

MANUFACTURER OF  
**PTFE/FEP/PFA/PP/  
HDPE LINED PIPE  
AND FITTINGS.**

**SHREE SAI SCIENTIFIC**



[www.shreesaiscientific.in](http://www.shreesaiscientific.in)

## ABOUT US

Founded in the year 2004, at Vadodara (Gujarat, India), we “SHREE SAI SCIENTIFIC” are the renowned manufacturer and supplier of Fluoropolymer / Poly-Ethylene Lined Systems for handling of highly corrosive and pure media in Chemical Process Industry [CPI]. We use virgin PTFE, PVDF, FEP, PFA, HDPE & PP for manufacture of both static & anti-static fluid handling systems for Bulk drugs, Pharma Intermediates, API's, Paper Industry, Water Treatment Plants, Power Plants, Fertilizers, Dyes, Food and Drink Industry. We use premium quality raw materials and most advanced machinery to manufacture these products in accordance with set industrial standards. These products are high in demand due to their elevated strength, optimum performance, accurate dimensions, easy installation, corrosion resistance, low maintenance and durable finish standards.

The state-of-the-art infrastructure of our organization is equipped with advanced machines and equipment gives us the capability to bring forward a wide collection of high grade products in bulk quantities. This infrastructural unit is manned by a workforce of highly dedicated professionals. Professionals of our team are highly qualified and experienced that enables us to acquire this position in the industry. It is due to their determination and commitment towards our company that we have become a reputed name across the country. Our team members work in close-coordination with our client in order to provide an excellent quality product range as per their exact requirements.

We are quality centric firm that is why we give the first priority to fabricate the best quality products as per the set industry standards. Professionals recruited by us are very conscious, particularly in this domain and acquire the basic material only from authentic vendors of the industry, which ensure that our product comply with the set international quality standards.



### Quality Assurance:

Our quality assurance system is meant to increase customer confidence and a company's credibility, while also improving work processes and efficiency, and it enables a company to better compete with others.



### Vision :

We make good quality of products, that's why we create space country around the world.



### Mission :

Happy employee lead to happy customer, which lead to all growth.



### Goal :

We focused on our goal and work hard on it daily.



## PRODUCT LINE

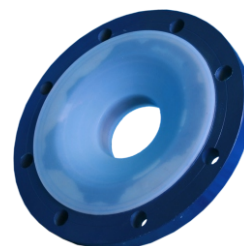
We manufacture & supply Fluoropolymer and Polyethylene Lined Pipe Line, Pipe Fittings, Dip Pipes/Spargers, High Pressure Bellows, Valves, Moulded and Machine parts integral to CPI at Large.

## RAW MATERIALS/INFRASTRUCTURE

We use basic raw materials from renowned all the world over suppliers like DuPont, USA and GFL, India supported by the state of the art technical know-how and Thermoplastic Techniques like Paste Extrusion, Compression Moulding and Injection Moulding along with a dedicated team of Engineers, Technicians, Computer aided Designers and others make it come alive as long lasting corrosion free systems.

## SALIENT FEATURES/DESIGN ADVANTAGES

- \* Chemical inertness except for Fluorine and its compounds and highly violent reducing agents.
- \* Low Co-efficient of friction.
- \* Little water absorption.
- \* Non-toxic.
- \* Non-Inflammable.
- \* Excellent weathering resistance.
- \* Alternative to expensive alloys and exotic metals.
- \* Long service life, Maintenance free, easy to install to ensure little or no equipment or plant down times means low operational costs.
- \* Exceptional corrosion resistance over a wide range of Ph and temperatures.
- \* Recommended for use in Multi-Component Mixture applications.
- \* Low risk of failure because of designs conforming to current international standards to ensure hazard free environment.
- \* No contamination of flow media.





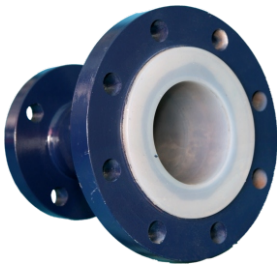
## TEMPERATURE RANGE FOR OPERATION

	PTFE	PFA	FEP	HDPE	PP	PVDF
Theoretical Maximum Temp.	260°C	260°C	205°C	100°C	127°C	135°C
Recommended Operational Temp.	- 40°C to + 200°C	- 40°C to + 200°C	-40°C to +180°C	60°-70°C	100°C	Temp. for Operation is Different for different materials



## QUALITY CONTROL FACILITIES

- \* Hydro-Testing facility at 20-28 kg/cm<sup>2</sup>.
- \* Spark Testing facility at 10KV -15 KV DC after lining.
- \* Hardness Tester for Moldings.
- \* Tensile Strength Testing Machine.
- \* Specific Gravity Testing Machine.



## SPOOL PIPES

Pipe spools of sizes up to DN-300 and a maximum length of 3000mm. These spools are seamless pipe sections to which the plastic liner is thermally locked from inside & flared at ends conforming to ASTM A 106 sch-40 conforming to ASTM F 1545 suitably provided with vent holes to prevent liner failure against different temperature and pressure and permeation conditions. These lined spool pipes can be supplied with loose or fixed flange design to any drilling specification upto DN - 300 sizes. As a solution to customer's applications Jacketed Lined Pipes can also be made available.





## FITTINGS & ACCESSORIES

Our fittings and piping accessories are strictly conforming to ASTM F 1545-97 (2003) because we have preferred highly proven technique of injection moulding to transfer molding to ensure safe running under high vacuum and high temperatures of each and every component in the isometrics. All the fittings are of seamless construction with locking groves for the lining stability against bulging and caving. Jacketed fittings are also available for typical applications.

## GLASS LINED REACTOR ACCESSORIES

Reactor Accessories like PTFE Nozzle Bushes, Envelope Gaskets, Main-Hole Covers & Bushes besides Spargers and Dip Pipes are also available.

## EXPANSION BELLOWS

Expansion Bellows are an indispensable part of a piping system. These can withstand design temperature, pressures both negative as well as positive, misalignment, vibrations and provide the necessary capacity to absorb thermal growth of the piping system. The movement can be axial, lateral or angular where our expansion bellows stand apart. The pressure thrust of expansion joint too is restrained by use of tie bolts and reinforcing rings. Convolution design is perfect for strength and flexibility and our bellows are available in convolutions of different numbers depending upon the total movement capacity of expansion bellows.

## VALVES

PFA/FEP Lined Ball Valves, Plug Valves, Butterfly Valves, Diaphragm Valves, Non-Return Valve, Flush Bottom Valves to suit any CPI application with assured smooth running besides safety & reliability. We can supply valves of all sizes upto DN - 150 and Butterfly valves upto DN - 300 however higher sizes too can be supplied. We also supply PFA/FEP Lined accessories like NRV's, Sight Flow Indicators, Strainers, etc. for piping systems.





## DIP PIPES AND SPARGERS



Our PTFE Lined & Jacketed Steel Dip Pipes & Spargers are manufactured to the highest standards in the industry. Units are given extreme stress tests to validate integrity and long life. Flared sealing of joint is provided with machined PTFE seal - plate of uniform thickness and surface finish which ensures higher seal integrity over uneven sealing surface of a flare. Sparger extensions are solidly fused to the liners and jackets and are smaller in diameter to fit various CPI applications. These extensions can be straight, angular and with PH Probe adapter. Our standard sch. 40 seamless steel pipes conform to grade ASTM A 106 Group B. We can make closed end dip pipes with tantalum tips for thermo well & reinforced baffle applications.



## PTFE MOULDED & MACHINED PARTS

A wide variety of PTFE Moulded & Machined parts can be made available to meet entire range of operations in CPI handling corrosive and pure media, such as:

1. PTFE / GFT Tube Sheets and Baffles for Heat Exchangers / Re-Boilers.
2. 'O' Rings for joints.
3. Valve Bellows / Line Bellows / Vacuum Bellows / High Pressure Bellows for specific applications.
4. PTFE Perforated Plates / Re-distributors / Packing retainers and Structured Packing for Distillation Column applications.



## ANTI-STATIC PIPING SYSTEMS

SHREE SAI SCIENTIFIC manufactures lined pipe and fittings with static dissipating liners, commonly referred to as having 'Antistatic' properties. By combining the PTFE or PFA fluoropolymers with a small amount of carbon filler the liners are able to conduct any build up of static charge from the bore of the pipe to the steelwork.





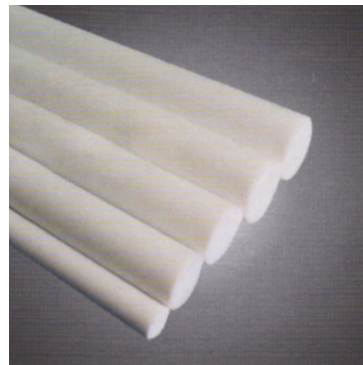
## PTFE MOULDED PRODUCTS



**PTFE Sheets**

**Moulded Sheet**

Size 300 mm<sup>2</sup> upto 1200 mm<sup>2</sup>  
Thickness from 1.5 mm to 100 mm thick



**Teflon Moulded Rods and PTFE Rods**

**Moulded Rods**

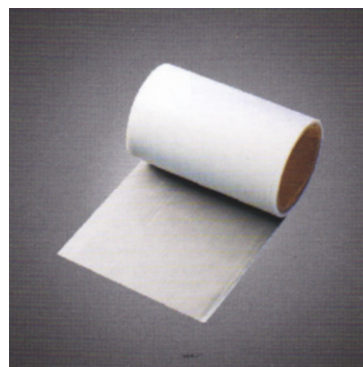
Size 12.5 mm to 300 mm Diameter Length 300 mm  
Size 3 mm to 200 mm Diameter Length 1000 mm



**PTFE Bush**

**Moulded Bushes**

OD: 12.5 mm to 300 mm  
ID: 6 mm to 275 mm  
Length: 100 mm Length



**Skived Sheet**

**PTFE Skived Sheets**

Size: 300 mm Width to 1500 mm Width  
Thickness: 25 mm to 4 mm



**PTFE Gasket and PTFE Bellows**

**PTFE Machined Components**

Ready Cut Gaskets  
Envelop Gasket - SLIT Type/Mill Type  
Expansion Joints/Bellows



**Teflon Moulded Parts**

**PTFE Machined Components (Non Standard)**

Valve Components for Ball Valves, Plug Valves,  
Butterfly Valves, O/V/D/U Rings and Custom Made  
Drawings as per Drawings and Specification.

# PTFE LINED PIPES



## SHREE SAI SCIENTIFIC

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Our Group Company :



## INDIAN GLASS CENTRE

Mfg. of Scientific / Industrial Glass Equipment as per International Standard (QVF, X-TRONG, SCHOTT TYPE)

**Head Office** : A-37/A, B/h Near Super Bakery, Sardar Estate, Ajewa Road, Vadodara-390 019.

**Office** : FF-27, 1st Floor, Jeevendeeep Arcade, GIDC, Ankleshwar-393002.

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