

GLASFORMS™ ELECTRICAL COMPONENTS

Composite Materials for
Power Transmission and
Distribution Products

Extend the service life of electrical transmission and distribution products with Glasforms composite technologies.

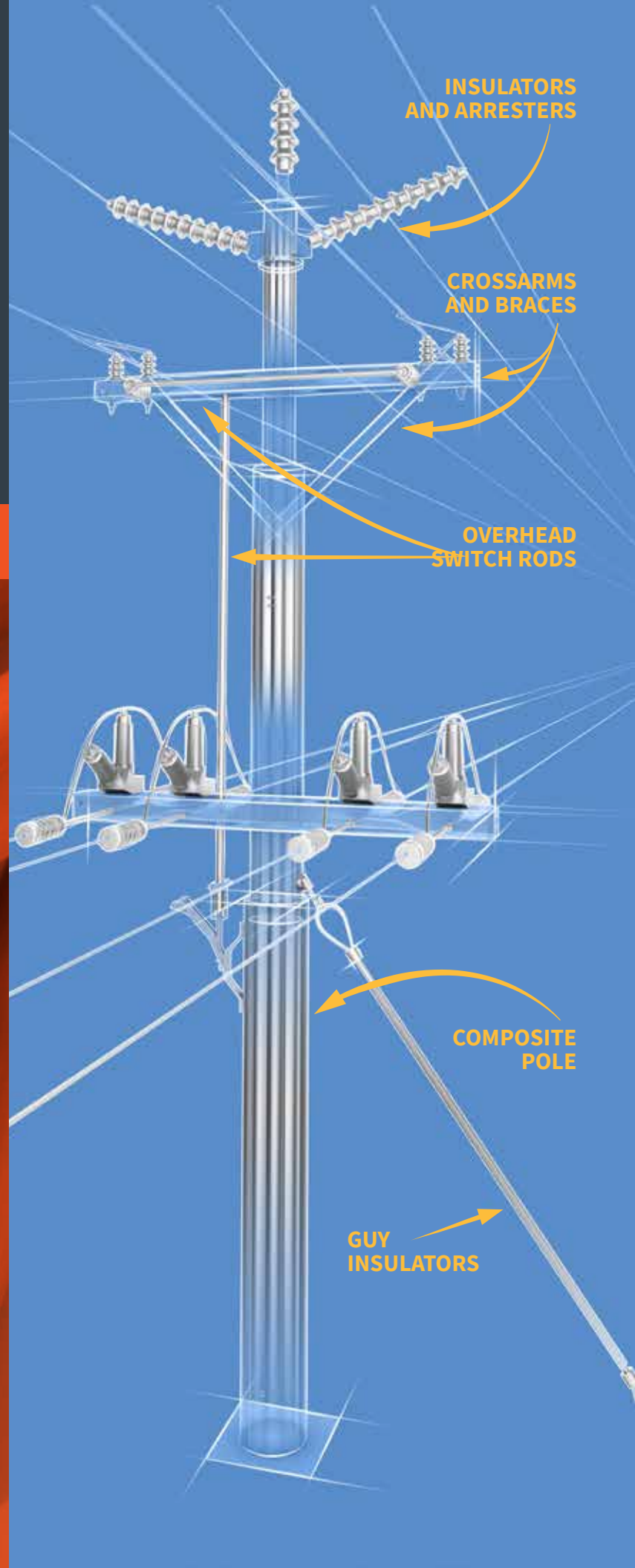
The formula: extensive electrical industry experience combined with pioneering composite technology expertise. The result? A diverse portfolio of purpose-engineered electrical components that meet the specific and rigorous demands of the electrical utility industry, and have been trusted by major utility product manufacturers for over 35 years.

KEY CHARACTERISTICS

Glasforms' automated pultrusion process creates constant cross-section profiles with consistent, uniform quality and exceptional dielectric and mechanical performance. Proprietary composite formulations and technologies prevent voids and produce high-quality cores that withstand stringent electrical testing and end-use manufacturing stresses such as thermal overmolding and mechanical crimping.

Performance advantages:

- Non-conductive: formulations engineered to optimize composite dielectric properties
- Lightweight: up to 80% lighter than porcelain, reducing installation time and cost
- High strength: high tensile, compressive, flexural and inter-laminar shear strength to support various design configurations and line loads
- Flexible: deflect and return to original shape for load dampening to minimize damages and outages
- Durable and shatter resistant vs. ceramic and glass, and UV and corrosion resistant for long service life



Electrical Transmission & Distribution Applications

COMPONENT	DESCRIPTION	SIZES
Insulators for transmission and distribution		
Suspension insulators	Epoxy/corrosion resistant glass rods	.625" to 1.25" diameter
Line post and station post insulators	Epoxy/glass fiber rods	1.50" to 4.74" diameter
Arresters		
Cage type	Vinyl ester/glass fiber rods	.125" to .50" diameter
Custom tubular	Polyester, vinyl ester or epoxy/glass fiber custom shapes	2.0" to 6.0" envelope size
Pole line construction		
Conductor standoff and equipment support arms	Polyester/glass fiber rods	1.50" to 2.00" diameter
Guy strain insulators	Polyester/glass fiber rods	0.50" to .812" diameter
Cross arms		
Tangent and deadend, support braces	Polyester/glass fiber rectangular tubes	3.62" x 4.62" and 4.0" x 6.0" rectangular
Utility poles		
Composite poles	Polyester/glass fiber hollow custom tubes	10" to 14" diameter, typical lengths 40' to 110'

Pole line construction, cross arms and utility poles feature an integral fabric surfacing veil for long-term weather resistance and retention of properties. Mechanical properties and specifications are available—please contact Avient.





To learn more about our solutions, contact us at +1.844.4Avient

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