AeroLock™ Synthetic Connector

A safer, stronger, superior soft connector

For the longest time there was one type of shackle to use, made from steel. Advancements in synthetic ropes have brought about soft shackle designs. Soft shackles effectively remove a very heavy and potentially lethal standard metal shackle from the load path. But the strength of most existing soft shackles relies heavily on a knot, and knots can fail. They also become hard to undo once used. Additionally, most conventional soft shackles are not designed to interface with ropes that have similar breaking strengths.

Light, Safe, Secure

Meet the contender to knotted soft shackles. No longer do you need to worry about a knot which creates unpredictable results and wastes material. Introducing the AeroLock™ Connector from Cortland. With working load limits from 22,050–176,400 lbs. and a minimum breaking strength of 110,250–882,000 lbs., these products are ideal for a wide range of commercial marine, mining, and industrial towing applications.

Patent pending and light and flexible, AeroLock™ Connectors can be opened and closed quickly without the need for any additional equipment and are self-locking under load. To address friction and abrasion, they feature a braided SX jacket for enhanced abrasion resistance, ensuring long-lasting durability in the toughest environments.

Backed by Extensive Testing

As with any new technology, rigorous testing for both safety and efficacy is essential.

Testing included more than 15,000 cycles at WLL and 2.5x WLL at 1:1 D:d ratios. It also included tension fatigue testing and break testing to ensure reliability in all conditions. All testing was conducted with rope-on-rope connections to simulate field usage. During testing, Cortland's engineering team ensured that the ropes being connected did not lose strength due to being connected to the AeroLock™ as opposed to conventional soft shackles.

The results? The AeroLock™ increased in strength with minimal wear to its durable jacket.

Features

- Safer than a steel or synthetic knot shackle
- More secure and reliable than a conventional soft shackle
- Lighter than a conventional soft shackle
- Patent pending UHMWPE fiber core construction design and technology**
- Thoroughly tested to meet design and safety standards
- Lightweight and flexible
- Easy to handle, install and remove
- Excellent energy absorption for safety
- The eye fits easily around the pin

Applications

- Towing
- Winchline recovery
- This product has not been designed or specified for use in overhead lifting applications

AeroLock™ Connector

CORTLAND™
A CORTLAND INTERNATIONAL COMPANY

AeroLock™ Synthetic Connector

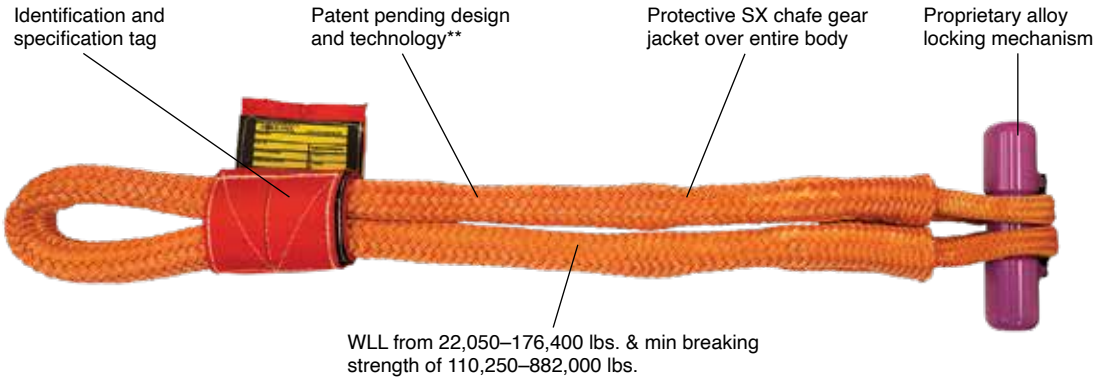
Technical Information

materials	**UHMWPE**
construction	**Patent-pending**
jacket	**Heavy duty UHMWPE cut-resistant braided cover**
capacity	**10–80 Te WLL**

Replace your connections with the security of traditional rigging, but all the benefits of lightweight fiber.

	Working Load*		Min. Breaking Load**		Weight		Standard Length +		Leg Dia.		Min. Connection Dia.	
Part Number	MT (tonnes)	lbs	MT (tonnes)	lbs	kg	lbs	mm	in.	mm	in.	mm	in.
SYNTH CONN 10TE	**10**	22,050	50	110,250	1.2	2.7	305	12	29	1.15	29	1.15
SYNTH CONN 15TE	**15**	33,075	75	165,375	2.7	5.9	405	16	35	1.38	35	1.38
SYNTH CONN 25TE	**25**	55,125	125	275,625	4.8	10.5	510	20	48	1.88	48	1.88
SYNTH CONN 33TE	**33**	72,765	165	363,825	5.4	12.0	660	26	53	2.1	53	2.1
SYNTH CONN 45TE	**45**	99,225	225	496,125	9.6	21.2	660	26	58	2.3	58	2.3
SYNTH CONN 55TE	**55**	121,275	275	606,375	13.5	29.8	810	32	66	2.6	66	2.6
SYNTH CONN 80TE	**80**	176,400	400	882,000	21.1	46.6	960	38	80	3.1	80	3.1

** Based on 5:1 Factor of Safety*
*** Based on D:d of 1:1 - compare to competitive solutions at higher D:d*
+ Standard length measured from load bearing to load bearing points
Additional sizes available upon request



Please email contact@cortlandinternational.com for an initial discussion or visit us online at cortlandinternational.com.