



SYNTHETIC WINCH LINES

STEEL-LIKE STRENGTH.
DRAMATICALLY LESS WEIGHT.



Cortland International's braided synthetic ropes and slings are a safer, lighter alternative to steel wire rope for winch and belt-pulling applications. Ideal for winching longwall shields and pulling conveyor belts, they help reduce handling injuries, eliminate rust and lubrication issues, and avoid wire rope problems like kinking and bird-caging.

Made from high-performance UHMWPE fiber, Cortland ropes deliver equal or greater strength than wire rope size for size, with easier handling, smooth spooling, and lower maintenance.

Features

- Equal or greater strength than steel wire rope, size for size
- Up to 70% lighter for easier handling
- Torque-free construction for smooth, even spooling
- Reduced recoil risk in the event of failure
- RFID capability available
- Slings tag-certified to ASME B30.9 standards

Benefits

- Safer operations
- Reduced handling-related injuries
- Less maintenance
- Increased productivity
- Lower downtime
- Improved profitability

Safer. Lighter. More efficient.



SYNTHETIC WINCH LINES

Plasma® 12-Strand Winch Lines

Plasma® 12-Strand Winch Lines				Steel Wire Rope (6x19 or 6x36 IPS)		
Dia. Size (in.)	Wt. / foot (lbs.)	MBS (lbs.)	WLL (@5:1)	Dia. Size (in.)	Wt. / foot (lbs.)	MBS (lbs.)
5/8	0.106	54,100	10,280	5/8	0.66	33,400
3/4	0.133	68,500	13,700	3/4	0.95	47,600
13/16	0.159	74,000	14,800			
7/8	0.196	92,600	18,520	7/8	1.29	64,400
1	0.234	110,000	22,000	1	1.68	83,600
1-1/8	0.319	147,000	29,400	1-1/8	2.13	105,200
1-1/4	0.362	165,000	33,000	1-1/4	2.63	129,200
1-5/16	0.417	196,000	39,200			
1-1/2	0.517	221,000	44,200	1-1/2	3.78	184,000

Plasma® specifications are based on splice-terminated ropes.

Plasma® 12-Strand winch lines are available in bulk lengths on reels or in cartons, or splice-fabricated to order. Wire rope specifications based on Wire Rope Sling User's Manual – Third Edition – Wire Rope Technical Board



Endless Loop Fabrication Plasma® 12-Strand Bridle Slings

Plasma® 12-Strand rope fabricated into an endless loop sling. Entire sling is encased in a braided synthetic fiber wear-protection covering; either Cortland SX (UHMWPE) or polyester. Each sling is tag-certified.

Specifications		Sling Rated Capacities @ 5:1 WLL (lbs.)	
Dia. Size (in.)	MBS	Vertical	
5/8	84,810	16,900	
3/4	113,025	22,600	
13/16	122,100	24,400	
7/8	152,790	30,500	
1	181,500	36,300	
1-1/8	242,550	48,500	
1-1/4	272,225	54,400	
1-5/16	323,400	64,000	
1-1/2	364,650	72,000	

Plasma® specifications are based on endless loop (grommet) fabrication using one end-for-end splice.

Plasma® endless loop (grommet) lifting slings conform to ASME B30.9 Synthetic Rope Lifting Sling Standards. Standard truck bridle length is 14' OAL (overall length).



Email contact@cortlandinternational.com for an initial discussion, or visit us online at cortlandinternational.com.