

Built to last: Arvind FRP Poles



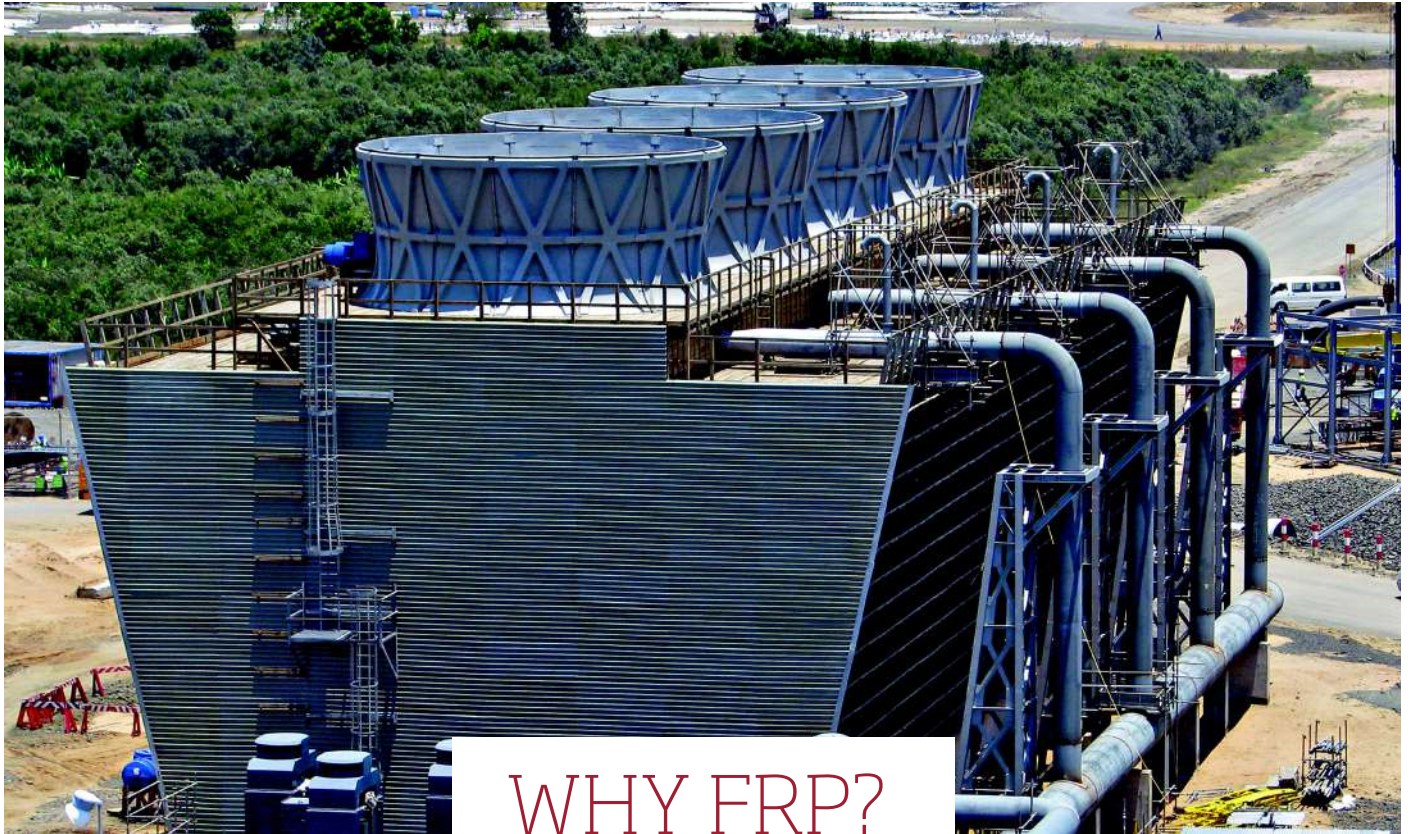
Arvind Composites Division



Founded in 1931, Arvind is one of India's largest integrated textile-to-retail conglomerates with successful forays in advanced materials, environmental solutions and real estate. A pioneer of denim in India, Arvind is a \$1.5 bn company with an unmatched portfolio of owned, licensed brands and retail formats. Arvind is a supplier of fabrics to global brands such as Levi's, Gap, VF Corp, Tommy Hilfiger, Zara, H&M and others.

Known for its commitment to innovation and quality, Arvind manufactures high performance protective and industrial fabrics through its Advanced Materials Division, using world-class technology and researched processes.

Arvind started its Composites Division in 2014 producing structural profiles and hand-laminated products. With a monthly production capacity exceeding 500 MT, Arvind has been able to serve global customers with high standards of quality and delivery. Arvind provides complete solutions for all structural needs, including gratings, poles and hand-laminated products. Arvind's FRP products are sold in more than 40 countries.



WHY FRP?

FRP (Fibre-reinforced plastics) is a composite material made from a polymer resin matrix reinforced by glass fibres and fabrics. Also known as GRP (Glass reinforced plastic) or fibreglass, it is a lightweight, strong and durable material, used as a superior alternative to steel, aluminum, wood or concrete.

High strength and low weight

Durable and maintenance-free

Non-conductive

Rapid installation

Fire retardance

Design Flexibility



Steel Rusts



Wood Rots



FRP Lasts

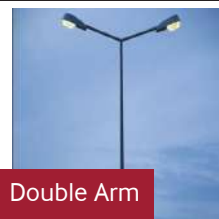


Poles

Pole Height	Bottom OD(D)	Top OD(D)	Embedded Length(L-l)
4 meter	143 mm	76 mm	750 mm
5 meter	160 mm	76 mm	850 mm
6 meter	176 mm	76 mm	850 mm
7 meter	193 mm	76 mm	1000 mm
8 meter	210 mm	76 mm	1000 mm
9 meter	226 mm	76 mm	1000mm
10 meter	243 mm	76 mm	1200 mm
11 meter	260 mm	76 mm	1600 mm
12 meter	277 mm	76 mm	1600 mm



Base Basket



Double Arm



Single Arm

Accessories



Internal Junction Box



External Junction Box

Advantages of Composite poles

Resistance to Corrosion: FRP poles are corrosion resistant and can be used in a variety of environments with exposure to weathering or chemicals

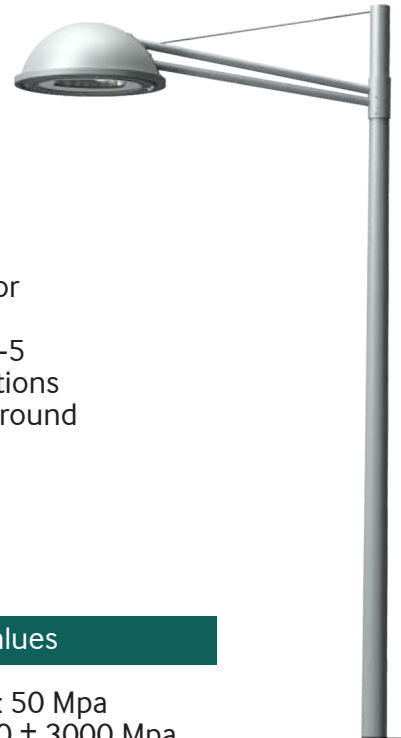
Lightweight: FRP ladders are light-weight and can be easily carried by even 1 person and installed; also ideal for carrying to hilly / difficult to access locations

Inherent colour: FRP poles have colour inherently embedded in them and do not need any painting or maintenance over a long life time

Frangibility: FRP poles are frangible and snap upon vehicular impact rather than resisting leading to higher safety

Pole Specifications

Details	Properties
Height of Poles	Up to 12 mtr
No. of Sections	Single
Shapes of Poles	Conical
Arm Style	Straight Inclined
Length of Arm	.25m to 1.5 mtr
Mounting ARM Dia	50mm
Junction Box	Internal & External
No. of Arms	Single Arm Double Arm
Color	All RAL colours
Mounting Arrangement	With fixed Metal Plate, Anchor Base or Groutable Burial
Standard Referred	IS 875 -Part 3,TIA 222 ,AASHTOL LTS-5
Wind Load	100 Kmph to 180 Kmph, with deflections within 15% of height of pole above ground



Mechanical & other properties

Properties	Ref. Standard	Values
Tensile Strength	As per ASTM D 638	250 ± 50 Mpa
Elasticity of Modulus	As per ASTM D 638	20000 ± 3000 Mpa
Yield Strength	As per ASTM D 638	250 ± 50 Mpa
Compressive Strength	As per ASTM D 695	250 ± 50 Mpa
Flexural Strength	As per ASTM D 790	250 ± 50 Mpa
Impact Strength	UNI 6062/67	> 180 KJ/m ²
Dielectric Strength	As per ASTM D 149	3 – 7 KV/mm
Thermal Conductivity	As per ASTM D 177	0.2 – 0.3 Kcal/mH°C
Coefficient of Linear Expansion	As per ASTM D 696	15 – 17 °C-110-8
Density		
Glass Content (% by wt.)	As per ASTM D 792	1.30 to 1.80
Water Absorption	As per ASTM D 2584	45 to 55 %
	As per ASTM D 570	< 0.5 %

Normal Pole v/s Arvind FRP Pole

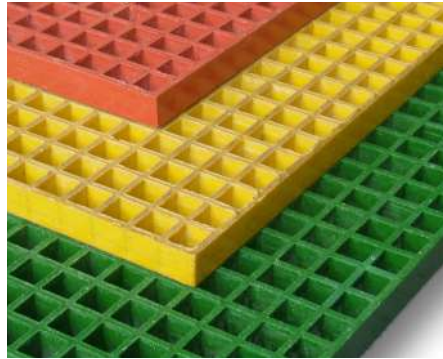
Parameter	Conventional Pole	Arvind Composite Pole
Maintenance	Required regularly	None: Fixtures also easy to maintain
Life	Short life	Long life
Weight	Very high	Very light (Adv. For Hilly Region)
Installation Cost	High	Very low, Easy installation
Earthing	Required	Not required
Rusting	High	Never
Transport Cost	Very high	Very low: Telescopic assembly
Insulation	Conductive, High electrical risk	Excellent insulator



Product Offering



Cable trays



Gratings



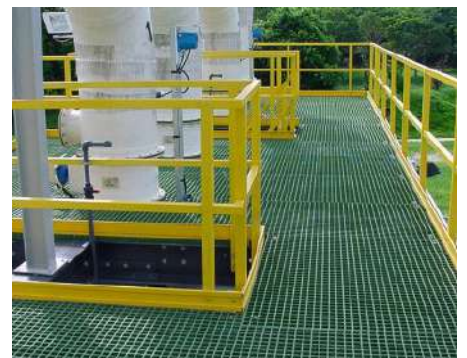
Poles



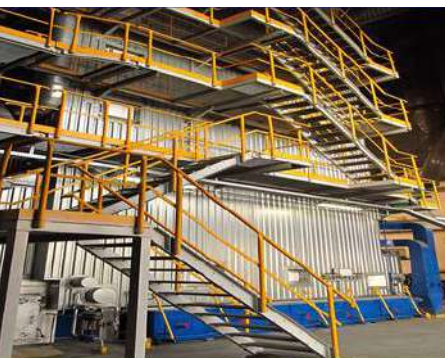
Ladder



Platforms



Handrails / Walkways



Staircases



Monkey ladders



Toilets



Why Arvind?

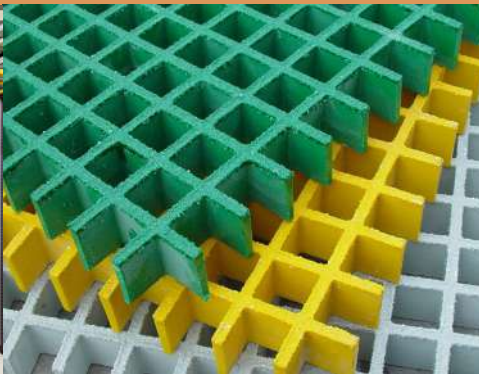
Arvind lineage: 100+ year-old financially strong publicly listed corporate with experience of delivering high quality products to global customers

Scale: 500T+ pultrusion production capacity per month with sufficient resources to expand, working across a range of products and solutions

Systems and processes: Strong in-house processes for production planning, export logistics support and quality control to ensure total customer satisfaction

Best cost structure: Backward integration of glass fabrics, scale for glass and resin purchase, export logistics advantage

Team capabilities: All round-capabilities across team supported by expertise across various areas by broader Arvind team



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