



COMPOSITE SOLUTIONS FOR INDUSTRIES

pipng, vessels, apparatus, lining

design, production, assembly





We are Plasticon

your partner in GRP solutions

50+ years of expertise

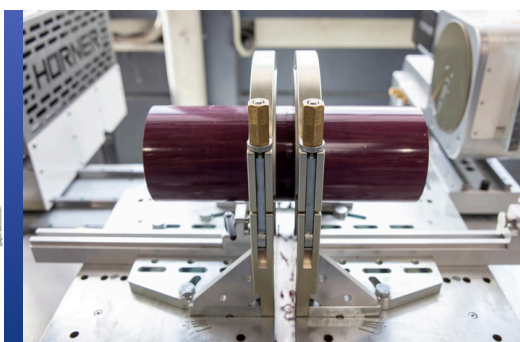
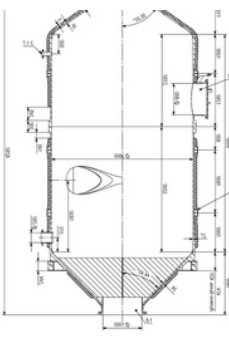
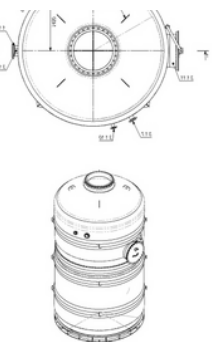
We are specialized in the manufacture of GRP and dual-laminate equipment for diverse industry sectors. With more than 50 years of experience, we have been recognized as an expert in the field of composite solutions.

we transform industries

Our products are the cornerstone of industrial and technological advancements, serving industries with corrosion resistant alternatives that outperform traditional materials like steel.

precision engineering

From precision-engineered **vessels** and **apparatus** to advanced **pipng** and **lining** systems, we redefine industry standards with our commitment to quality and forward-thinking design.



global presence

Plasticon's production facilities are strategically located in Western and Central Europe. Our flexible manufacturing process allows us to adapt products in compliance with worldwide norms and standards, while our international team of engineers, technicians, and on-site experts consistently deliver value and innovation wherever our customers operate.

expert guidance from concept to lifetime

We are with our customers every step of the way, offering technical expertise from concept to installation and throughout the entire lifetime of our products.



multilingual support



customer base across all continents



international team of engineers, on-site experts and technicians



high quality and consistency for every production site



production facilities in Western and Central Europe



flexible manufacturing to comply with different norms and standards



client-oriented value chain



technical expertise

- Conceptual design of the product
- Collaboration with the client
- Engineering support and consulting (static calculations, stress analysis, drawings, 3D models, materials testing)
- Design optimization



production

- GRP and dual-laminate vessels and piping
- Fluorinated linings
- Piping spools
- Flexible manufacturing process (products size from 25 to 20000 mm)
- Ultra clean procedures for advanced materials welding



quality assurance

- Rigorous quality control measures
- Lab testing service (analysis of laminate samples, collaboration with notified bodies, complete documentation)
- International standard certifications and approvals



installation

- Convenient installation: project engineering, technical expertise and on-site management
- Collaboration with external contractors
- Start to finish support and ongoing assistance



after sales

- Daily service
- Quick repairs
- Refurbishments
- Inspections
- Shutdowns



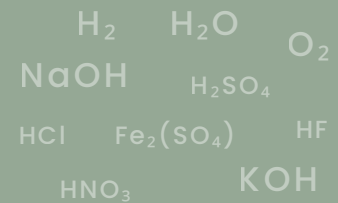
highest industry standards

At Plasticon, we pride ourselves on adhering to the **highest industry norms and standards** to ensure quality and reliability. Our products are meticulously crafted using a **diverse range of resins, thermoplastic materials and high performance fluoropolymers**. Each and every item is **tailored to suit the unique demands of the process** with careful consideration of factors such as medium, pressure, temperature, and environmental conditions.



MEDIUM

- **agresive/corrosive** chemicals
- **ultra pure** liquids
- **exhaust** gases
- **abrasive** materials



PRESSURE

Max standard design pressure:

- **PN 16 for piping**
- **10 barg for vessels**

However, we can design and fabricate vessels and piping systems with varying pressure ratings to accommodate the specific pressure levels of your process.



TEMPERATURE

Depending on the lining material and technology used, our products are suitable for temperature **up to 260°C**.



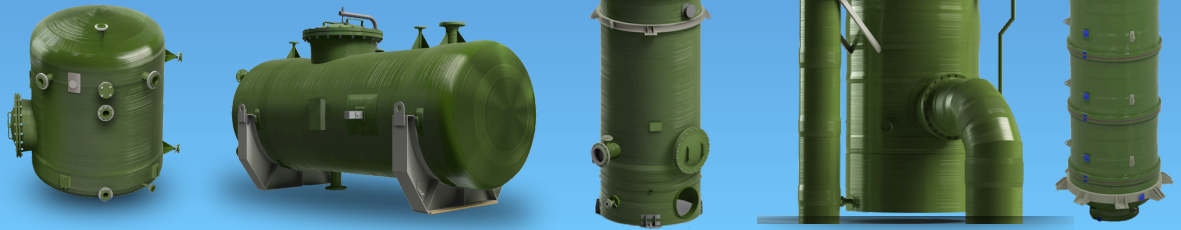
ENVIRONMENT

- **Insulation** to protect the medium from extreme heat or cold.
- **UV protection** to prevent degradation from exposure to sunlight.
- **Climate control** heating or cooling systems for optimal temperature conditions.
- **Load factors consideration** (wind velocity, value of snow load and seismic acceleration).



VESSELS AND APPARATUS

- ✓ EN 13121 (European Norm)
- ✓ Special design from the client



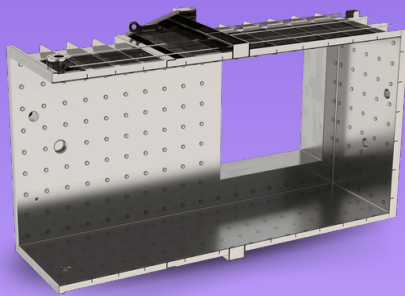
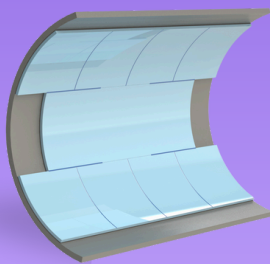
PIPING

- ✓ DIN 16965/66 (German Norm)
- ✓ Special design from the client

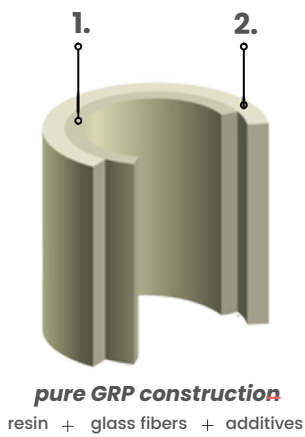


LINING

- ✓ Loose lining
- ✓ Sheet lining
- ✓ Fix-point lining



composite expertise



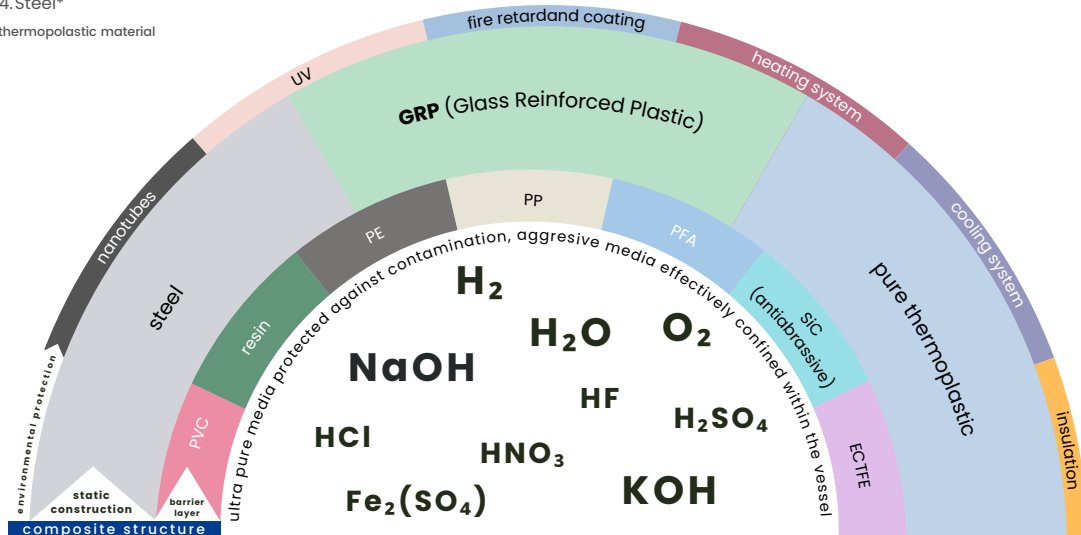
RESINS
polyester
vinylester
phenol
amino
epoxy

POLYOLEFINS	VINYL POLYMERS	SEMI-FLUORINATED
PE	PVC	PVDF
PP	C-PVC	ECTFE

FULLY FLUORINATED
FEP
MFA (PFA-M)
PTFE
PFA

- 1. CBL (chemical barrier layer) GRP
- 2. Reinforcement layer GRP
- 3. CBL thermoplastic
- 4. Steel*

* or thermoplastic material







We adapt **our GRP products** to the needs of industry sectors making them the cornerstone of modern industrial and technological advancements. Our products are not just materials. They are solutions, **empowering multiple sectors** to meet their unique challenges with confidence and sustainability.

In the **chemical industry**, our process vessels, apparatus and piping stand as a testament to durability and corrosion resistance, ensuring the safe containment and transport of various range of substances including strong acids and ultra pure liquids. For the **petrochemical industry**, our composite solutions are trusted for their resilience in the face of **harsh operating conditions**.

For the **energy sector**, Plasticon's products prove instrumental in safeguarding critical infrastructure. They also play a crucial role in minimizing an environmental impact providing effective solutions for **industrial exhaust systems**.

As the world seeks cleaner and more sustainable energy, our GRP solutions offer a durable and reliable options for **green hydrogen production** delivering various components for the PEM and alkaline **electrolysis** process.

The **semiconductor industry** benefits from our dual-laminate technology for **ultra-pure water storage** and fully fluorinated high performance vessels for acids, as well as from non-flammable ducting systems for microchips factories.



In **water treatment**, our products become indispensable tools for maintaining water quality. Smooth and non-porous surface of materials we use, make the vessels **easy to clean** and maintain hygienic conditions. This feature is also crucial in applications involving **ultra pure liquids**. In **sewage disposal** systems they are used to construct durable and corrosion-resistant pipes and tanks, ensuring the safe and efficient transport and treatment of wastewater.

In the field of **metal purification**, our products exemplify their adaptability, offering exceptional reliability in handling **aggressive media** used in the process.

Within the **offshore** sector, our products serve as crucial assets, providing durable equipment for **wind farms substations** and FPSO vessels.

our solutions



storage solutions

- tanks and containers for various liquid and solid substances
- aggressive substances storage
- water storage
- oil and gas storage
- high-purity chemical handling

chemical processing

- piping systems
- versatile range of apparatus, columns, mixers, reactors and many more
- acid handling equipment
- heat exchange housings

exhaust treatment

- fume scrubbers for industrial exhaust streams
- CC(U)S installations
- air pollution control products: filters, wet ESPs
- industrial ventilation systems
- special fire resistant ducting systems for semiconductor factories
- odor treatment

We have delivered vessels, apparatus, piping and special equipment to hundreds of chemical plants producing:

- polymers and plastics
- pulp and paper
- fertilizers
- salts and acids
- chlorine, bromine, hydrogen and many more

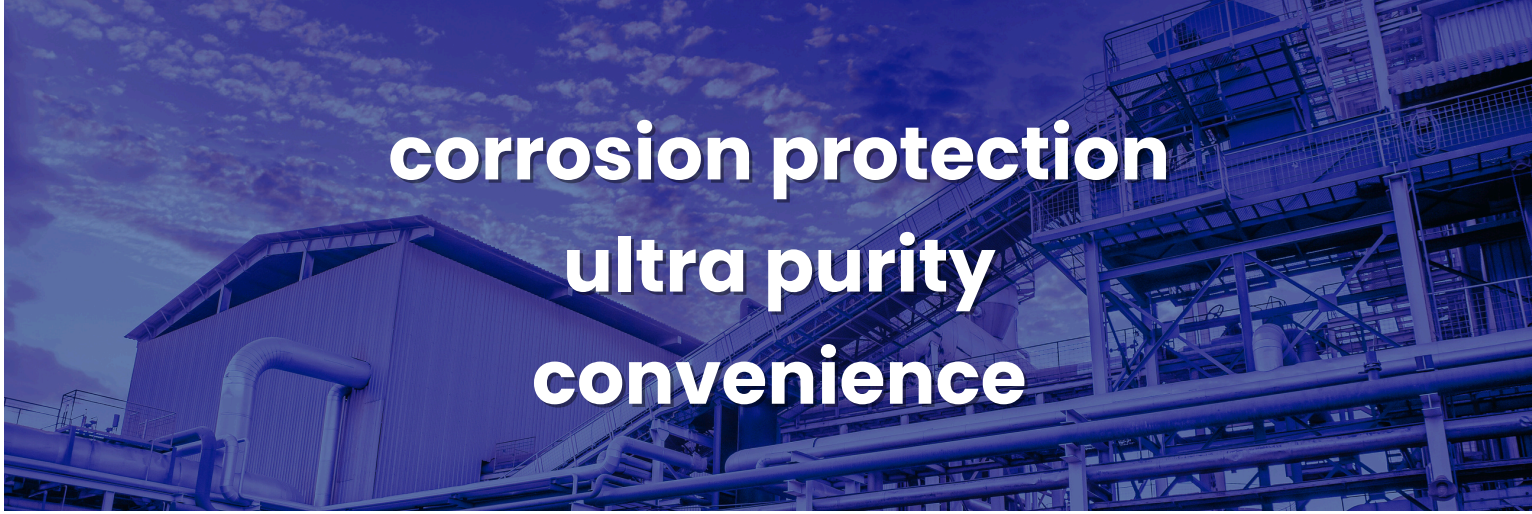
Our industrial expertise in composite products covers:

- chemical and petrochemical industry
- energy sector: power plants, incineration facilities, geothermal plants
- semiconductor fabrication plants
- industrial and municipal water and wastewater treatment facilities
- metals production facilities
- offshore substations for wind farms

Our products are exceptionally durable, making them ideal for demanding applications such as storage and chemical processing. They are specifically designed to handle:

- **highly corrosive substances**
- **ultra-pure liquids**
- **abrasive substances**





corrosion protection ultra purity convenience



ultra purity non-leaching attributes prevent contamination of the medium



chemical and corrosion resistance ensures that products retain sustainable value over time



quick installation reduces on-site disruption and labor costs



durability resulting in low maintenance costs



light weight ensures convenient transport and installation





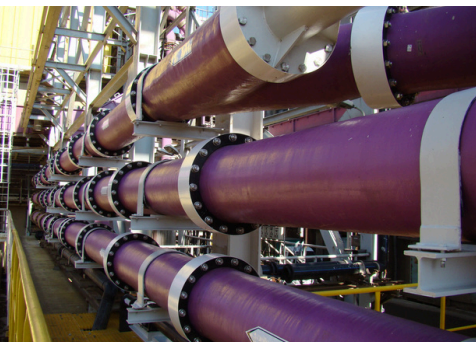
For over 50 years tanks and apparatus have been a cornerstone of our business. We have built a reputation for excellence in the design and manufacture of these critical components which are used in a wide range of industrial applications from ultra-purity storage to sewage handling.



Product range:

- storage vessels
- process vessels
- pressure tanks
- scrubbers
- reactors
- GRP covers
- separators
- filters
- gas columns
- absorbers
- demountable transportation tanks
- mixing tanks
- sump tanks
- tailor made constructions

	Size range	0,5m-20m
MATERIALS	Resins	polyester, vinylester, phenol, amino, epoxy
	Glass	cloths, mats, chopped, roving
	Thermoplastic CBL	PE, PVC, C-PVC, PP, PVDF, E-CTFE, FEP, PFA-M, M-PTFE, PFA
	Standard design according to EN 13121	
DESIGN	Shells	round, conical, elliptical, rectangular, non standard, each shell available with skirt
	Bottoms	dished, hemispherical, conical, flat
	Nozzles	standard nozzles according to DIN 16966
	Design pressure	10 barg
ADDITIONAL EQUIPMENT	Steel elements	ladders, railings, walkways, steal supporting elements, anti-slip grids, manhole hatches
	Electronic systems	anti-leakage systems, cooling systems, heating systems, load cells, level gauges
	Other	reinforcing rings, dust filters, internal mixers, demisters, non standard laminated and thermoplastic elements
	Customization	conductivity, UV protection, fire-retardancy, increased abrasion resistance, thermal insulation



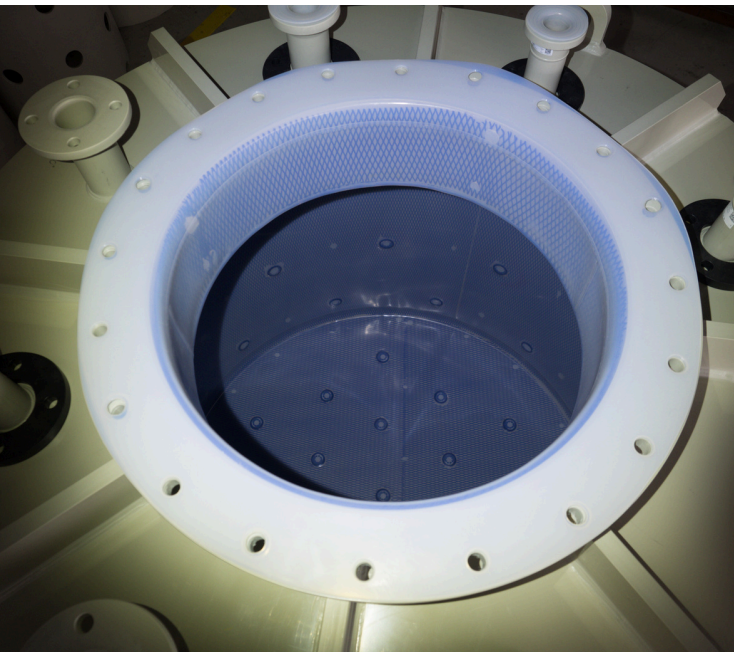
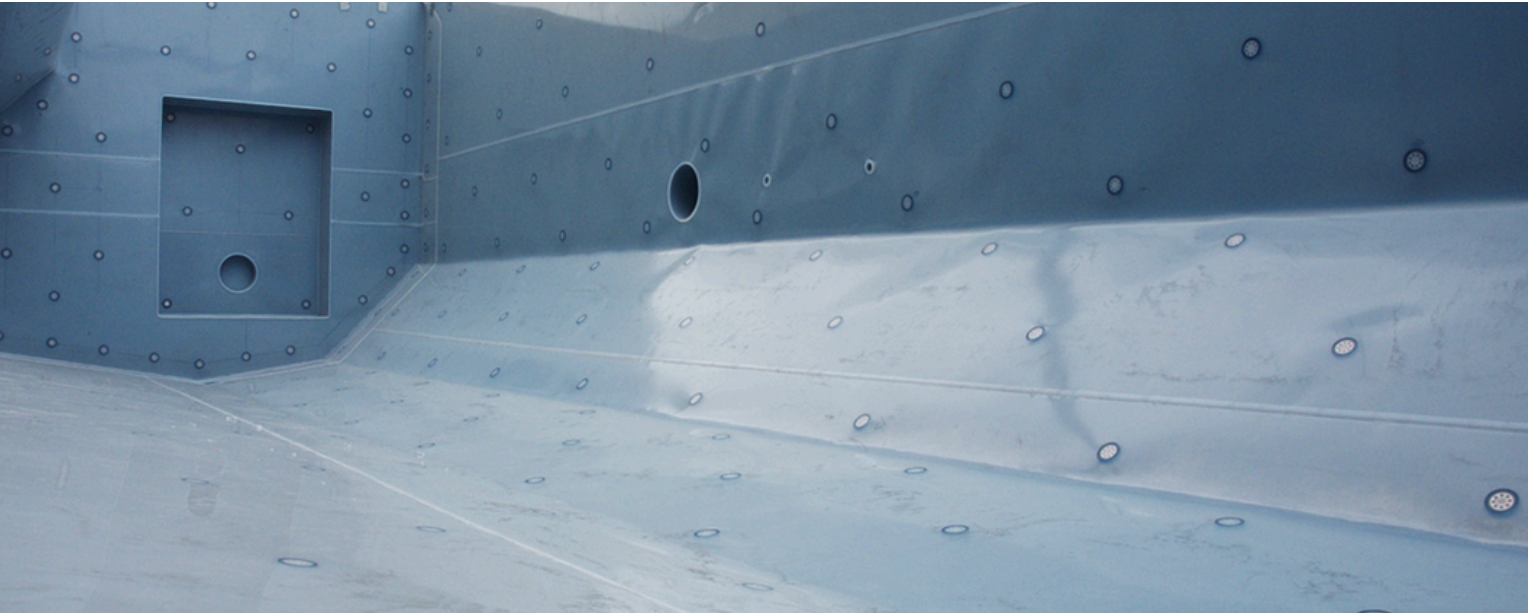
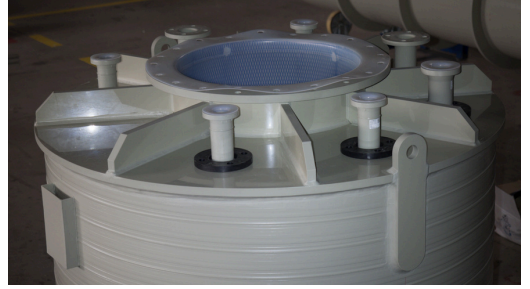
Plasticon piping systems can be perfectly used in various environments because of their excellent mechanical properties. We offer pre-assembly adjustments and professional installation services to ensure that our products fit seamlessly into your existing system.



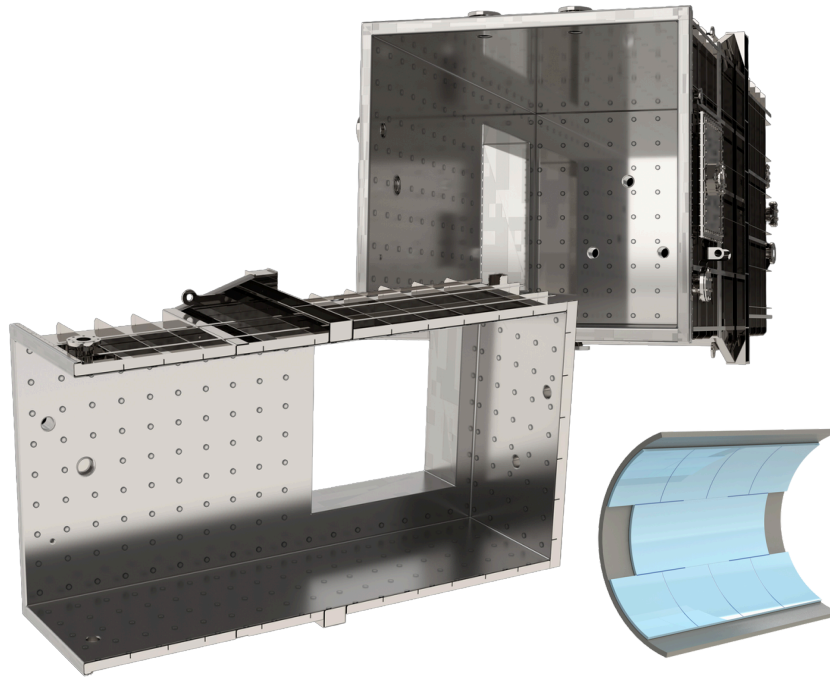
Product range:

- process piping
- fittings
- pipelines
- ventilation systems
- industrial exhaust systems
- spools
- skids
- special fire-safe ducting for semiconductor factories

	Size range	25mm-20m
MATERIALS	Resins	polyester, vinylester, phenol, amino, epoxy
	Glass	cloths, mats, chopped, roving
	Thermoplastic CBL	PE, PVC, C-PVC, PP, PVDF, E-CTFE, FEP, PFA-M, M-PTFE, PFA
	Standard design according to DIN 16965/66	
DESIGN	Design pressure	16 bar (higher pressures available on request)
	External design pressure	1 bar / full vacuum
	Design temperature	maximum 130°C for liquids and 170°C for gases
ADDITIONAL EQUIPMENT	Steel elements	supports, flanges, skid constructions
	Other	valves, compensators, preisolation
	Customization	conductivity, UV protection, fire-retardancy, increased abrasion resistance



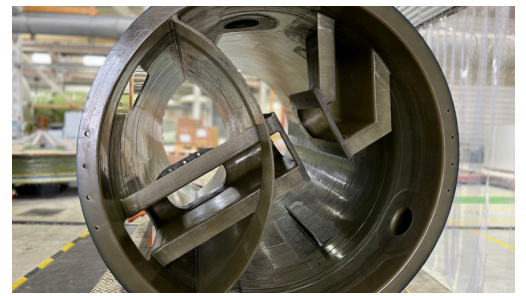
Our linings will give a second life to your equipment. Advanced fluorinated materials are the perfect solution for demanding applications and deliver unmatched performance when exceptional chemical resistance or ultra purity is essential.



Product range:

- lining for steel vessels
- lining for thermoplastic vessels
- heat exchanging housings
- vessels for ultra pure media
- vessels for highly aggressive media
- fittings, connections, ducts/spools
- special customized products

	Size range	no limit
MATERIALS	Fully fluorinated	PFA, FEP, M-PTFE
	Semi fluorinated	PVDF, ECTFE
DESIGN	Loose lining	the sheets of special polymer are appropriately tailored to the inner surface of the laid element. The lining remains loose, which means it is not attached in any way to the surface of the tank or shape. Loose linings are suitable for components with simple shapes, such as cylindrical and conical tanks with flat covers.
	Sheet lining	the lining material is directly bonded to the component's surface. Vacuum technology ensures complete adhesion. Components with bonded linings are the perfect solution when high vacuum conditions are present.
	Fix-point lining	the lining material is attached to the component's surface either through a conventional method (formed polymer sheets are screwed to the component's surface), or by using the patented Plastilite® technology.
	Customization	Our linings can be installed in steel, concrete or thermoplastic vessels or fitting.



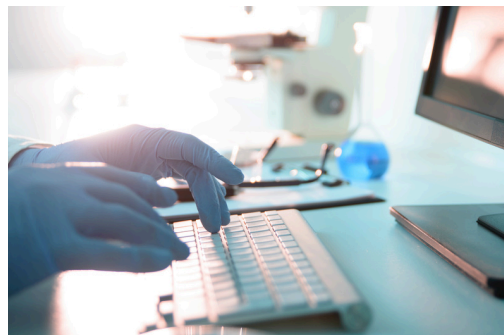
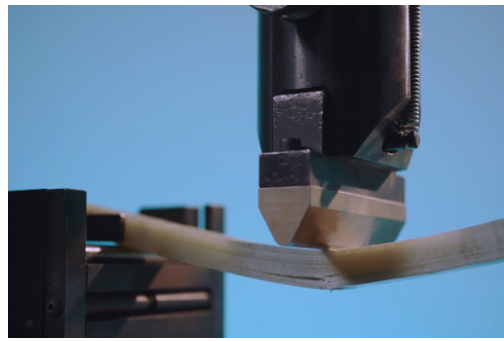
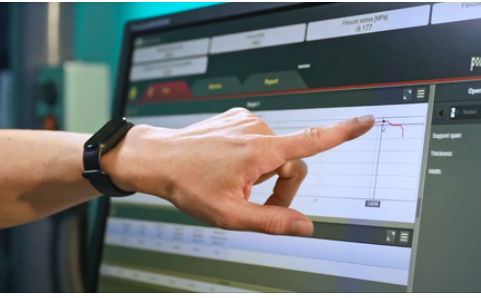
We offer special products uniquely engineered and manufactured to meet specific requirements or solve particular problems. From internal equipment for vessels, special header pipes and tanks to advanced ducting systems and very complex components. **Challenging projects are our specialty.**



Product range:

- header pipes
- internals
- ducting (including FM approved fire-safe ducts)
- chimneys
- housings
- special fittings
- lamella plates
- thermoplastic filter cages
- wet ESP (wet electrostatic precipitators) modules
- GRP and dual-laminate constructions manufactured according to customer's special design

All delivered components are meticulously crafted to meet the exact specifications of our clients, ensuring seamless integration with existing infrastructure.



With a focus on customer satisfaction, we swiftly handle **installation, repairs, inspections** and **on-site daily support**. Our experienced team and stringent quality management ensure best in class service delivery. Completing our service lineup, we offer **commercial lab testing** for composite samples.

The scope of our services includes:



Technical condition inspections

- Non-Destructive Testing/Testing (wall thickness measurements, Barcol hardness test of the resin matrix, conductivity measurement of the surfaces, spark inductor test for leak testing of welding seams, determination of adhesion values at interfaces)
- preparation of repair, modernization technologies and technical condition assessments along with agreements with recognized notified bodies



Pipelines and vessels repairs

- repairs involving GRP/thermoplastic materials (PP, PE, PVC, PVDF, ECTFE)
- replacement of damaged components (fittings, elbows, reducers)
- lining of steel tanks
- emergency repairs



Modifications and modernizations of installations

- partial replacement of piping installations
- insertion of additional fittings and equipment into existing installations
- optimization of existing installations



Laboratory testing

- comprehensive scope of laboratory tests related to composite and thermoplastic materials
- static proof of stability based on laboratory results



Maintenance of operations

- 24/7 service
- emergency repairs



Installations

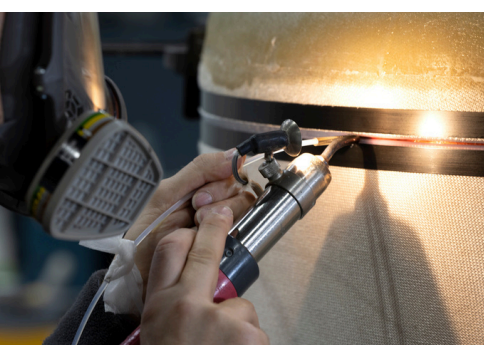
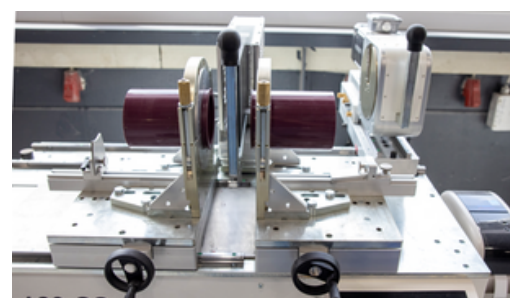
- cooperation with subcontractors
- ongoing assistance



Additional services

- extending warranties for already used vessels and installations
- comprehensive quality supervision over installations
- technical consulting

ongoing assistance during
and after project execution



Our production methods focus on the **cleanliness** and **meticulousness** of the manufacturing process. Beyond production, we ensure **rigorous oversight over every step of our operations**, prioritizing the holistic skill development of our employees.

professional training center

In our training center we focus on key competences:

- welding and laminating techniques
- in-depth study of materials properties
- annual DVS certification for the welders
- rigorous top-quality practical training prior to work

cleanliness

- dust-free space with HEPA system for fluorinated materials welding
- proper storage and handling of raw materials
- compliance with rigorous industry standards for demanding processes (e.g. ultra-purity fabrication process of semiconductors)
- station for demineralized water for anti-contamination procedure of pressure tests

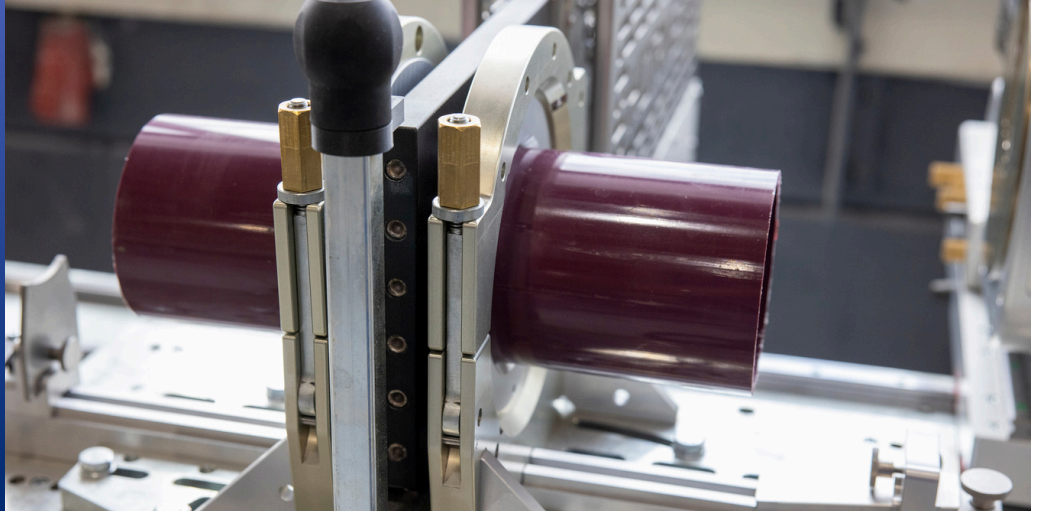
certifications

We have obtained key certifications for management practises, production processes, products and on-site safety procedures. Moreover, our employees hold personal certifications that attest to their expertise, skills and knowledge.

These certifications reflect our ongoing investment in high quality of our work, ensuring that we deliver world class products and services.

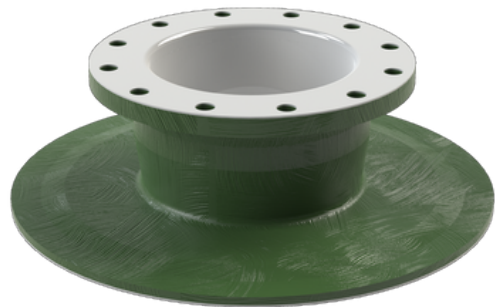
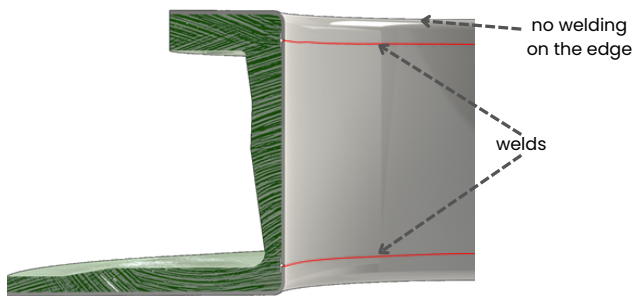


Manufacturing methods, management and safety practices validated by renowned notified bodies.



crimped nozzles

Special production method for nozzles to minimize welding seams in critical areas.



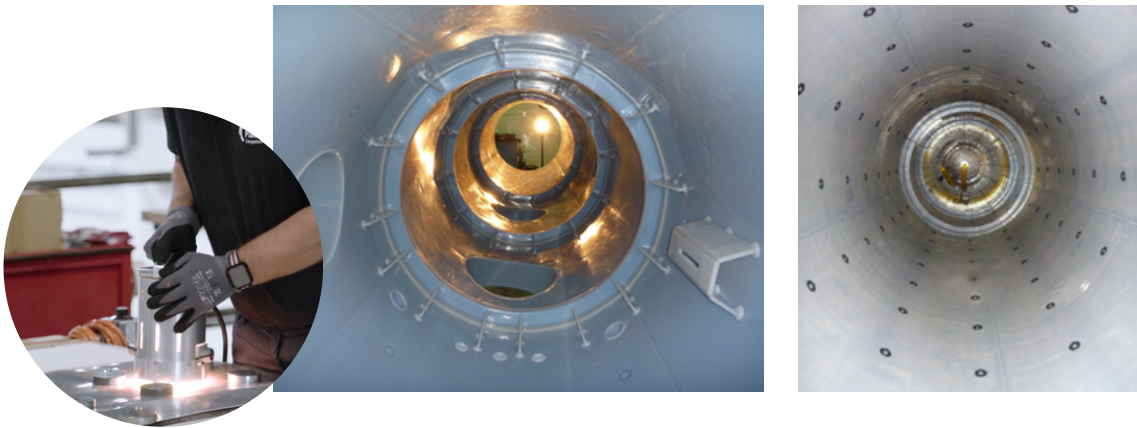
bottoms thermoforming

Innovative technology designed to prevent the infiltration of corrosive mediums through welds, ensuring superior protection against aggressive substances.



Plastlite® technology

Patented technology for optimal performance with PFA fluoropolymer, designed for use in processes requiring resistance to high temperatures and extremely aggressive media.



Steel/PFA
without stretching grid



Steel/PFA
with stretching grid



PE/PFA
without stretching grid



PE/PFA
with stretching grid





www.linkedin.com/company/plasticoncomposites/



www.youtube.com/@plasticoncomposites7540/videos



www.plasticoncomposites.com



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