

cnktPOLE™ Composite Aerial Poles

cnktPOLE™ is a composite pole for Aerial deployment of fibre removes the historical difficulties of steel, concrete and wood builds. Long lasting, light weight and extremely durable, cnktPOLE™ increases the longevity of the installation and decreases the maintenance costs associated with wear and tear. The reduced cost of transport and installation labour makes these poles a very cost-effective solution for fibre network builders and operators.

The cnktPOLE™ composite monopole requires no maintenance at all. Once installed, nothing more than routine inspections needs to be done. In LLSM projects installing new poles in remote, rural locations without road access, these poles can be carried by hand and dressed on site. Because composite poles are so light, they are also easy to install in dense urban environments without the need of heavy cranes and other large equipment. A single pole can be installed in just a few hours without major disruptions.

The cnktPOLE™ is stronger than wooden poles. These poles will hold up against everything mother nature can throw at them. They can withstand high winds and the heavy loads such winds generate. Where wood poles might snap, our composite poles will stand tall.

Materials

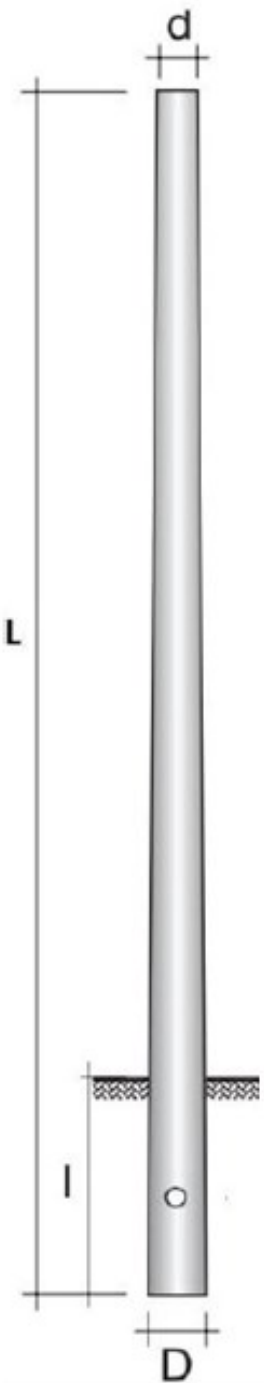
- Polyester resin reinforced with fiberglass. Orthophthalic polyester resin. The fiberglass reinforcement has a continuous yard form. The customer can choose the colour. Flame retardant and fireproof.

Structure

- Monolithic, tubular, truncated conical element, with closing lids at the base and on the top.
- Made by centrifugation with fully automated machines that guarantee a constant and uniform production.

Characteristics

- Self-extinguishing. Resistant to chemical agents, to harmful and industrial environments, water resistant, UV resistant.
- Paintable, recoverable and reusable. The pole allows you to lift with rubber grappling hooks, to use studs and self-tapping screws. These poles are light and easy to carry.
- Zero environmental impact. They don't need maintenance.



Light FRC pole

Height L	underground I	Diameter D	Diameter d	hole hF	Weight	MAX Tensile strength on top before break
7000 mm	500/1500 mm	236 mm	115 mm	600 mm	27 KG	250 KG
8000 mm	500/1500 mm	250 mm	115 mm	600 mm	34 KG	250 KG

**TECHNICAL SPECIFICATION
Fiberglass Poles**

TECHNICAL DATA		
PERFORMANCE	Light Pole	Reinforced Pole
Temporary top deflection at 100KG strength	30-40 cm	30-30 cm
Temporary top deflection at 200KG strength	60-80 cm	50-70cm
Temporary top deflection at 300KG strength	-	90-110 cm
Temporary top deflection at 400KG strength	-	-
Self-extinguishing time		5 seconds
Thickness (average)	4mm	6mm



Specific	U.M.	Result	International Standard Rules for testing
Composition			
Reinforcing Glass Fiber	%	40	
Polyester Resin	%	60	
Appearance			
Specific weight	kg/dm ³	1.45±1.80	
Surface Hardness	Barcol degrees	≥ 40	UNI EN ISO 59:2016
Impact Shock Resistance	kg cm/cm ²	≥ 120 ≥ 55	UNI EN ISO 179-2:2013
Tensile Strength			
Traction	kg/cm ²	≥ 1200	UNI EN ISO 61
Compression	kg/cm ²	≥ 1200	UNI 4279
Flexion	kg/cm ²	≥ 1600	UNI EN ISO 14125:2000

Flexural Modulus of Elasticity	kg/cm ²	≥ 140000	UNI EN ISO 14125:2000
Water Absorption	%	≤ 1	UNI EN ISO 62:2008
Thermal Stability	C°	-45±80	
Impact Resistance Variations	%	±15	
Mechanical Properties Behaviour in changes of temperature	%	Df ≤ 15 EF ≤ 15	UNI EN ISO 14125:2000
Self-extinguishing	S	≤ 5	ASTM-D-635:2014
Ultraviolet Rays (UV) Resistance	H	72	EN ISO 4892-1:2016
Tolerance to Shock Resistance	%	± 2	UNI EN ISO 179-2:2013
Changes in Mechanical Properties	%	Df ≤ 2 EF ≤ 2	UNI EN ISO 14125:2000
Atmospheric and Chemical Agents Resistance			
Changes in Surface Hardness	%	≤ 25	UNI EN ISO 59:2016
Changes in Mechanical Properties	%	Df ≤ 10 EF ≤ 10	UNI EN ISO 14125:2000
Microorganisms Resistance			
Proliferation of Fungi	%	≤ 30	ASTM G 21-70
Changes in Surface Hardness	%	25	UNI EN ISO 59:2016
Changes in Mechanical Properties	%	Df ≤ 5 EF ≤ 5	UNI EN ISO 14125:2000
Electrical resistivity			
External	MΩ cm	≥ 10 ⁴	UNI EN ISO 4288:2000
Volume	MΩ cm	≥ 10 ⁵	UNI EN ISO 4288:2000

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