



Camouflage net support poles for MSCN and ULCANS systems

Lightweight composite support poles for military camouflage and concealment systems

Exel Composites designs and manufactures lightweight telescopic camouflage net support poles for military camouflage systems, including Multi-Spectral Camouflage Net (MSCN), Ultra-Lightweight Camouflage Net System (ULCANS) and broader multi-spectral concealment applications. The poles are designed for **rapid deployment**, **reliable handling** and **long service life** in demanding field conditions.

Composites for better camouflage performance

Effective military concealment depends on more than the camouflage net itself. The support system must be easy to transport, quick to deploy and strong enough to hold the net in the right shape across different terrain and weather conditions.

Exel's telescopic camouflage net support poles are used as support units for camouflage net systems and other military concealment applications. Our **global manufacturing footprint** and **scalable composite production** help customers source reliable support poles with consistent quality and repeatability.

Why composite support poles?

Lightweight for easy handling and deployment:

Our composite camouflage net support poles are designed to be lightweight, making them easier to transport, handle, adjust and deploy.

Fast, tool-free set-up:

The telescopic system is easy to adjust according to the required height. The locking mechanism clearly indicates open and closed positions and can be tightened by hand without tools.

Durable in harsh conditions:

The poles are designed for repeated field use and can tolerate sand, dust, mud, snow, heat and wet conditions. They can be washed with water when needed.

Corrosion-free performance:

Glass fiber reinforced composite does not rust, making the poles suitable for wet, humid and corrosive outdoor environments.

Smooth net shape for better concealment:

The spreader and rubber neck allow the camouflage net to flex and form a smoother, more natural shape without sharp edges or exposed shadows.

Multi-spectral system compatibility:

Non-metallic glass fiber composite combines low thermal conductivity with low RF attenuation, helping minimize unwanted thermal and electromagnetic signatures.

Scalable, consistent manufacturing:

Exel's pull-winding process supports efficient production of composite tubes with consistent dimensions and performance for demanding defense applications



Typical applications

- ♦ Military camouflage net systems for concealing personnel, vehicles, equipment and temporary military installations.
- ♦ MSCN, ULCANS and broader Multi-Spectral Signature Management (MSSM) support systems.
- ♦ Temporary field structures where systems need to be rapidly transported, deployed, dismantled and reused.
- ♦ Harsh-environment military operations involving sand, dust, mud, snow, heat, rain and moisture.

Technical snapshot

Feature	Specification
Product type	Telescopic camouflage net support pole / camouflage support unit
Exel product designation	CNSU – Camouflage Net Support Unit
Material	GFR composite / glass fiber reinforced composite
Manufacturing method	Pull-winding
Pole configuration	One-section to six-section configurations
Maximum height	Up to 9 m
Tube diameters	23, 30, 37, 44, 51 and 58 mm
Standard colors	NATO green and beige
Operating temperature	-30°C to +80°C
Lock material	Reinforced plastic joints, stainless steel screws
Ground foot material	Aluminum
Standards	NATO AECTP 230 compliant

System components

Component	Purpose
Telescopic pole sections	Glass fiber reinforced composite sections designed for lightweight, stiff telescopic performance.
Locking mechanism	A field-friendly locking system that indicates open and closed positions and can be tightened by hand without tools.
Spreader and rubber neck	Key components that help shape the camouflage net smoothly and reduce sharp angles and exposed shadows.
Ground foot	Designed to grip different ground types, from concrete to soft sand.
Step-on ring / step-on spring	Supports hoisting the pole and tightening the net. Depending on system version, it can support transportation, soft soil and hard soil positions.
Optional guy wire / guy ring	Can be used when additional stability is needed in high-wind conditions, special camouflage systems or sensitive installations.



Composite technology and manufacturing

The poles are manufactured using **pull-winding**, a continuous composite manufacturing process that combines longitudinal fibers with crosswise reinforcement. This allows the tube structure to be engineered for the right balance of stiffness, strength, impact resistance and low weight.

Pull-winding helps create durable, dimensionally consistent tubes that are easy to handle in the field while still providing the structural performance needed to support the net system.



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