

# comp-ds™ insight

### **Overview**

The Comp-DS driveshaft is a completely new, technologically advanced design, intended to meet or exceed the most rigorous cooling tower specification requirements.

## **Primary Benefits**

- Durable The Marley Comp-DS is the only cooling tower driveshaft\* using carbon-fiber flexible elements. Addax® driveshafts use only fiberglass
- Carbon Fiber Up to 70% stronger per unit weight than fiberglass and three times more rigid
- Lightweight One third the weight of an equivalent stainless steel driveshaft
- Low Maintenance Fewer corrosion-resistant components

### Benefit Detail

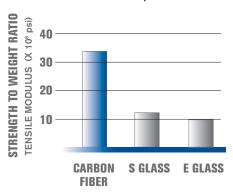
#### Durable

- Polyurethane encased carbon-fiber flexible elements withstand rigorous cooling tower duty
- Composite tube with infused UV inhibitors provides outstanding resistance to sun exposure
- Stress reduction is achieved with unique geometry of resin-transfer molded flanges
- Light weight, single piece 316 stainless steel billet hub limits operating stress





### Flex Element Material Comparison



Source: Engineered Materials Handbook, Volume 1, Composites, First Edition, ASM International

### Tube UV Resistance Test



UV chamber test results comparison after six weeks

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### **Benefit Detail**

### Lightweight:

- Reduced weight yields less vibration and lower inertia to prolong the life of the air movement mechanical package
- Faster installation time without the use of a hoisting crane

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- The single piece unitized flexible element requires four cap screws to secure the flex element to the flange
- Corrosion-resistant composite tube, flanges and flex element along with stainless steel hubs and hardware have a long lifespan, even in direct sunlight
- The unitized flexible element installs more quickly then rubber bushing insert designs

### **Features**

- Patented flex element patent 8317628
- The composite-wound tube is available in four configurations optimized for specific applications:
  - Fiberglass
  - Fiberglass/carbon fiber hybrid
  - Carbon fiber
  - High modulus carbon fiber
- 316 stainless steel hardware

# **Application Range**

COMP-4: 200 hp at 1500 and 1800 rpm

spans up to 30 ft diameter fan

COMP-6: 300 hp at 1500 and 1800 rpm

spans up to 36 ft diameter fan

driveshaft type	weight		
Stainless Steel	177 lb		
Comp-DS composite	52 lb		

Assuming 10 ft overall driveshaft length



Patented Flex Element

### **Key Contacts**

Visit spxcooling.com/sales to find your local Marley representative



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