

Optimized for Efficiency
Engineered Hardware



Lifting Specialists



Designing and providing custom hardware solutions for onshore, offshore and subsea applications

During the last decade, high-performance synthetic fiber lifting slings have been providing compelling improvements to operational efficiency and workforce safety over traditional steel wire rope slings. Both heavy equipment, and operations, benefit from advantages of synthetic fiber slings.

However, conventional hardware used on large and critical lifting projects have historically been a limiting factor.

We design and provide optimized hardware solutions that reduce weight, rigging complexity, and deliver safety improvements. By taking into consideration the overall operation, installation, disconnection, and any redundancies, we deliver an optimized lifting arrangement that is safer and more efficient.



Operational efficiency and safety

Lightweight materials and exacting interfacing hardware can reduce rigging complexity and weight, providing compelling improvements to operational efficiency and workforce safety.

Reduction of rigging complexity

The more rigging components that can be replaced with a specialty hook and synthetic solution, the simpler the rigging arrangement. The simpler the rigging, the less issues and frequently the less time needed to rig.

Optimized geometries

We combine hardware and sling geometries for an optimal solution between connections, versus an assortment of standard components used to just make the connection work.

Specialized functionality

Specialized functionality can be incorporated into a custom hardware solution: ROV handle, nose extension, or specialty latching for instance. Any accessory can be created to be removable for pull-in activities or maintenance.

The strength of slings is 100% related to how they interface with other pieces of equipment

For all slings, the sharper the edge, the lower the capacity.

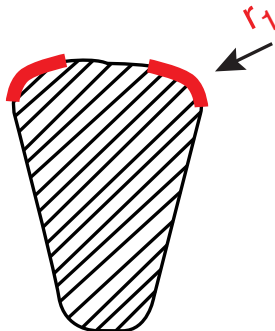
The strength of slings is 100% related to how they interface with other pieces of equipment. The same sling might have different Working Load Limits (WLL) based on the pin it interfaces with.

At Cortland we specialize in designing synthetic friendly hardware with large gentle edges that maximize the capacity of your synthetic slings.

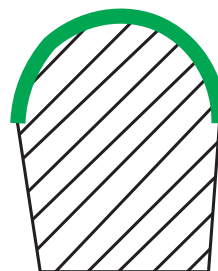
Hardware that has a consistent radius across the full bearing contact area means the load on the sling is distributed evenly. Because the load is distributed evenly, it is not necessary to reduce the WLL on the sling.

Integrated Solutions

- We have designed and produced hooks that increase the bending radius in the sling zone, which improves the working efficiency of high-performance synthetic fiber lifting slings
- We have built hardware specifically for i-tube and j-tube pull-in operations, reducing clashing opportunities
- We have added aspects such as anti-snap shackles, and tools that center the load path
- Any design can be made to interface with connecting hardware



A DIN hook has an inconstant (not smooth) bearing profile in which the smallest radii in the profile must be taken into consideration when calculating the MBL or bending loss in a sling.



Cortland offers custom synthetic-friendly hardware solutions, with smooth and constant bearing profiles in sling contact areas, for load handling challenges.

Product Range



Design flexibility

We provide customers with purpose-built solutions engineered for specific applications. We offer a comprehensive range of hardware solutions perfectly matched to work with synthetic fiber ropes and lifting slings.

Our custom hardware designs can deliver rigging arrangement simplicity while providing performance and reliability assurance. Hardware can be designed to incorporate additional functionality such as quick connect/disconnect, hand-off connections or ROV interfaces. Hardware solutions are engineered and tested to meet specific design criteria and provide customers with assurance of safe and reliable performance.

Our hardware solutions include but are not limited to:

- Bolt to Fiber Hooks (BFH)
- Fiber to Fiber Hooks (FFH)
- Load Transfer Hooks (LTH)
- Double Hooks (DH)
- Specialty Hooks
- Delta Plates
- Plate Shackles
- Sheave Assemblies
- Subsea Hardware

Engineered hardware for specific operations, to achieve safer and more efficient lifts



Experience the benefit of smart engineering.

Our team is constantly working to develop creative hardware solutions optimized to interface with synthetic rope and round slings, and tether systems. We design unique tools that improve the safety and efficiency of rigging and lifting processes and deliver full equipment sets to outfit a specific project or ship's capacity requirements.

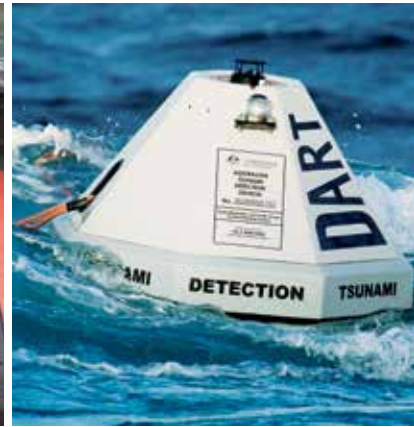
We have decades of engineering experience across various industries, including aerospace, defense, research, subsea, marine, and energy. Everything we do is designed to help our customers achieve the ultimate in rigging design and production efficiency, without ever making compromises in safety or quality.

To find out more about our technology and expertise in creating engineered hardware alternatives for lifting applications, email cortland@cortlandcompany.com, or visit us online at cortlandcompany.com.

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Cortland is a global designer, manufacturer, and supplier of technologically advanced ropes, slings, and strength members. Collaborating with customers, our team uses its experience in high performance materials and market knowledge to transform ideas into proven products.

For more than 35 years, our custom-built solutions have been developed for work in the toughest environments and to overcome some of the world's greatest challenges. They consistently enable our customers to meet the demands of the aerospace, defense, research, subsea, marine, and energy industries.

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