



General

Tongyi Power has over 15 years of experience in manufacturing FRP Products (fiberglass reinforced polymer) and has been exporting to our clients worldwide.

FRP tube produced by our company has applied the **pultrusion process technology**, of which high-quality raw materials of reinforced glass fibers and epoxy resin are used.

Our FRP tubes are designed and manufactured mainly for applications of electrical and power industries with a variety of cross section diameters ranging from 6mm to 110mm at any length at option.

Applications

Mainly for **power and electrical** industries, such as composite/polymer insulators, cable tray, insulation rod, arrestor, power transformer and resistor, switchgear; tap changers, Cryogenic insulation, underwater conditions, electrical equipments and so on.

Besides, our pultruded FRP tube could also be used in other various industries where insulation, resistance to stress, weathering and corrosive atmospheres are important.

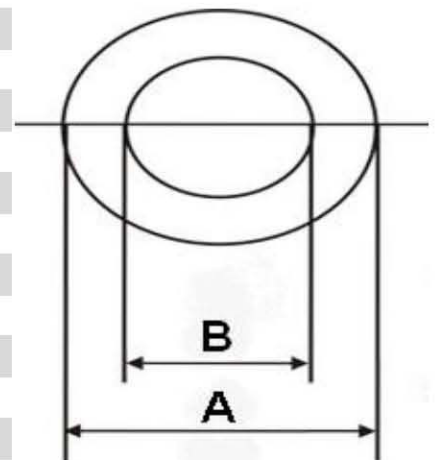
Properties

Superior mechanical strength and high
 Good corrosion resistance
 Light weight and low maintenance
 Long life cycle
 Arc and track resistant
 Electromagnetic transparency
 Non-magnetic and flame resistant
 Excellent electrical insulation
 Non-conductive thermally and electrically



Product Specification

A × B - mm	Kg/Mtr	A × B - mm	Kg/Mtr
18 × 12.5	0.280	40 × 12.5	1.740
20 × 12.5	0.410	40 × 20.0	2.000
24 × 12.5	0.700	45 × 20.0	2.740
28 × 12.5	1.040	50 × 30.0	2.660
30 × 12.5	1.240	50 × 32.0	2.460
30 × 20.0	0.830	60 × 30.0	4.490
35 × 12.5	1.780	60 × 32.0	4.290
35 × 20.0	1.370	70 × 30.0	6.660
38 × 12.5	1.370	70 × 32.0	6.450
38 × 20.0	2.140	80 × 60.0	4.660



Note: Custom diameter and length according to the drawing are available upon request.





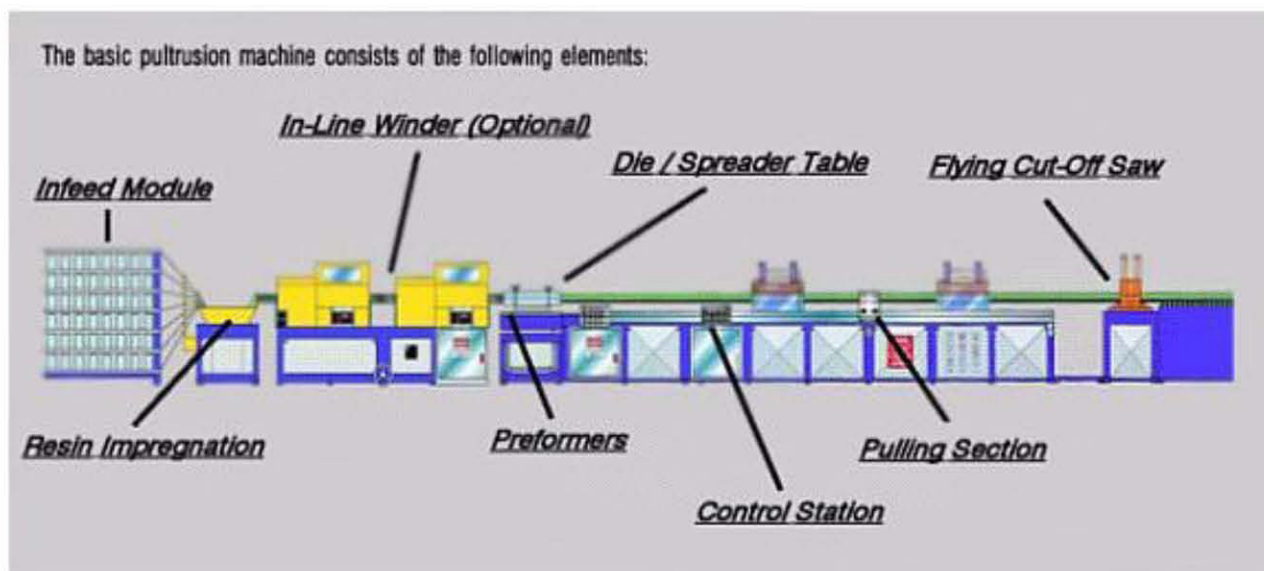
Technical Data

No.	Item	Unit	Values	Standard	Evaluation
1	Density (20±2℃)	g/cm ³	≥2.1	ASTM D 792	Pass
2	Water Absorption Rate	%	≤0.05	ASTM D 570	Pass
3	Tensile Strength	Mpa	1420	ASTM D 638	Pass
4	Bending Strength	Mpa	900	ASTM D 790	Pass
5	Torsional strength	N/mm ²	≥90	ASTM D4923	Pass
6	Thermal Bending Strength	Mpa	≥180	ASTM D 790	Pass
7	Dye Penetration Test	min	≥15	ASTM D5117	Pass
8	Volume Resistivity (140°C,96h)	Ω·m	≥10 ¹⁰	ASTM D 257	Pass
9	Water Diffusion Test (0.1% NaCl,100h,12kv,1min)	mA	<0.03	IEC 1109	Pass
10	Lightning Impulse Withstand Voltage (100kv)	times	≥5	ASTM D 149	Pass
11	D.C. Breakdown Voltage	kv	≥50	ASTM D 149	Pass
12	Heat deflection temperature	℃	≥135	ASTM D 648	Pass
13	Glass Fiber Content	%	73	ASTM D2584	Pass

Above results are tested from size 18mm× 12.5mm tubes.

Standards: in strict accordance with relevant ASTM, IEC, GB/T and Enterprise Standards

Pultrusion Process



For more knowledge of pultrusion process, please read our online articles accordingly.

FRP Rod | ECR Rod | FRP Tube | FRP Rebar | FRP Thread | FRP Profile

