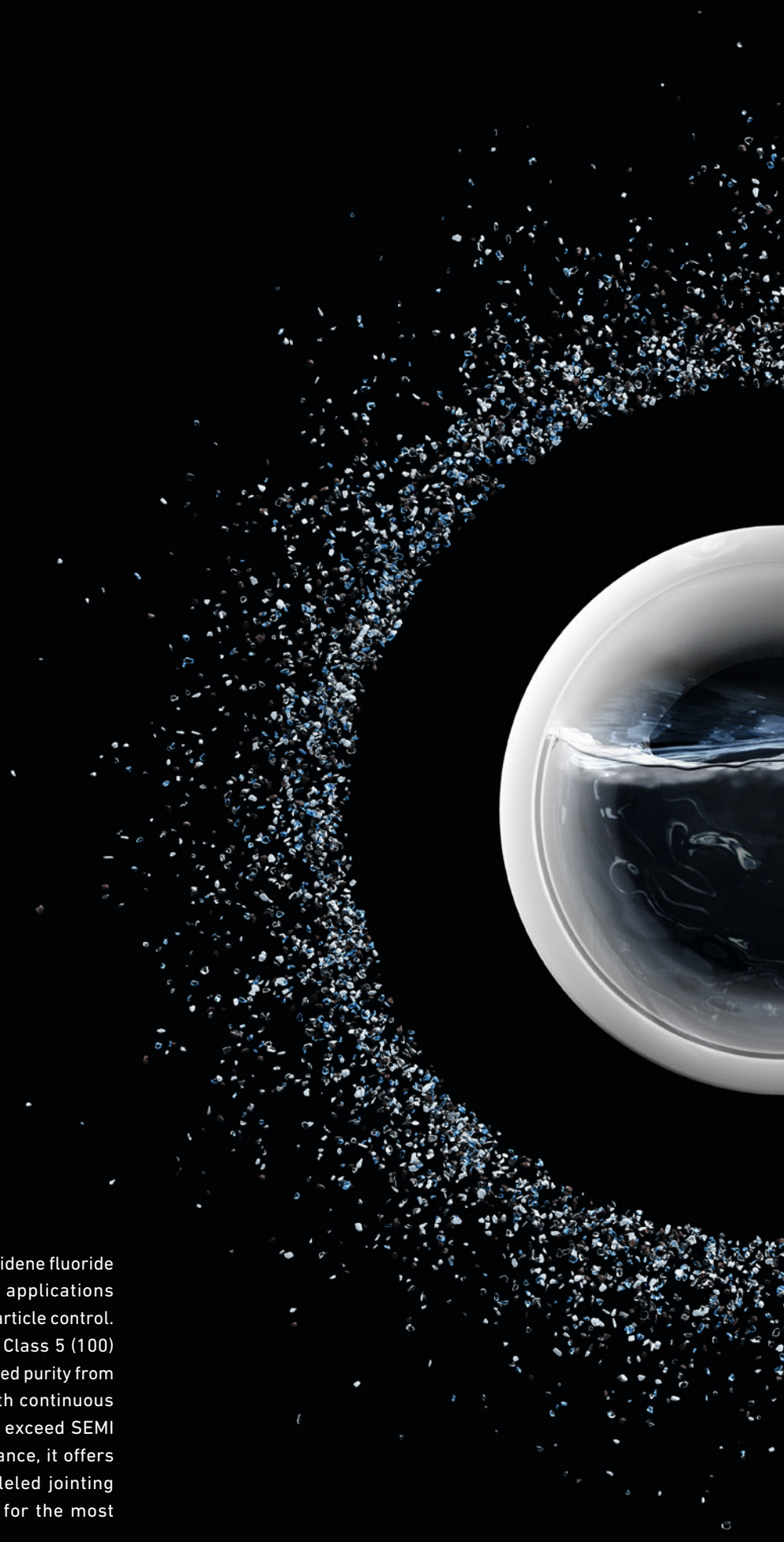
Non-conductive
material

Long-lasting
system lifetime

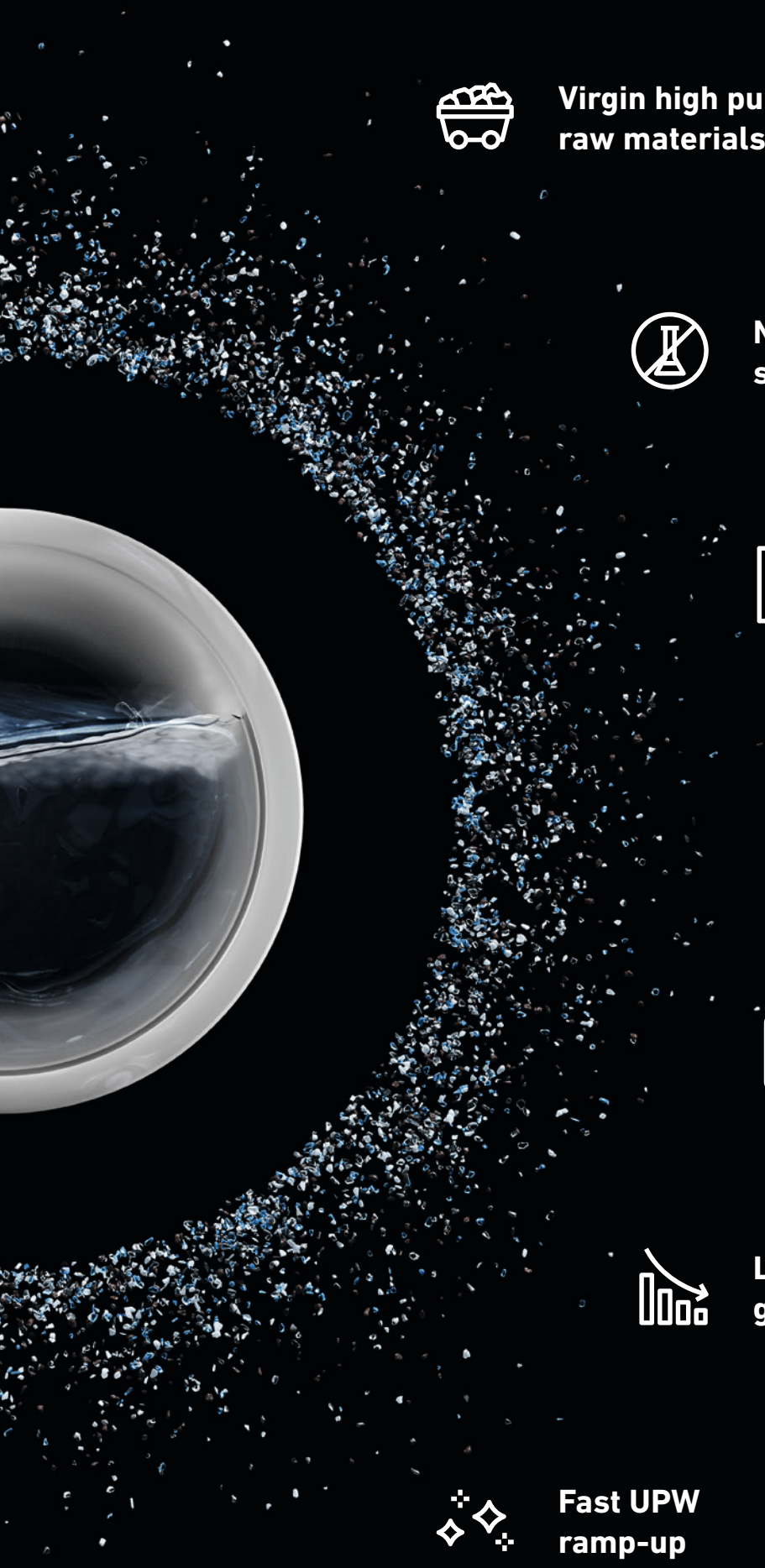
SYGEF Plus

Beyond purity

PVDF-HP piping system



SYGEF Plus
SYGEF Plus PVDF-HP is a high purity polyvinylidene fluoride piping system specifically engineered for applications demanding exceptional purity and stringent particle control. Manufactured and double bagged under ISO Class 5 (100) cleanroom conditions, it ensures uncompromised purity from production upon active onsite operation. With continuous improvements, regular leach-out tests that exceed SEMI F57 standards, and seamless quality assurance, it offers maximum reliability. Enhanced by unparalleled jointing technologies, SYGEF Plus is ideally suited for the most demanding high purity applications.



Virgin high purity raw materials

No additives, stabilizers or pigments

Exceeding SEMI F57 requirements

Excellent surface finish

100% traceability

Low biological growth

Fast UPW ramp-up

High tech factory Ettenheim / Germany

SYGEF High Purity Chain

All SYGEF components are manufactured in one of the largest cleanroom factories for fluoropolymer products in Ettenheim, Germany. Due to over 50 years of experience and continuous improvements SYGEF Plus pipes, fittings and valves are exceeding SEMI F57 requirements to increase our customers' yield. Furthermore GF Piping Systems played a major role in establishing the relevant standards SEMI F40, F48 and F57 for polymer component testing.

1.

Raw material

SYGEF begins with the highest available quality raw materials. Our suppliers provide analytical proof of compliance with defined and specified material properties for every shipment. Upon arrival, GF performs extensive incoming goods inspection. This assures that only raw materials fulfilling the strict requirements are released for production.

2.

Manufacturing

SYGEF Plus products are manufactured under clean room class 5 (100) conditions with fully controlled processes. During the whole production process the inner surface area of pipes, fittings and valves are only in contact with air in compliance with clean room class 5 (100).

3.

Quality control

A detailed and unique QS system ensures the highest level of quality. It is directly linked to the manufacturing of the complete SYGEF Plus range and includes a 100% inspection of every product. All mechanical testing takes place in matchless Swiss federally accredited lab facility. The regular leach-out testing is performed by external certificated labs in accordance with SEMI F40 and F57.

4.

Cleaning and packaging

Highest purity is achieved, as SYGEF Plus products are additionally cleaned, using 18MΩ pure water and special cleaning devices under clean room class 5 (100) conditions. All products are packaged under selected and strictly monitored process conditions to avoid contamination. Pipes are capped and all components are double bagged with a high quality, certified clean bagging material.

5.

Logistics

SYGEF products are stored in dedicated warehouses and distributed globally. GF uses special wooden boxes for storage and transport to ensure the highest quality and safety during transportation to the customer's site.

6.

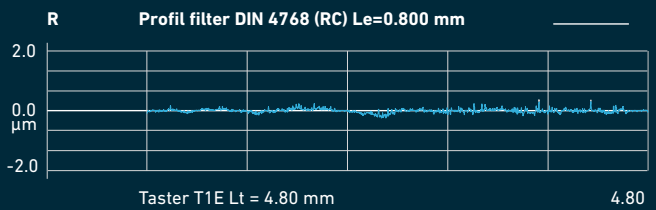
Installation and services

GF offers an advanced IR welding technology and top-tier weld bead inspection ensuring highest quality and reliability. Comprehensive project support, including design and installation training, and global service centers, completes the high purity chain.

Controlled environment
Our SYGEF production clean rooms are continuously monitored and audited both internally and externally. Microbiological and particle measurements are fully documented with a unique QA system.

Ultrapure water plant
Components are cleaned and rinsed with high-quality water to ensure cleanliness. SYGEF Plus products undergo regular leach-out controls, with impurities like metals, anions, and TOC constantly monitored to exceed SEMI F57 requirements.

Surface quality
Smooth surfaces are achieved through special equipment design, proper tooling material selection, mirror finish surfaces, and preventive maintenance. SYGEF Plus products surpass SEMI F57 inner surface roughness standards.



Inner surface roughness measured at a SYGEF Plus T90° equal d250 SDR33 / PN10

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Beyond challenges

High purity for the semiconductor industry

What does high purity mean for semiconductors?

High purity piping systems are crucial in semiconductor manufacturing due to their ability to convey ultrapure water and other liquids while ensuring that the purity properties of the transported media is staying on the required levels. Here are some key aspects:

Lowest material leach-out

PVDF-HP significantly reduces the risk of contaminating ultrapure water and pure chemicals with particles, metals, anions, and other impurities. This is crucial for producing high-quality semiconductor wafers and microchips. The high purity of SYGEF Plus products is ensured by PVDF's inert and virgin homopolymer nature and the stringent purity controls maintained during the SYGEF Plus high purity chain.

Compliance with SEMI Standards

SYGEF Plus products comply with stringent industry standards, such as SEMI F57, to ensure the high purity requirements essential for the semiconductor fabrication are met.

Smooth surfaces

PVDF-HP products for high purity piping systems must be manufactured using specially developed and tested tooling and process parameters. These measures reduce inner surface roughness, which prevents particle buildup and biological growth, and ensure the smooth flow of transported liquids.

High temperature resistance

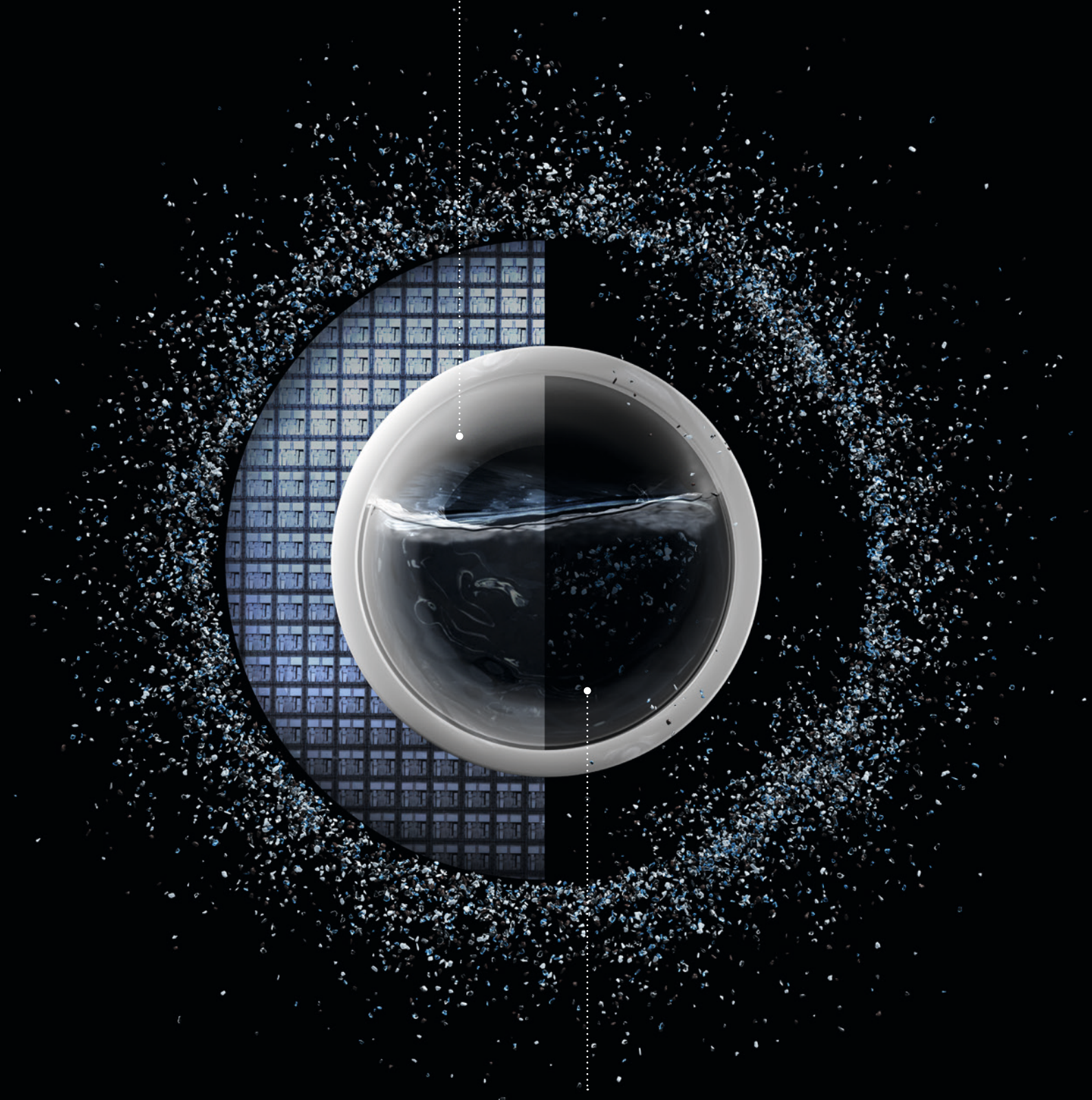
PVDF-HP can withstand high temperatures while maintaining its excellent mechanical, chemical, and purity properties. This is crucial for processes involving both ambient and high temperatures, such as handling hot ultrapure water (HUPW) up to 85°C.

Chemical resistance

PVDF is highly resistant to a wide range of chemicals including oxidizing and non-oxidizing acids also in combination with high temperatures. This makes it ideal for handling etching or sanitization medias, which are commonly used in semiconductor processes.

Overall, high purity PVDF piping systems are essential for the semiconductor production process. For applications like the distribution of UPW, SYGEF Plus is the ideal choice to reach and ensure the required water purity levels at ambient or hot temperatures. The SYGEF Plus piping system ensures the production of high-quality semiconductors by significantly reducing defects and therefore improving yield rates.

SYGEF Plus assures the lowest level of extractable contaminations to the media and therefore the wafers and microchips.



Without a focus on high-purity chain manufacturing, the risk of contamination due to higher leach-out is significantly increased.

SYGEF PVDF

Welded system for highly demanding applications

With a customer-centric focus on application-specific needs, the entire SYGEF system portfolio has been continuously developed to meet the latest performance requirements. The comprehensive PVDF/PVDF-HP portfolio includes a wide range of components, such as pipes, fittings, valves, sensors, and sealing materials. Additionally, it features related jointing technologies, double-contained solutions, advanced automation, and engineering with prefabrication services.

For critical media applications, GF offers a double containment solution with CONTAIN-IT Plus.

Extensive testing is conducted on all raw material grades and components to verify their chemical and temperature resistance, as well as their mechanical and purity properties.

Tailored measurement and control solutions complement the SYGEF portfolio.

GF's portfolio includes a wide range of ball valves, diaphragm valves, and various other valves and sensors.

All qualified raw material grades by GF undergo stringent testing to ensure highest performance for each specific use case.

Developed to perfection, GF jointing solutions enhance the dependable performance and extended lifespan of SYGEF systems.

A specially designed high purity o-ring positioning ensures dead space free union connections.

All SYGEF products are single-, or in case of SYGEF Plus even double-bagged, to ensure highest product quality.

Beyond performance

	SYGEF Standard	SYGEF Plus
Material	PVDF	virgin High Purity PVDF (PVDF-HP)
Color	opaque	opaque
Density	~1.78 g / cm³ (EN ISO 1183)	~1.78 g / cm³ (EN ISO 1183)
Thermal expansion coefficient	0.12–0.18 mm / m K (DIN 53752)	0.12–0.18 mm / m K (DIN 53752)
Thermal conductivity at 23 °C	0.19 W / m K (EN 12664)	0.19 W / m K (EN 12664)
Yield stress at 23 °C	≥ 48 N / mm² (EN ISO 527)	≥ 48 N / mm² (EN ISO 527)
Tensile e-modulus at 23 °C	≥ 1 800 N / mm² (EN ISO 527/ASTM D790)	≥ 1 800 N / mm² (ISO 527/ASTM D790)
Charpy notched impact strength at 23 °C	≥ 8 kJ / m² (EN ISO 179)	≥ 8 kJ / m² (EN ISO 179)
Dimensions	d16–d315 in accordance to ISO 10931	d20–d400 in accordance to ISO 10931
Temperature rating	from -20 °C to 140 °C (-4 °F to 284 °F)	
Production	- Pipes: extruded - Fittings: injection moulded / machined - Valves: injection moulded (additional oil free treated and paint compatible / silicon free)	- Pipes: extruded - Fittings / Valves: injection moulded / machined - Produced under clean room class 5 (100) conditions. Subsequent assembling, quality inspection and cleaning by using 18MΩ pure water under clean room conditions class 5 (100).
Surface finish **Compliant to SEMI F57**	Inner surface Ra < 0.5 µm (20µin) for injection moulded and extruded components	Inner surface (PN10/ SDR33): d ≤ 225 Ra ≤ 0.2 µm (8µin) d = 250 Ra ≤ 0.3 µm (12µin) d280–315 Ra ≤ 0.4 µm (16µin) d355–400 Ra ≤ 0.65 µm (26µin) for injection moulded and extruded components
Internal stress	Pipes: ≤ 2.5 N / mm²; stress relieved by thermal annealing during manufacturing	
Material and product approvals	DIBt FM-4910 listed cleanroom material FDA CFR 21 177.2510; EU 10/2011 USP 25 class VI (physiological non-toxic) ASME BPE	SEMI F57 FM-4910 listed cleanroom material DIBt FDA CFR 21 177.2510; EU 10/2011 USP 25 class VI (physiological non-toxic) ASME BPE
Packing	Pipes capped and multiple components single bagged in a specified bag	Pipes capped and each component double bagged in a specific inner and outer bag under clean room class 5 (100) conditions
Marking and labeling	All components are embossed with a permanent identification during the production process to ensure full traceability: - Brand name - Material - Dimensions - Pressure rating - Lot No. - Product description - Article number - Standard and approvals	

Standards:

Approvals / Acceptance:

ISPE I ASME BPE I FM-4910

More than a system

With a constant focus on maximum reliability and safety the SYGEF system assures a sustained high level of product quality and outstanding performance for high-end applications.

SYGEF system range

Products	SDR	PN	d	16	20	25	32	40	50	63	75	90	110	125	140	160	200	225	250	280	315	355	400
			DN	10	15	20	25	32	40	50	65	80	100	100	125	150	200	200	250	250	300	350	400
Pipes	21	16																					
	33	10																					
Socket fusion fittings		16																					
Butt fusion fittings (IR and BCF compatible)	21	16																					
	33	10																					
Ball valves		16																					
		10																					
Diaphragm valves		16			upon request																		
		10																					
Butterfly valves		10																					
Check valves		16																					
		10																					
Pressure regulating valves		10																					
Ventilating- and bleed valves		16																					
Automation																							
Flanges																							
Flange seal																							
Pipe clips																							
IR fusion machine																							
BCF fusion machine												**											
												**											
												**											
Butt fusion machine*																							
Socket fusion machine																							

SYGEF Standard SYGEF Select SYGEF Plus

* Technically possible but not recommended for SYGEF PVDF

** Technically possible, special training required

Exceeding your standards of quality

Polyvinylidene fluoride (PVDF) – a high quality material

Chemical resistance at 20 °C (Applications can be very dependent on the concentration)		Partially crystalline thermoplastics			Amorphous thermoplastics		Stainless steel	
Media	**Chemicals**	**PVDF**	**PE**	**PP**	**PVC-U**	**PVC-C**	**1.4401 316**	**1.4301 304**
Oxidizing acids (HNO_3, H_2CrO_4, H_2SO_4 , etc.)	$HNO_3 \leq 25\,\%$	+	o	o	+	+	o	o
	$25\,\% \leq HNO_3 \leq 65\,\%$	+	o	-	o	+	o	o
	H_2CrO_4 aqueous solution	+	o	o	o	o	o	o
	$H_2SO_4 \leq 70\%$	+	+	+	+	+	-	-
	$70\,\% \leq H_2SO_4 \leq 96\,\%$	+	-	-	+	+	-	-
Non oxidizing acids (HCl, HF, etc.)	$HCl \leq 30\,\%$	+	+	+	+	+	o	-
	$HF \leq 40\,\%$	+	+	+	+	-	o	-
	$40\,\% \leq HF \leq 75\,\%$	+	+	+	-	-	-	-
Organic (formic acid, acetic acid, citric acid, etc.)	$HCOOH \leq 25\,\%$	+	+	+	+	+	o	-
	$25\,\% \leq HCOOH \leq$ tech. pure	+	+	+	+	-	o	-
	$CH_3COOH \leq 50\,\%$	+	+	+	+	+	o	-
	$50\,\% \leq CH_3COOH \leq$ tech. pure	+	+	+	o	-	o	-
	$C_3H_4OH\,(COOH)_3$	+	+	+	+	+	o	-
Bases	Inorganic (NaOH, KOH, etc.)	-	+	+	+	o	+	+
	Organic (amine, imidazole, etc.)	-	+	+	o	-	o	o
Salts	NaCl, $FeCl_2$, $FeCl_3$, $CaCl_2$, etc.	+	+	+	+	+	o	o
Halogens	Chlorine, bromine, iodine, (no fluorine)	o	-	-	o	o	o	-
Fuels / oils	Aliphatic hydrocarbons	+	o	o	+	o	+	+
	Aromatic hydrocarbons	+	-	-	-	-	+	+
Solvents	Chlorinated hydrocarbons	o	-	-	-	-	o	o
	Ketones	o	+	+	-	-	+	+
	Alcohols	+	+	+	o	-	+	+
	Esters	o	o	o	-	-	+	+
	Aldehydes	-	+	+	-	-	+	+
Phenols	Phenol, Cresol, etc.	+	+	+	-	-	+	-

+ resistant o conditionally resistant, please consult us - not resistant

Please note: The above list is only intended as a guideline and does not replace an indepth review of material suitability for the particular application. The information is based on our experience and is state of the art. These data are general indicators only. In practice, however, other factors such as concentration, pressure and jointing technology must also be taken into consideration. The technical data are not binding and are not expressly warranted characteristics of the goods.

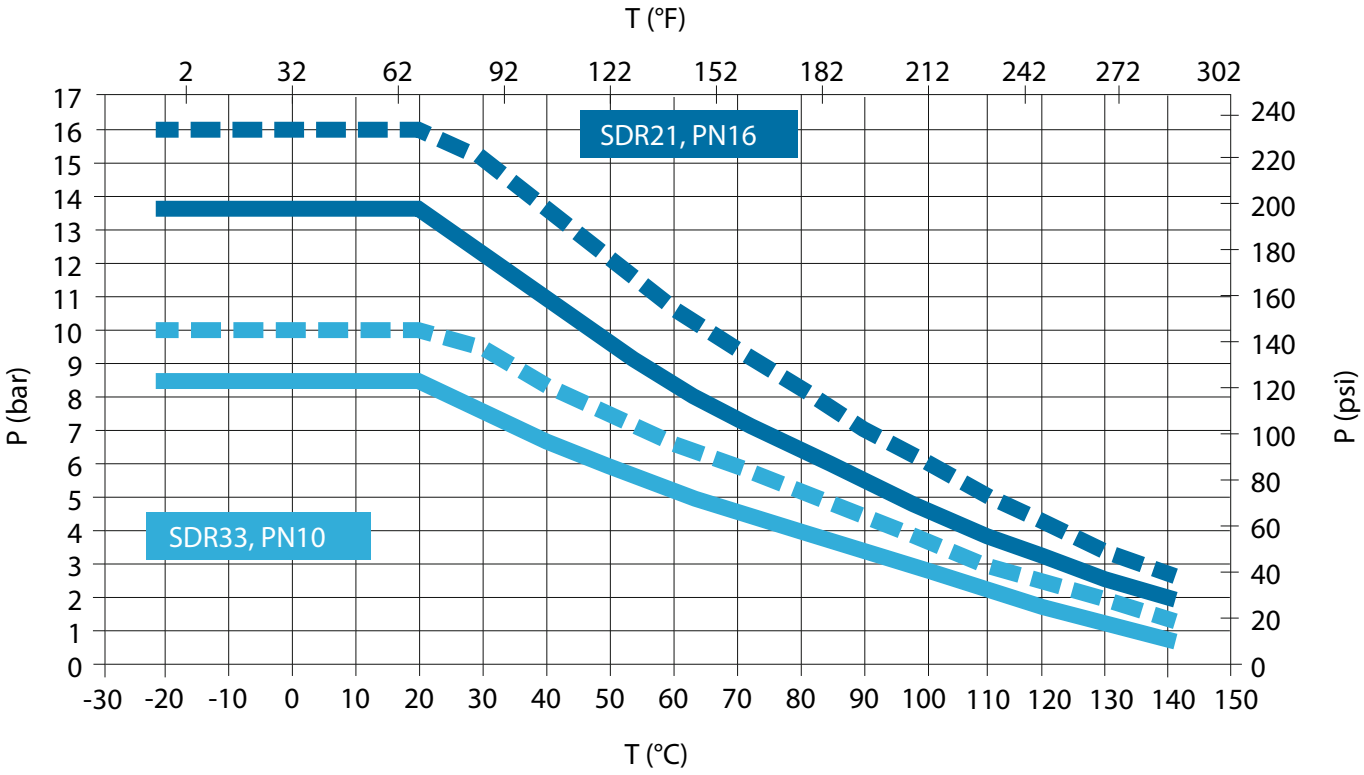
Please contact us for help in selecting the right materials.

Technical specifications with focus on pressure, temperature and high purity attributes.

Excellent pressure/temperature performance

SYGEF PVDF is a thermoplastic fluoropolymer with a melting point above 175 °C and a wide service temperature range from -20 °C to 140 °C. SYGEF systems are ideal for use in aggressive chemical or ultrapure water systems since they are generally considered inert, have high strength and stiffness, and are readily weldable into system components.

Pressure-temperature diagram



P **Permissible pressure in bar, psi**

T **Temperature in ˚C (Celsius), ˚F (Fahrenheit)**

- - - - C = 1.6
——— C = 2.0 (recommended by GF)

The pressure/ temperature curve based on medium water, operating temperature of 20°C, valid life time of 25 years and the design factor of C = 2.0 or C = 1.6 respectively

More information regarding technical specifications can be found online in our planning fundamentals: www.gfps.com

SYGEF Standard

Beyond trust

SYGEF Standard
When extreme temperatures and harsh chemicals meet, transporting liquids becomes a formidable challenge for system operators. Ensuring operational safety and preventing system failures are critical aspects of our durable PVDF system, SYGEF Standard. The inherent strength of the material, combined with tailor-made jointing solutions and specialized services, fosters reliability and ensures a long-lasting lifespan for your demanding industrial applications.

SYGEF Plus

Beyond possibilities

SYGEF Plus
In applications where even the smallest contaminants can jeopardize operational efficiency, having an exceptionally high purity piping system is crucial. The PVDF-HP system, combines the wide range of outstanding properties of SYGEF Standards with top-notch purity characteristics. This is achieved through meticulous manufacturing processes conducted in a clean-room environment, ensuring the highest levels of cleanliness and performance. This opens up a new realm of possibilities for advanced industries, such as semiconductor manufacturing, pharma or life sciences.

Improving operational safety with SYGEF Standard

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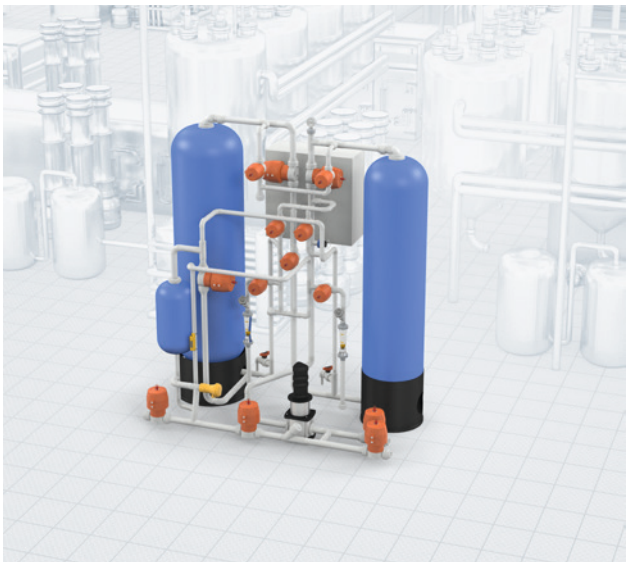
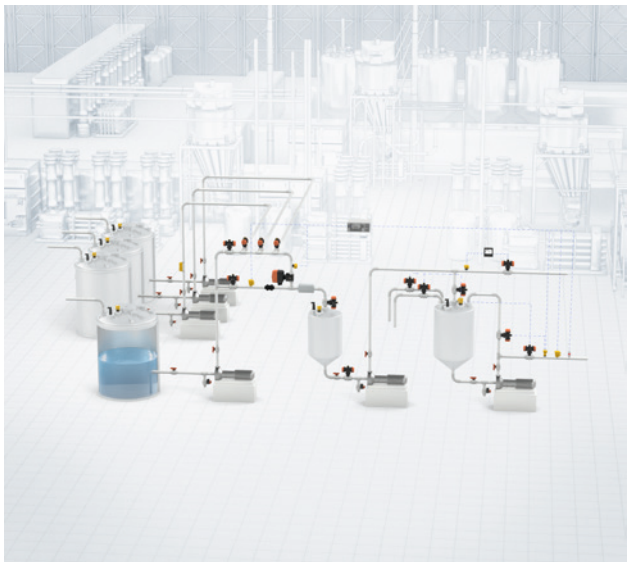


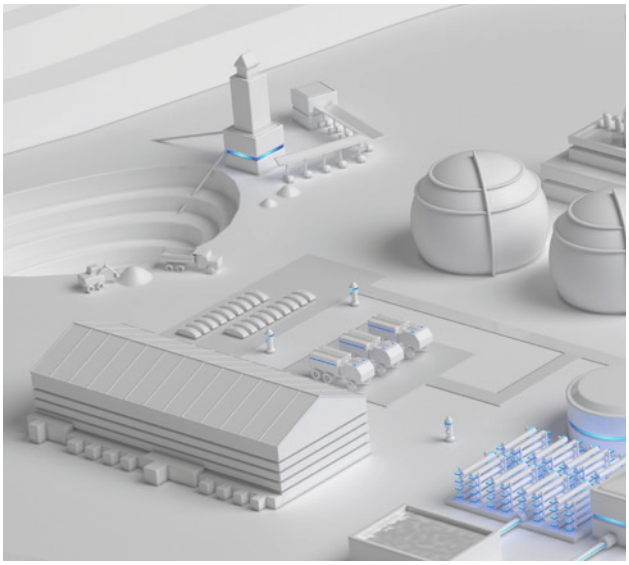
Water treatment

Maintaining high water quality is essential for production processes, feed boilers, and cooling systems in the modern water treatment industry. SYGEF Standard prevents contamination, scale formation, and corrosion, ensuring the safety of water treatment applications like deionization, electrodialysis, and innovative membrane-based solutions.



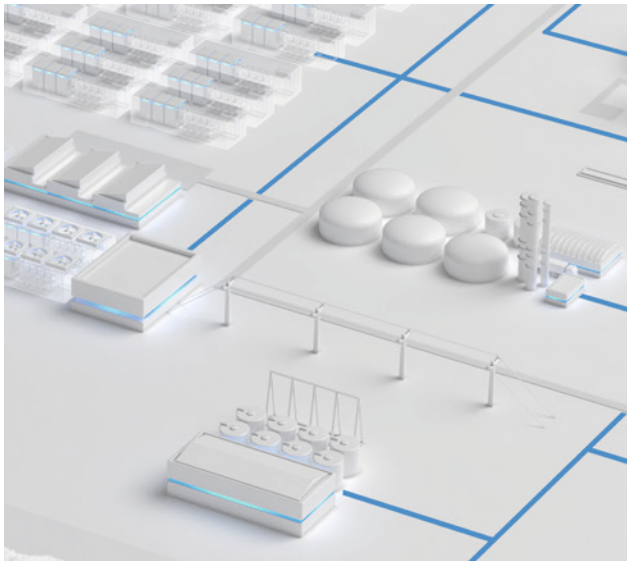
Chemical process industry

Piping systems in the chemical process industry face harsh conditions. They must transport and process aggressive substances, in combination with high temperatures and ensure the mechanical strength to handle the process pressure. The SYGEF Standard piping system is designed to meet these challenges, offering exceptional reliability, safety, and efficiency. Additionally, it provides maximum corrosion protection, ensuring the integrity and longevity of the system.



Mining

The harsh conditions of mining sites pose significant challenges for piping systems. SYGEF Standard with its UV and weather resistance is the ideal solution for the transportation of (hot) brine or other fluids inside or outside of the refinery plant at high temperatures. The translucency of the products does further help to locate potential blockages inside the piping system caused by, for example, crystallization of the brine. Our PVDF range is the perfect solution for a lot of the refinery process steps due to its excellent temperature and chemical resistance.



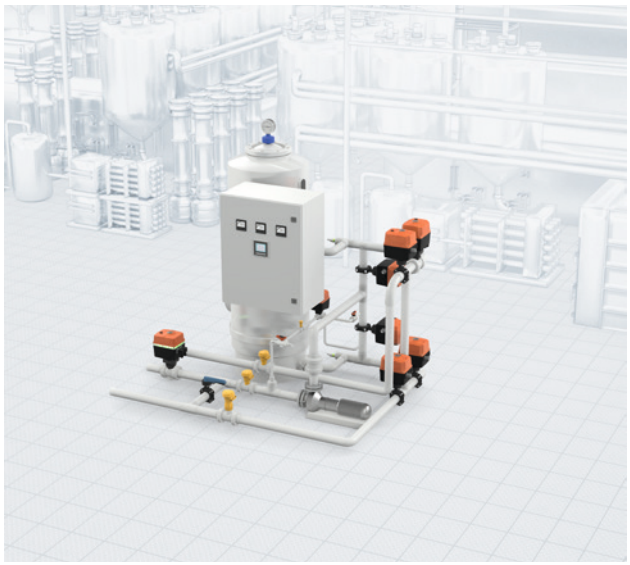
Energy

PVDF Piping systems within energy applications are commonly used for liquid cooling to effectively managing and absorbing heat. Due to being installed in areas where high voltages occur, materials with very low electrical conductivity are required. Furthermore corrosion resistance and a high flame retardancy is essential, particularly for offshore installations. SYGEF Standard meets all these requirements, offering long-term reliability.

Ensuring highest water purity with SYGEF Plus

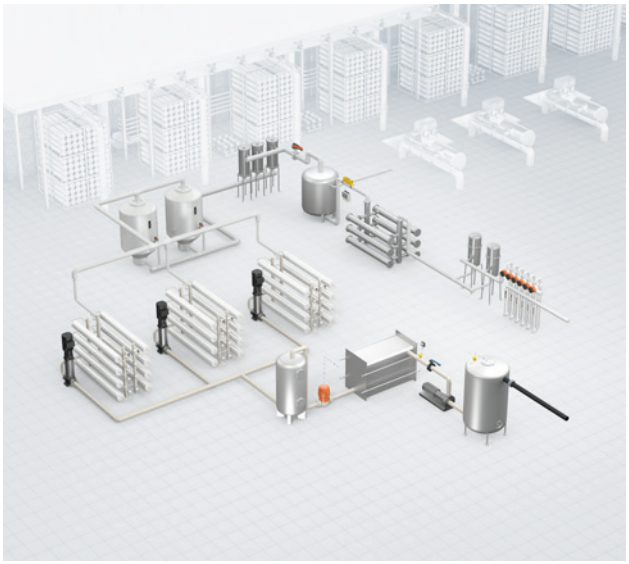
Polishing

The SYGEF Plus piping system is ideal for a polishing process due to its exceptional chemical resistance, which prevents contamination from reactive chemicals used for chemical purification processes. Its thermal stability ensures that it maintains structural integrity and purity even in high-temperature environments. Additionally, PVDF's low extractables and non-reactivity ensure that it does not leach impurities, helping maintain high purity levels required for sensitive polishing processes.



Media filtration

Media filtration plays a crucial role in pre-treating water by removing suspended solids, silt, and debris. In a multi-level filtration process, the use of SYGEF Plus components enhances efficiency, reduces maintenance costs, and improves overall water quality, essential for consistent and reliable freshwater production.



Ultrapure water

Ultrapure and hot ultrapure water are crucial for producing microelectronic products. The SYGEF Plus range offers pipes, fittings, valves, and supporting components that are meticulously designed and manufactured to meet the highest industry standards on purity. This ensures that the water delivered to manufacturing tools meets even the most stringent quality requirements, like SEMI F57.

Deionized water

SYGEF Plus is ideal for both the filtration processes in deionization systems and the transport of high purity water, such as deionized or UPW. Ensuring the consistent quality and purity of the water is essential for achieving reliable and accurate results in industrial and laboratory environments. SYGEF Plus meets the strict requirements needed to handle and transport these critical fluids, ensuring optimal performance and safety.

Fast and easy jointing

As a pioneer in the industry, GF Piping Systems has consistently prioritized the advancement of inventive jointing techniques tailored to precise material demands. Our jointing technologies are founded on principles of application simplicity, unwavering chemical resistance, enduring thermal stability, and steadfast weld strength.

IR-63 M Manually operated infrared fusion

IR fusion machines are characterized by contact-free melting of the components to be fused. This eliminates the possibility of contamination or the pipe faces sticking to the heater. Due to the minimal defined welding bead, there is a good flow in the fusion zone, which increases the free passages of the pipe.

IR-110 A Automated infrared fusion

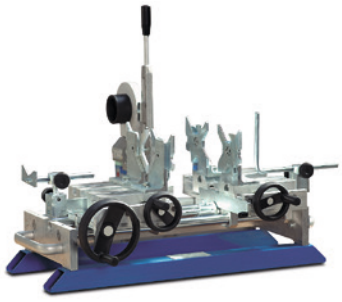
The IR-110 A follows the infrared technology principles of contact-free melting, ensuring a fully automated fusion process that minimizes operator errors by automating facing, heating, and jointing. Enhanced with an integrated video camera, it offers superior quality control, traceability, and the ability to export video files, making it highly efficient and secure for installers.

WBI Tool

The Weld-Bead Inspection (WBI) Tool from GF Piping Systems assesses the quality of infrared-weld beads more reliably than ever. It provides information about the geometry of the outer weld bead at the inspected points. Every element has been designed to be intuitive and efficient. No misinformation or falsification, the WBI Tool automatically documents facts of bead shapes for both traceability and accurate accountability.

Bead and Crevice Free (BCF) fusion

The BCF fusion machine guarantees high reproducibility of fusion weld quality, even for on-site fusion. An external heating unit causes the material to flow into the fusion zone without changing the material property. A bladder positioned in the fusion zone produces a bead and crevice-free fusion weld. The machine covers SYGEF PVDF materials in the dimension range of d20 - d110.



Socket fusion

With a wide range of manual and mechanical variants to choose from, GF Piping Systems socket fusion machines are ideal for the job site thanks to their space-saving dimensions. They are engineered to ensure perfect coordination and high temperature accuracy throughout the fusion process, while the short fusion times prevent distortion of the pipe ends and create a strong, homogenous joint. They are suitable for various pipes and materials.

Training

Project specific trainings provide the opportunity to gain confidence in working with GF's tools and systems. The trainings are available globally and are carried out by local teams of experts.

Our commitment extends further with a comprehensive global jointing training initiative, widespread machine rental availability, and an extensive network of service centers worldwide, empowering our customers with specialized expertise and hands-on proficiency.

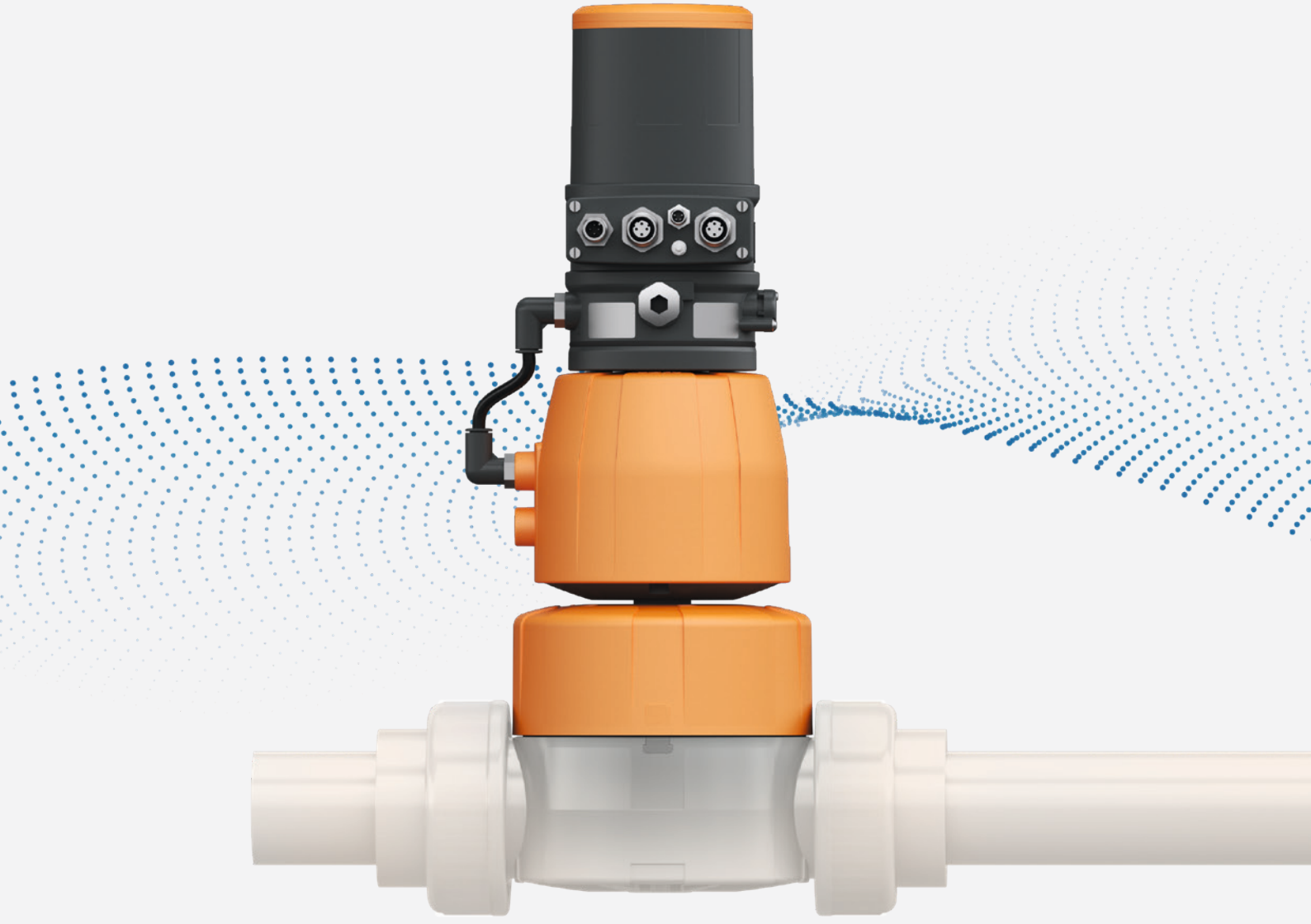
Learn more:
gfps.com/globalacademy

Together as one

We make Process Automation easy

We offer a comprehensive portfolio of full-scale valves and measurement solutions specifically designed for water treatment and chemical processing applications. Combined with our deep expertise in piping systems, we simplify complex operations, making fluid handling processes efficient and reliable.

Watch our customers success stories



Technologies for clean and corrosive environments

At GF Piping Systems, we provide comprehensive solutions tailored to meet your process requirements. Available in a wide range of material options, our sensors and valves are designed to support corrosive to ultrapure applications.

GF Piping Systems valve solutions are recognized as industry-leading. Our extensive valve portfolio includes key types such as ball, butterfly, diaphragm, and process valves. Depending on your process needs, these valves can be manually operated or automated to integrate seamlessly with other system components, such as process sensors.

In addition, our measurement solutions cover a wide range of parameters, including flow, pH/ORP, conductivity, temperature, pressure, and level, as well as dissolved oxygen (DO). We also offer transmitters and controllers to ensure the safe and efficient management of liquid processes.

Delivery value through expertise

GF Piping Systems is globally recognized for its high-quality and innovative solutions, delivering exceptional reliability and performance across diverse industries. We bring expertise in designing and manufacturing solutions for handling water and chemicals tailored to customer needs worldwide. Our global network of experts provides comprehensive support regardless of your or your customers' location.

Easy to combine
Flexible combination and upgrade.

Easy to set-up
Plug-and-play design.

Easy to connect
State-of-the-art communications technology.

Easy to maintain
Wide range of accessories.

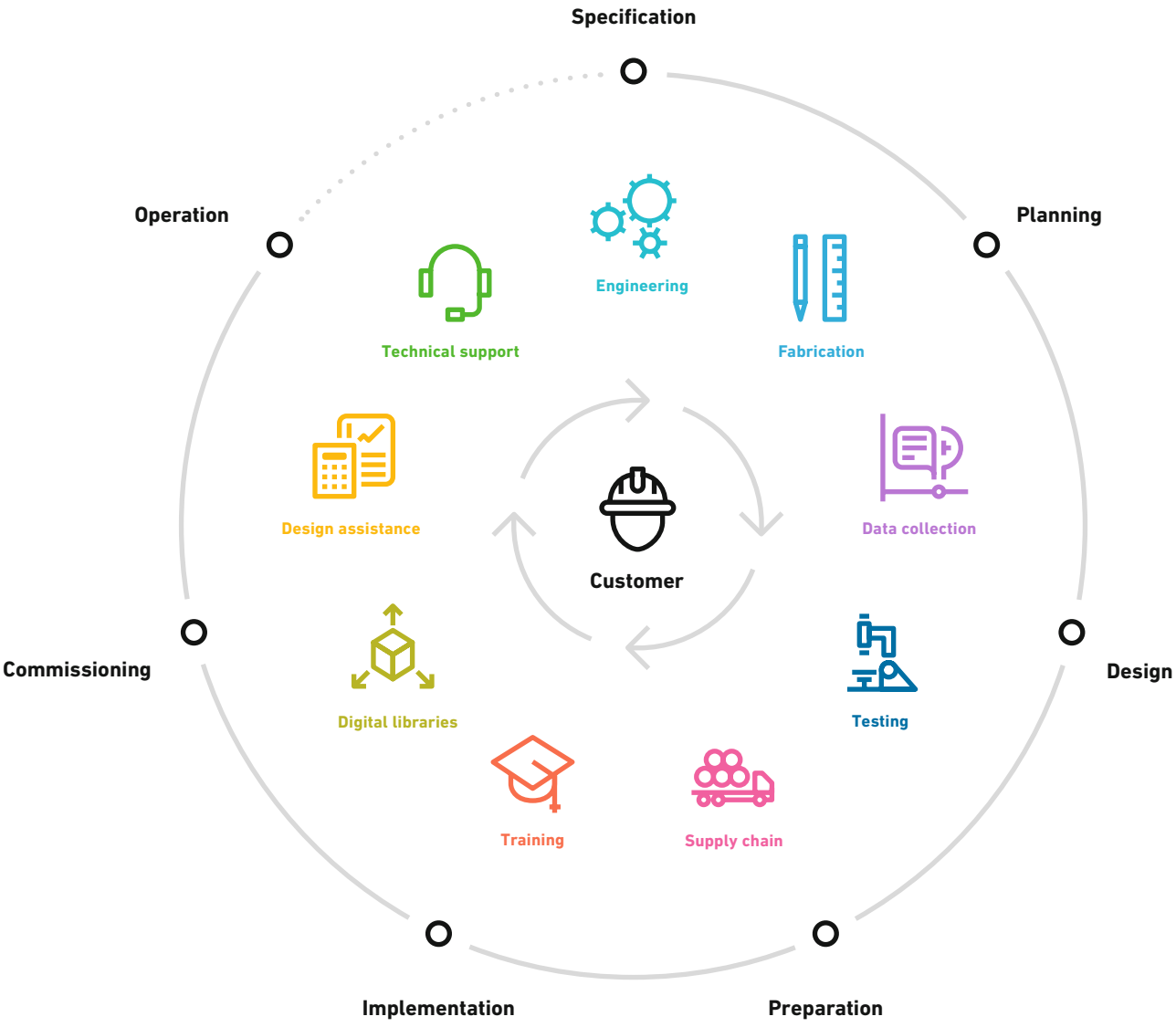
Easy to install
Seamless integration.

Easy to operate
Intuitive menu structure.

Discover our new Valve Automation Centers

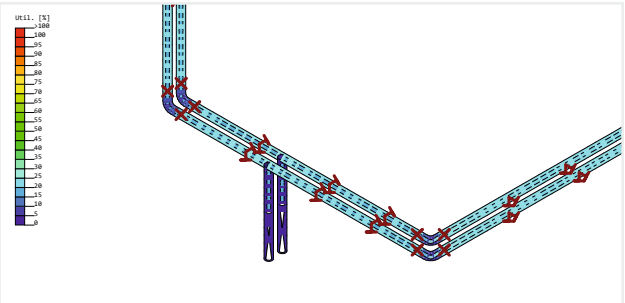
One partner from planning to commissioning

With Specialized Solutions, the global leader GF Piping Systems provides project support every step of the way to achieve construction excellence. Allowing owners and planners to concentrate on their daily business without interruption.



Pipe stress calculations
To evaluate a piping installation regarding dead load, thermal expansion and additional loads the following evaluations and calculations are offered by GFs Advanced Engineering:

- Flexibility of the pipe system geometry
- Stresses in pipes and fittings
- Pipe displacement
- Pipe deformations
- Loads on components
- Loads on supports



Custom Product Design and Prefabricated components
Having your individual needs and application in focus, our customizing teams forge the solution that fits you best, developing custom-made parts to complete systems or special solutions produced in small series, individual consulting and off-site prefabrication.

Digital Libraries
The libraries cover three key areas for the design, creation, and maintenance of a project: Building Information Modeling, the Plant Design Software, and the CAD Library, helping you reduce costs and construction times.

Global Academy
Our training and certifications provide installers with the essential knowledge for the welding of pipes and piping components, as well as an in-depth understanding of our extended portfolio of Jointing Solutions. With Specialized Education from GF Piping Systems, we help prevent damage before it occurs, with well-trained and qualified installers.

More information at
gfps.com/specialized-solutions

Next steps

In this brochure, you have received the most important information and technical details. But nothing replaces a personal conversation with an expert from GF Piping Systems. It is all about your needs and how we can support you in your daily business challenges. If you have not already done so, make an appointment today.

Find your local contact on the back cover of this brochure or visit our GF Piping Systems website, where you will find specialized contact persons in your area. You will also find additional information on our products, including technical datasheets, operating instructions, and relevant certificates and approvals.

More information at
gfps.com/sygef

GF Piping Systems

Local support around the world

Visit our webpage to get in touch with your local specialist:
www.gfps.com/our-locations

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