

PTFE PRODUCTS

Technoflex Rubber Products (An ISO 9001:2015 certified company) is located in Rubber Park, Airapuram, which has been organized for Design and Manufacturing of all type of Rubber, Polyurethane, Plastics Products and Metal Components.

When we believe innovation is the key component to remain as the market leader, we cannot refrain from introducing wide range and variety of Molded Rubber products and the moulds for manufacturing those components.

PTFE EXTRUDED ROD



Diameter : 3mm to 300 mm (Standard).
Length : 900mm to 1000 mm (Standard).
Made to Order: Specific Length & Diameter available as per customer's requirement.
Material : Virgin PTFE.
Specification No. : ASTM -D 1710.

PTFE EXTRUDED TUB



Diameter : 20mm to 200 mm (Standard).
Inner Diameter : 10mm to 175mm (Standard).
Length : 1000mm (Standard).
Made to Order: Specific O.D. & I.D. available as per customer's requirement.
Material : Virgin PTFE.
Specification No. : ASTM -D 3295.

PTFE MOULDED ROD



Diameter : 12.5mm to 400 mm (Standard).

Length : 300 mm (Standard).

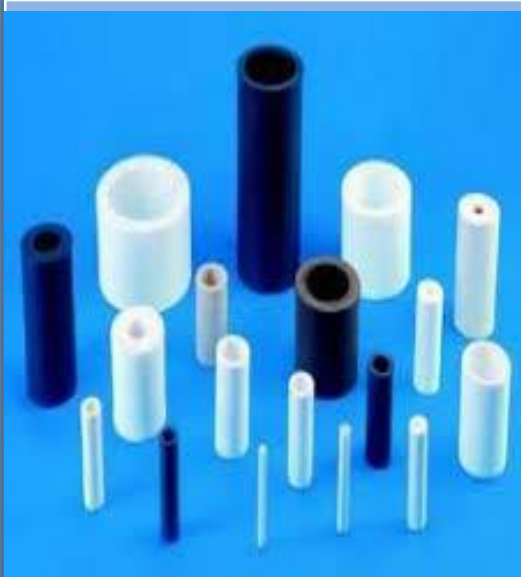
Made to Order: Specific Length & Diameter available as per customer's requirement.

Filler : Glass / Carbon / Bronze / Bronze + Mos2

Material : Virgin PTFE.

Specification No. : ASTM -D 1710.

PTFE MOULDED BUSH



Outer Diameter : 12.5 mm to 300 mm (Standard).

Inner Diameter : 6mm to 275mm (Standard).
Length : 100 mm (Standard)

Made to Order: Specific O.D. & I.D. available as per customer's requirement.

Filler : Glass / Carbon / Graphite / Bronze + Mos2.

Material : Virgin PTFE & Filled PTFE.

Specification No. : ASTM - D 3295.

PTFE MOULDED SHEET



Standard Size: 300 x 300 mm, 450 x 450 mm, 600 x 600 mm, 1000 x 1000 mm, 1200 x 1200 mm, 1500 x 1500 mm, 1000 x 2000 mm.

Thickness: 3 mm to 100 mm.

Made to Order: Specific Length, Width & Thickness available for customer's requirement.

Filler : Glass / Carbon/ Graphite / Bronze / Bronze + Mos2

Material : Virgin PTFE.

Specification No. : ASTM -D 3293.

PTFE SKIVED SHEET



Standard Size: 300 x 300 mm, 450 x 450 mm, 600 x 600 mm, 1000 x 1000 mm, 1200 x 1200 mm, 1500 x 1500 mm, 1000 x 2000 mm, 2000 x 2000 mm.

Thickness: 0.1 mm to 5.0 mm(Standard).

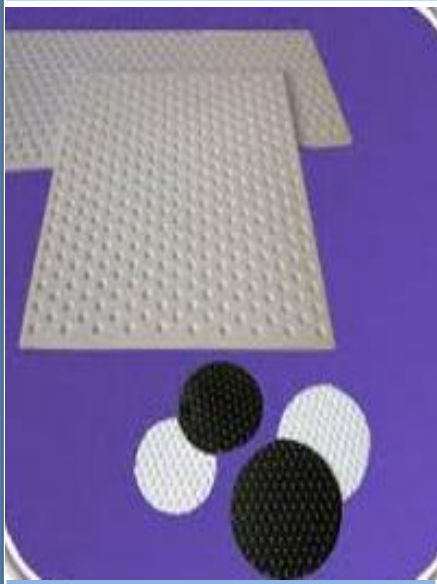
Made to Order: Specific Length, Width & Thickness available for customer's requirement.

Filler : Glass / Carbon / Graphite /Bronze / Bronze + Mos2

Material : Virgin PTFE & Filled PTFE.

Specification No. : ASTM -D 3308.

PTFE DIMPLE SHEET BRIDGE BEARING PAD



Standard Packing: PTFE Bridge Bearing pad also known as PTFE Dimple Sheet, mostly used in fastly growing infrastructural projects like Metro Projects, Railway Bridges. Fly-overs etc.

Range : As per customer's specification and drawing

Available Grades:

- Virgin PTFE
- 15 To 25% Glass Filled PTFE
- 15% Graphite Filled PTFE
- 5 to 15% Aluminium Oxide Filled PTFE
- 5 to 10% Mica Filled PTFE
- 15% + 5% Glass + MOS2 Filled PTFE
- 55% + 5% Bronzed + Molybdenum Disulphide Filled PTFE
- Special Grade as per customer specification
- 15% Peek PTFE
- 25 To 35% Carbon Filled PTFE
- 40 to 60% Bronzed Filled PTFE
- 5 to 10% Stainless Steel Filled PTFE
- Pigmented PTFE

TURSITE SHEET & STRIP



Tursite Known as various names like Bearing linear / Trexonn etc. Extensively used in mechanical machine tool manufacturing industries, Hydraulics & pneumatic manufacturing industries.

Made to Order: Specific Size & Thickness available for customer's requirement.

Available Grades:

- Virgin PTFE
- 15 To 25% Glass Filled PTFE
- 15% Graphite Filled PTFE
- 5 to 15% Aluminium Oxide Filled PTFE
- 5 to 10% Mica Filled PTFE
- 15% + 5% Glass + MOS2 Filled PTFE
- 55% + 5% Bronzed + Molybdenum Disulphide Filled PTFE
- Special Grade as per customer specification
- 15% Peek PTFE
- 25 To 35% Carbon Filled PTFE
- 40 to 60% Bronzed Filled PTFE
- 5 to 10% Stainless Steel Filled PTFE
- Pigmented PTFE

PTFE EXPANDED SHEET



Standard Size & Thickness: 1500mm (W) x 1500 mm (L) x 0.5 mm (Thick), 1500mm (W) x 1500 mm (L) x 1.0 mm (Thick), 1500mm (W) x 1500 mm (L) x 1.5 mm (Thick), 1500mm (W) x 1500 mm (L) x 2.0 mm (Thick),

1500mm (W) x 1500 mm (L) x 3.0 mm (Thick),

1500mm (W) x 1500 mm (L) x 5.0 mm (Thick),

1500mm (W) x 1500 mm (L) x 6.0 mm (Thick),

Made to Order: Specific Length, Width & Thickness available for customer's requirement.

Expanded PTFE: MultiTex Sheet[®] is a high Quality gasket Sheet made of pure multidirectional expanded PTFE to cut or punch gasket. In a special Process PTFE is stretched in different directions and get high strength length and cross. Creep tendency under force and temperature is considerable on uneven surface. Material with enough thickness can compensate even big gap of uneven flanges as they appear on glass lined steel flanges or at corrosive damages.

Pressure: Full Vacuum to 200 bar. Temperature- 200 deg C to +230 deg C. Approvals / Certifications- BAM Tested for used with oxygen. TA-Luft, US FDA, EC 1935/2004, TUV, USP class 10 certification.

PTFE MACHINED COMPONENT



PTFE & Filled Grade available in machined components such as valves seat rings, roof packing, seal cover, plug valves sleeve, wedge ring, 'O' ring, piston ring, washer, bearings, bushing, balls, insulator, pipes joints, guides, breaks, piston ring, rider ring etc. and all types of components for non-lubricated compressor or any PTFE components as per customer's sample specification and drawings.

PTFE PACKING



Standard Packing: 3 mm to 25 mm in square & round, other sizes & Specific length can be supplied as per customer's requirements.

Product Range : PTFE Universal Soft packing, PTFE Graphite soft packing, valve seal, pure Expanded graphite Packing, Pure carbon packing, PTFE packing, PTFE Graphite packing, Aramid Packing, PTFE & PTFE Graphite Combination packing, PTFE & Aramid Combination packing, Hollow Core / Solid core Packing, PTFE Putty/ PTFE Graphite putty.

PET ROD & SHEET



PET (Poly Ethylene Terephthalate)

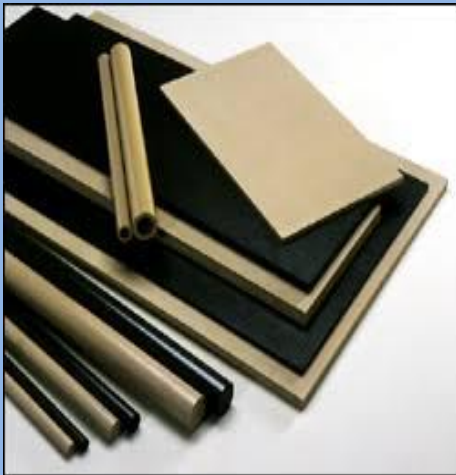
PET is a semi crystalline thermoplastics; used as a high performance polymer in various industries like conveyor industry , mechanical engineering, food processing etc.

PET Sheet : Standard Size: Thickness: 6 mm to 50 mm; 1 mtr W x 2 mtr L; 0.6 mtr W x 3 mtr L.

PET Rod : Standard Size: Diameter: 12 mm to 100 mm; Length 1 mtr to 3 mtr .

Features: High Wear Resistance , low coefficient of friction , high chemical resistance , good machinability etc.

PEEK SHEET



PEEK (Poly Ether Ketone) is a high performance engineering thermoplastic that offers chemical and water resistance similar to PPS, but can operate at higher temperatures. PEEK can be used continuously to 480° F (250°C) and in hot water or steam without permanent loss in a physical properties. For hostile environments , PEEK is high strength alternative to fluoropolymers. PEEK Carries a V-0 flammability rating and exhibits very low smoke and toxic gas emission when exposed to flame.

Standard Size: Thk 8 mm to 25 mm ; Size: 0.5 mtr x1 mtr;etc; custom size available on request. PEEK Sheets as per Customer request.

PEEK ROD



PEEK (Poly Ether Ketone) is a high performance engineering thermoplastic that offers chemical and water resistance similar to PPS, but can operate at higher temperatures. PEEK can be used continuously to 480° F (250°C) and in hot water or steam without permanent loss in a physical properties. For hostile environments , PEEK is high strength alternative to fluoropolymers. PEEK Carries a V-0 flammability rating and exhibits very low smoke and toxic gas emission when exposed to flame.

Standard Size: Dia 6 mm to 120 mm; Length : 1 mtr; Custom Sizes available on request other Variants Available : 30% Glass Filled PEEK ;30% carbon Filled PEEK15% PEEK filled PTFE ;etc.

PVDF SHEET & ROD



PVDF (Poly vinylidene fluoride)

Available in Rod/ sheet form in certain size only ; it is currently imported only;

PVDF is used for its excellent chemical resistance, machinability and wide range of application PVDF is mainly used in the chemicals and semi conductor industry .

SOLID POLYCARBONATE SHEET



Solid polycarbonate - Clear/ Transparent sheets offer the highest level of glazing performance where transparency or tailored light transmission along with high impact strength is of vital importance. Their versatility makes them the ideal choice for glazing in hospitals , schools, sporting arenas and public infrastructure projects . They are available in transparent (compact sheets) & textured (embossed sheets) finishes.

Standard size: Thk: 1mm to 12mm; size: 1200mm W x 2400mm L; 2000mm W x 3000 mm L.

Also available in UV (Ultra Violet) Protected and FR (Fire Retardant) Grade. Other Variants Available in Blue, Smoke Brown. Smoke Grey colours.

CAST NYLON ROD



Diameter: 6mm to 255mm; Length: 300mm and 1000mm

Nylon: Extruded, Unfilled – Sheet, Rod & Profiles The bearing and wear properties of Nylon make it one of the most widely used plastic in the world. Nylon is frequently used as a replacement for bronze, brass, aluminum, steel and other metals, as well as other plastic, wood, and rubber.

Features: High tensile strength and modulus of elasticity, High impact resistance, a high heat distortion temperature, Resists wear, abrasion, and vibration, Can withstand contact with chemicals, alkalis, dilute acids or oxidizing agents. Available in Nature, Black, Glass-filler, etc, Nylon is not moisture Resistance.

CAST NYLON



Standard size:

Thickness: 6mm to 200mm; size: 300mm W x300mm L; 1000mm W x 1000mm L.

Colours: Default- Nature White, Black.

Important make:

Thickness: 8mm to 200 mm; size: 1250 mm W x 2500 mm L, 1000mm W x 2000mm L.

Colours: Default - Nature White, Black, Blue.

Variants available: 30% Glass Filled Nylon, Nylon PA 66, 30% Glass filled Nylon PA 66, etc We provide customized (special) size on request; Cast Nylon shapes are available in a wide range of size and grade. Their flexibility and performance characteristics have led to Nylon replacing bronze, brass, steel, and aluminum in various mechanical applications.

POM-POLYACETAL ROD



Polyacetal (POM) Rods: POM sheets, rods & tubes have many of the same characteristics of industrial metals such as brass, aluminum, zinc, and stainless steel. POM is a homopolymer acetal. Some of POM's comparable properties include stiffness, dimensional stability, impact resistance, and structural strength. Indian make.

Standard Size: Diameter: 12.5 mm to 140 mm; Length: 300 mm and 1000mm; Available in Natural White, Black, or Colour – as per your requirement; (subject to MOQ) Imported make.

Standard Size: Diameter: 12.5 mm to 200mm; length;1000mm; to 3000mm Available in Nature White / Black.

POPLYACETAL POM SHEET



Polyacetal (POM): Sheet, rods & tubes have many of the same characteristics of industrial metals such as brass, aluminum, zinc, and stainless steel. Some of Polyacetal's comparable properties include stiffness, dimensional stability, impact resistance, and structural strength.

Standard Size: Thickness: 6mm to 100 mm; Size:610mm width x 1000mm length; 1000mm x 2000mm length; 620mm x 3000 mm length.

Colours: Default – Natural White, Black, Blue.

TECHNICAL DATA SHEET (TDS)- PHYSICAL PROPERTIES OF PTFE & FILLED PTFE

Sr. No.	Property	Unit	Test Method	Virgin PTFE	Chemically Modified PTFE	15% Glass Filled PTFE	25% Glass Filled PTFE	5% Glass +5% MoS2 Filled PTFE	15% Glass +5% MoS2 Filled PTFE	25% Carbon / 23% Carbon + 2% Graphite filled PTFE	35% Carbon / 33% Carbon + 2% Graphite Filled PTFE	15% Graphite Filled PTFE	40% Bronze / TSQ Filled PTFE	40% Bronze+ 5% MoS2 Filled PTFE	60% Bronze Filled PTFE	55% Bronze + 5% MoS2 Filled PTFE	
				1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Density	gm/cc	ASTM D-792	2.1-2.2	2.15-2.2	2.15-2.22	2.22-2.25	2.20-2.24	2.20-2.24	2.0-2.2	2.0-2.14	2.10-2.16	3.0-3.2	3-3.2	3.8-4.0	3.8-4	
2	Tensile Strength	kgf/cm ²	ASTM D-638	210-375	300-325	180-260	125-200	175-250	150-200	125-200	100-175	150-200	125-225	125-225	100-200	100-200	
3	Elongation of Break	%	ASTM D-638	250-400	400-450	225-325	200-300	200-300	220-320	80-150	100-150	150-250	200-350	200-350	150-300	150-300	
4	Comressive Strength	kgf/cm ²	ASTM D-695	40-50	45-55	65-75	75-85	60-70	65-75	75-85	80-90	65-75	85-100	80-90	115-125	115-125	
5	Deformation under load(Max)																
a	2 Hrs. 23°C 113 Kgf	%	ASTM D-621	12	3.5	10	9	11	10	5	4	6	5	5	4	4	
b	24 Hrs. 23°C 113 Kgf			15	5	12	11	13	12	7	6	8	6	6	5	5	
c	permenent			8	2.5	7.5	7	8.5	7.5	3.5	3	4.5	3	3	2.5	2.5	
d	2 Hrs. 150°C 113 Kgf			55	40	52	50	52	50	35	30	43	42	42	40	40	
6	Impact Strength	J/cm	ASTM D-256	1.4-1.5	1.6-1.75	1.2-1.3	1.0-1.1	1.25-1.35	1.2-1.3	0.7-0.8	0.6-0.7	0.8-0.9	0.9-1.0	0.9-1.0	0.8-0.9	0.85-0.95	
7	Hardness	Shore D	ASTM D-2240	58-62	56-62	58-62	58-63	60-65	60-65	60-65	60-65	60-65	62-66	62-66	64-68	64-68	
8	Coefficient of Friction		ASTM D-1894														
a	Dynamic P-7 kg/cm ² v-0.5			0.04-0.06	0.02-0.03	0.31-0.37	0.5-0.54	0.15-0.20	0.15-0.20	0.12-0.17	0.13-0.18	0.11-0.16	0.11-0.15	0.1-0.14	0.12-0.16	0.11-0.14	
b	Static P-35 kg/cm ²			0.05-0.08	0.04-0.06	0.01-0.12	0.11-0.13	0.08-0.01	0.09-0.11	0.01-0.12	0.08-0.10	0.08-0.10	0.08-0.10	0.075-0.09	0.08-0.10	0.07-0.09	
9	Wear Rate (Max)	gm/s	ASTM-G-137	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
10	Water absorption (Max)	%	ASTM D-570	0	0	0.015	0.013	0.015	0.015	0	0	0	0	0	0	0	
11	Continuous Service Temperature	°C	ASTM-D-648	+260	+260	+260	+260	+260	+260	+260	+260	+260	+260	+260	+260	+260	
12	Heat resistance (Max)	%	ASTM-D-648	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
13	Coefficient of Liner Thermal Expansion - 10 ⁻⁶	%	ASTM-D-696	250-275	250-275	240-265	235-255	245-270	240-265	225-250	215-240	240-265	200-225	200-225	175-200	175-200	
14	Liner Thermal Expansion (Max)			A R	A R	A R	A R	A R	A R	A R	A R	A R	A R	A R	A R	A R	
a	30 -150°C	%	ASTMK-D-696	2 1.5	1.5 1.5	1.5 1.5	1 1.5	0.7 1.5	1 1.5	1 1.5	1 1.2	1 1.1	0.9 1.3	1 1.1	0.9 1.1	0.9 1.1	0.9 1.1
b	30 -200°C			2 2.3	2.4 2.3	2.3 2.3	1.8 2.2	1 2.3	1.8 2.3	1.8 2.3	1.8 1.9	1.5 1.8	1.7 2	1.7 1.8	1.5 1.8	1.5 1.8	1.5 1.8
c	30 -250°C			3 3.6	3.6 3.3	3.3 2.2	3.2 1.4	3.3 3.3	2.2 2.2	3.3 2.2	2.7 2.4	2.5 2.4	2.5 2.3	2.5 3	2.2 2.5	2.2 2.5	2.2 2.5
15	Dielecrtic Strength	Kv/m	ASTM-D-149	22-24	30-35	15-16	11-12	15-16	15-16	1-2	1-2	1-2	Conductive	Conductive	Conductive	Conductive	
16	Dimentional Stability																
a	Length	%	ASTM-D-1710	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	1.5-3	
b	Diameter			0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	0.5-1	
17	Chemical Resistance (Max)																
a	Permeability	%	ASTM-D-543	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
b	Dissolution			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
c	PTFE is chemically inert & uneffected by all nown chemicals expect molten or dissolved alkali metals-sodium;potassium;cesium; francium; & flourine gas, certain flourine compounds & complexes at elevated temperature. Filled PTFE has inferior chemical resistance depending upon the particular filler.																
	The physical properties of Standard and Non-standard filler grade composition not mention in above table ara to be reffered on the basic of Material Test Certificate issued by Raw Materials Suppliers / Manufacturer. Data quoted are average value only & should not be used for designed purpose.																
	Company has in-house test facility / Laboratory to test above properties. The testing equipments are calibrated as per procedure laid down in QMS-ISO-9001:2008, having traceability with NPL. The test procedure are self designed similar to above reffered ASTMs.																



PLOT NO XXI/63, NEAR ANGAMALY WEST CHURCH,
ANGAMALY P.O, ERNAKULAM
KERALA, INDIA - 683572
Tel: +91-999-5655684, 9895156199
Email: admin@technoflex.co.in
Website: www.technoflex.co.in

PLOT NO 31 & 81, RUBBER PARK,
AIRAPURAM, VALAYANCHIRANGARA,PERUMBAVOOR
ERNAKULAM, KERALA, INDIA -683556
Tel: +91-999-5655684, 9895156199
Email: admin@technoflex.co.in
Website: www.technoflex.co.in