FRP / GRP POLES

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(MANUFACTURED BY CENTRIFUGAL CASTING PROCESS)

Satyam is one of the leading manufacturers of FRP/GRP Poles in India. Satyam Fiberglass Poles meet the highest international standards for its high strength, corrosion resistance, UV resistance, Mechanical strength, long life and safety. Manufactured from various carefully selected resin systems these Poles are designed to deliver many years of reliable service, outperforming the traditional materials.

Satyam FRP/GRP poles are a high -tech innovative product, which can withstand high stress and all known atmospheric conditions. It is also easy to install and provides inherent safety for road users.

ADVANTAGES OF FRP/GRP POLES

- High corrosion resistance
- Safe in Accident Cases
- Lessweight
- No installation equipments needed
- No maintenance needed (painting)
- Fast and Easy installation
- Safe (non conductive electrically)
- Various and stable colors
- Smooth surface
- High dynamic strength 180 km / hr wind speed resistance)
- Direct burial
- Various and attractive decorative designs
- Environmentally safe
- Low harmonic vibrations

APPLICATION AREAS

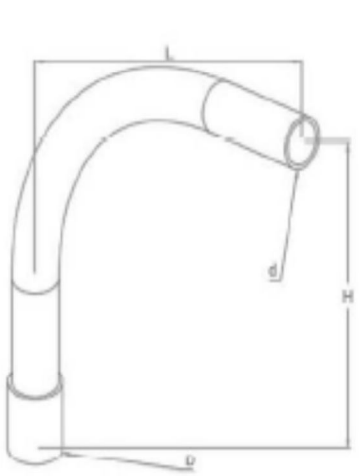
- Road lighting
- Airport areas
- Advertising poles
- Solar lighting
- Park lighting
- Flag poles
- Traffic lighting
- Malls & Multiplexes lighting
- Defence areas
- Plants & Industries Lighting

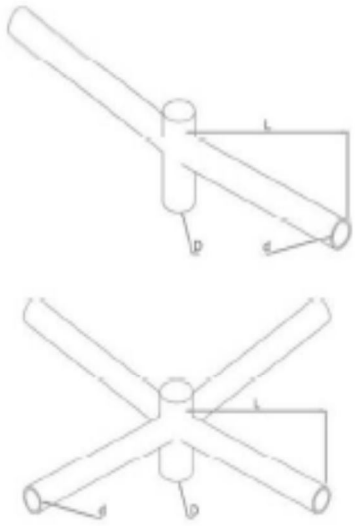
Comparison between composite poles and metal poles.

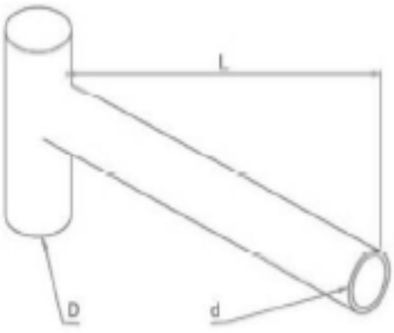
Features	FRP/GRP poles	Metal poles
Mounting	Foundation required/ optional	Concrete foundation is compulsory
Corrosion	Non-corrosive	Highly corrosive
Relocation	Easy and hand carried	Not feasible
Aesthetics	Good	Periodic maintenance required
Construction	Jointless	Multiple joints
Weight	Light	Heavy (3 times heavier than GRP poles)
Longevity	More than 20 years	Depends upon maintenance schedule
Periodic painting	Not required	Periodic painting required

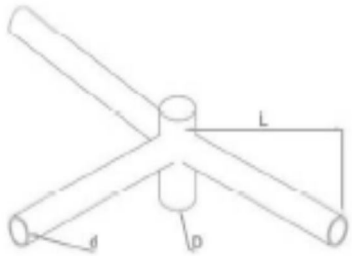
FEATURES :

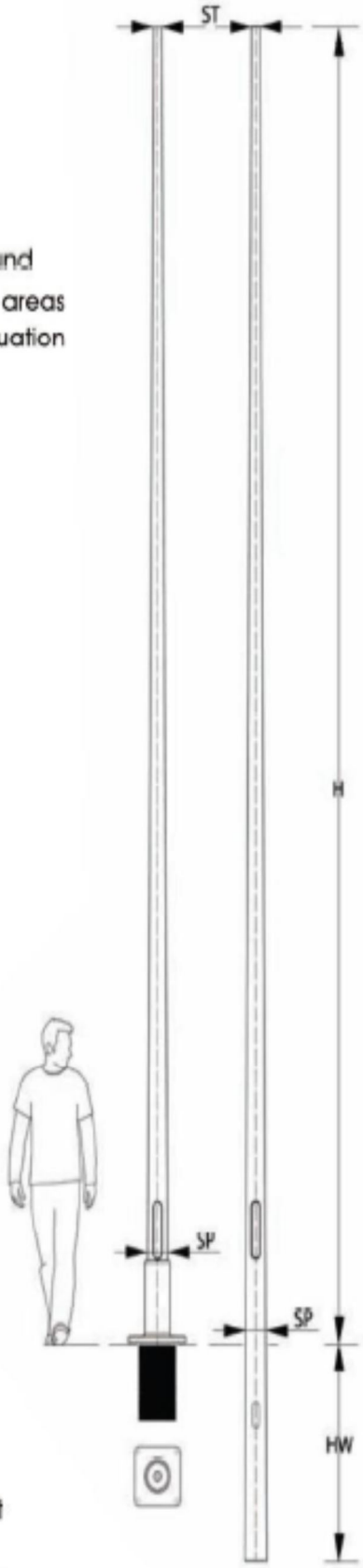
- Low cost
- Easy of Installation
- Higher Safety
- Environment Friendly
- Non-corrosive
- Maintenance Free
- Light Weight
- Non-Conductive
- Longevity
- High impact Strength
- UV Resistant
- Resistant to Deflection & Bending
- Resistant to Vibration
- Easily Drilled
- Resistant to Micro-Organisms of Ground
- Resistant to Saline Moisture in Costal areas
- Resistant to Great Temperature Fluctuation
- Low Inertia











MECHANICAL PROPERTIES

- Tensile Strength
- Elongation at Break
- Bending strength
- E-Modulus
- Impact strength
- Temperature stability

TESTS

- Tensile strength
- Elongation
- Flexural tests
- Impact Bending Test
- Rate of Burning
- Outdoor Weathering

TECHNICAL SPECIFICATION :

DETAILS	UNITS	TEST METHODS
Glass Content	45 - 55 %	ASTM D 2584
Water Absorption	< 0.5%	ASTM D 570
Tensile Strength	200 +/- 50 MPa	ASTM D 638
Flexural Strength	250 +/-50 MPa	ASTM D 790
Compressive Strength	200 +/- 50 MPa	ASTM D 695
Yield Strength	250 +/-50 MPa	ASTM D 638
Elasticity of Modular	1500 Mpa/2500 MPa	ASTM D 638

LIST OF SOME STANDARD AVAILABLE SIZES :

LENGTH OF POLE MM	TOP DIAMETER MM	BOTTOM DIAMETER MM	THICKNESS(MM)
2000	76	109	5.0-6.0 MM
3000	76	126	5.0-6.0 MM
4000	76	143	5.0-6.0 MM
5000	76	160	6.0-7.0 MM
6000	76	176	6.0-7.0 MM
7000	76	193	6.0-7.0 MM
8000	76	210	6.0-7.0 MM
9000	76	227	6.0-7.0 MM
10000	76	243	6.0-10.0 MM
11000	76	260	6.0-10.0 MM
12000	76	277	6.0-10.0 MM

ACCESSORIES OFFERED :

- Single Arm Bracket
- Double Arm Bracket
- External Junction Box
- Internal Junction Box
- Base Bracket