



## Truck bridles and winch lines as strong as steel but 70% lighter

Truckers can now safely replace their steel wire rope winch lines and bridle slings with Cortland Plasma<sup>®</sup> braided synthetic rope products. Plasma<sup>®</sup> ropes and slings offer a safer, more productive means of winching up heavy loads on flat-bed trucks. No more back and “fish-hook” handling injuries, rust, corrosion, grease and re-lubing, worries of crushed or deformed wire strands. Plasma<sup>®</sup> torque-free braided ropes and slings do the job better than wire rope...and in a safer manner.

Plasma<sup>®</sup> winch lines spool evenly and provide greater *pulling power* than heavy wire rope. Endless loop Plasma<sup>®</sup> lifting slings offer the safety and security needed to move heavy loads in the mining and oil & gas industry. In size-for-size comparison, Plasma<sup>®</sup> rope products are stronger than wire rope. No more worries of wire rope kinks or “bird-caging”. And endless loop Plasma<sup>®</sup> lifting slings are much more durable and cut-resistant than conventional synthetic fiber round slings.

Plasma<sup>®</sup> 12 Strand braided ropes offer the highest strength to weight ratio of any synthetic fiber rope. Manufactured from high performance High Modulus PolyEthylene (HMPE) fiber, Cortland's patented recrystallization process produces a very high strength rope with very low stretch. Plasma<sup>®</sup> represents the most durable and cut-resistant alternative to steel wire rope with user-friendly flexibility and handling. UV resistance is also a key feature of Plasma<sup>®</sup> ropes.

**Trust Cortland for proven rope performance to increase productivity, efficiency and ultimately profitability.**

### Features

- Equal or greater strength for wire  
SIZE FOR SIZE
- Significantly lighter than wire, reducing handling weight and lifting related injuries
- Reduced risk of recoil if failures should occur
- Easier on hands than wire rope—increasing user safety
- RFID capability
- Plasma<sup>®</sup> slings are tag-certified to ASME B30.9 rope lifting standards

### Benefits

- Increased productivity
- Increased efficiency
- Safer operations
- Ultimately, increased profitability



# Plasma® truck bridles and winch lines

## Plasma® 12 Strand Winch Lines

Plasma® 12 Strand Winch Lines				Steel Wire Rope (6x19 or 6x36 IPS)		
Dia. Size	Wt. / foot (lbs.)	MBS (lbs.)	WLL (@5:1)	Dia. Size	Wt. / foot (lbs.)	MBS (lbs.)
15.875mm	0.106	51,400	10,280	15.875mm	0.66	33,400
19.05mm	0.133	68,500	13,700	19.05mm	0.95	47,600
20.637mm	0.159	74,000	14,800			
22.225mm	0.196	92,600	18,520	22.225mm	1.29	64,400
25.4mm	0.234	110,000	22,000	25.4mm	1.68	83,600
28.575mm	0.319	147,000	29,400	28.575mm	2.13	105,200
31.750mm	0.362	165,000	33,000	31.750mm	2.63	129,200
33.337mm	0.417	196,000	39,200			
38.1mm	0.517	221,000	44,200	38.1mm	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 chafe covering; either Cortland SX (HMPE) or polyester. Each sling is tag-certified.

Specifications		Sling Rated Capacities @ 5:1 WLL (lbs.)	
Dia. Size	MBS	Vertical	
15.875mm	84,810	16,900	
19.05mm	113,025	22,600	
20.637mm	122,100	24,400	
22.225mm	152,790	30,500	
25.4mm	181,500	36,300	
28.575mm	242,550	48,500	
31.750mm	272,225	54,400	
33.337mm	323,400	64,000	
38.1mm	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 4.2672m OAL (overall length)