

ALPHA STRUT™

ALPHA STRUT™ is Park Electrochemical Corp.'s proprietary composite strut. The ALPHA STRUT design combines light-weight composite materials with Park's proprietary end-fitting which is co-cured into each end of the strut without the use of adhesives. This creates an axial load carrying component which is suitable for a variety of aircraft and other aerospace high to medium load bearing applications. The ALPHA STRUT design provides significant weight savings compared to metal struts and other composite struts.



Example of a rod end incorporated into Park's ALPHA STRUT™

KEY FEATURES & BENEFITS

- Utilizes light-weight composite materials
- Proprietary end-fitting eliminates the use of adhesives and/or fasteners
- Available in custom loads, lengths and diameters

APPLICATIONS

- Primary and Secondary Aircraft Structures
- Tie Rods
- Push/Pull Control Rods
- Monument Bracing
- Truss Structures
- Bulkheads
- Other Aerospace High to Medium Load Bearing Applications

PRODUCT FORMS

- Working tensile/compressive loads to 1,100 lbs (489 daN)
- Typical lengths ranging from 6" to 30" (152-762mm)
- Typical diameters ranging from 0.5" to 1.5" (13-38mm)
- Other loads, lengths and diameters are available



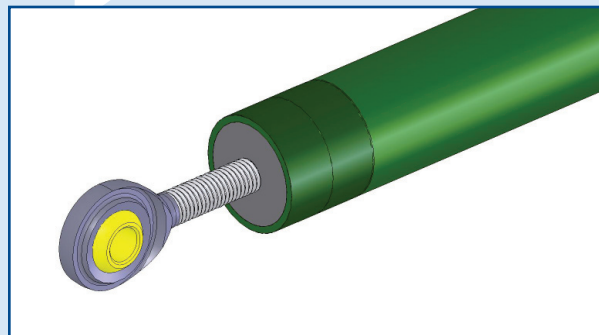
Park's ALPHA STRUT™



PARK
ELECTROCHEMICAL
CORP.

PARK'S PROPRIETARY END-FITTING DESIGN

Park's proprietary end-fitting is co-cured into each end of the strut without the use of adhesives. This technique creates an axial load carrying component which can be fitted with a variety of threaded rod end bearings, clevises, etc. The picture to the right illustrates an end-fitting with a spherical rod end bearing.



SAMPLE ALPHA STRUT SPECIFICATIONS

Dimensions			Loads		Weight	
Tube Length	Strut Outer Diameter (ref)	Strut Wall Thickness (ref)	Tension Limit / Ultimate Load	Compression Limit / Ultimate Load	ALPHA STRUT™	ALPHA STRUT™ (with rod ends)
6 inches (152 mm)	0.538 inches (13.7 mm)	0.017 inches (0.4 mm)	1,100 / 2,200 lbs (489 / 979 daN)	1,100 / 2,000 lbs (489 / 979 daN)	0.08 lbs (36 g)	0.18 lbs (82 g)
18 inches (457 mm)	0.845 inches (21.5 mm)	0.050 inches (1.3 mm)	1,100 / 5,400 lbs (489 / 2,400 daN)	1,100 / 2,000 lbs (489 / 979 daN)	0.34 lbs (154 g)	0.44 lbs (200 g)
30 inches (762 mm)	1.181 inches (30 mm)	0.058 inches (1.5 mm)	1,100 / 5,400 lbs (489 / 2,400 daN)	1,100 / 2,000 lbs (489 / 979 daN)	0.75 lbs (340 g)	0.85 lbs (386 g)

ABOUT PARK

Park Electrochemical Corp. is a global advanced materials company which develops and manufactures high-technology digital and RF/microwave printed circuit materials principally for the telecommunications and internet infrastructure and high-end computing markets and advanced composite materials, parts and assemblies for the aerospace markets. Park's core capabilities are in the areas of polymer chemistry formulation and coating technology. The Company's manufacturing facilities are located in Singapore, France, Kansas, Arizona and California. The Company also maintains R & D facilities in Arizona, Kansas and Singapore.

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