CORTLAND INTERNATIONAL™

WINCH LINES AS STRONG AS STEEL

BUT 70% LIGHTER

High-performance synthetic rope for industrial applications.

Cortland International's winch lines deliver a stronger, safer, and more efficient alternative to traditional steel wire rope for demanding industrial operations. Engineered from high-performance UHMWPE fibers, these winch lines offer equal or greater strength than steel on a size-for-size basis, matching steel wire rope diameter while significantly reducing weight and handling risks.

Designed to improve productivity and reduce downtime, UHMWPE winch lines provide superior flexibility, making them easier to install, spool, and pull from the drum. Unlike steel wire rope, UHMWPE does not rust, corrode, or develop dangerous fish-hooks, and it is easier to visually inspect for wear and damage, supporting safer operations and faster maintenance checks.

UHMWPE winch lines spool evenly, pull smoothly, and handle predictably under load, delivering reliable performance shift after shift. Their lightweight construction reduces operator fatigue, minimizes equipment wear, and contributes to faster, safer job execution.

Strong. Safe. Reliable—every time.
Trust Cortland International for proven high-performance rope solutions engineered to perform in the toughest industrial environments.

Features
- Equal or greater strength than steel wire rope, size-for-size
- Significantly lighter weight, reducing handling effort
- Reduced recoil risk in the event of failure
- Easier on hands, improving operator safety and comfort
- RFID capability for asset tracking and inspection management

Benefits
- Increased productivity
- Improved operational efficiency
- Enhanced safety performance
- Lower total cost of ownership and increased profitability

Winch Lines & Bridles

Plasma® Winch Lines

Rope Size (diameter)	Minimum Tensile Strength (lbs.)	Working Load Limit (lbs. at 5:1 safety factor)	Weight per 100 feet (lbs.)
1"	110,000	22,000	23.4
1-1/8"	147,000	29,400	31.9
1-1/4"	165,000	33,000	36.2
1-5/16"	196,000	39,200	41.7
1-1/2"	221,000	44,200	51.7

Plasma® Bridles

Rope Size (diameter)	Minimum Tensile Strength (lbs.)	Minimum Tensile Strength (kN)	Working Load Limit (lbs.)	Weight per 100 Feet (lbs.)
1"	110,000	489.3	22,000	23.4
1-1/8"	147,000	653.9	29,400	31.9
1-1/4"	165,000	734.0	33,000	36.2
1-5/16"	196,000	871.9	39,200	41.7
1-1/2"	221,000	983.1	44,200	51.7

Endless Plasma® Bridles

Rope Size (diameter)	Minimum Tensile Strength (lbs.)	Minimum Tensile Strength (kN)	Working Load Limit (lbs.)
1"	176,000	782	35,200
1-1/8"	235,200	1,046	47,000
1-1/4"	264,000	1,174	52,800
1-5/16"	313,600	1,394	62,700
1-1/2"	353,600	1,572	70,700

Compared to Wire Rope

Powerflex 6x36IWRC

Wire Size (diameter)	Nominal Breaking Load (lbs.)	Working Load Limit (lbs. at 5:1 safety factor)	Weight per 100 Feet (lbs.)
1"	114,870	22,970	201
1-1/16"	127,460	25,490	210
1-1/8"	142,970	28,510	254
1-1/4"	175,570	35,110	319

Blue Strand Wire Rope

Wire Size (diameter)	Nominal Breaking Load (lbs.)	Working Load Limit (lbs. at 5:1 safety factor)	Weight per 100 Feet (lbs.)
1"	103,410	20,680	180
1-1/8"	129,940	25,980	234
1-1/4"	159,840	31,960	289
1-3/8"	191,980	38,390	350
1-1/2"	227,950	45,590	416

CORTLAND INTERNATIONAL™