



MINING SOLUTIONS

Towing & Recovery / Lifting / Winching



Tie in to the superior performance of Samson synthetic rope for mining.

Mines rely on heavy equipment. When vehicles get stuck, it costs time, and in the mines, time is money. Wire and chain towlines used to free vehicles are difficult to work with because of their weight and inflexibility; and they can cause serious injury if they break. Samson's synthetic ropes offer a superior solution, both in terms of efficiency and safety.

Samson synthetic ropes are equal in strength or stronger than wire and chain, at a fraction of the weight. This revolutionary strength-to-weight ratio radically reduces manpower requirements, equipment demands, and exposure to hazards. As a result, Samson synthetics are far easier to manage, and significantly safer to deploy for:

- Material Handling Winch Lines
- Belt Pull-In Ropes
- Recovery and Towing Assemblies
- Body Tray Slings, Truck Bed Tie-Downs
- General Wire Rope Replacement

Haul Truck
Estimated weight 50 tons
(unloaded)

SAFER

With lighter synthetic rope you achieve
Safer handling / Reduced sparking /
Reduced injury due to recoil / No fish
hooks / No kinking in lines

LIGHTER

The same strength as steel, but
85% lighter, yielding the maximum
strength-to-weight ratio.



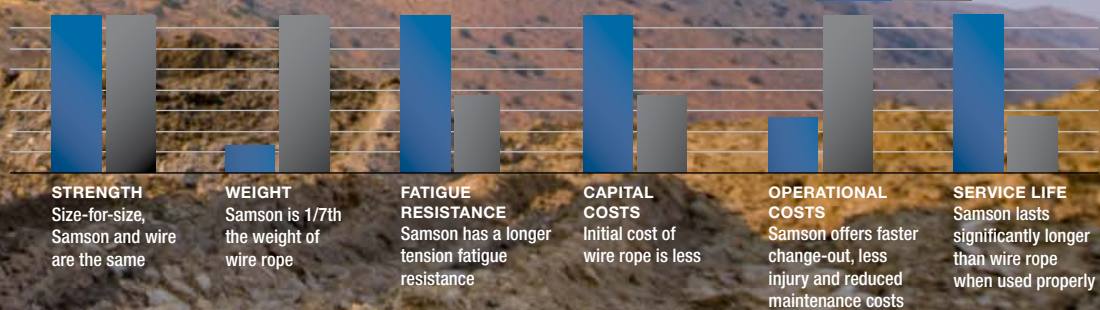
Panther Recovery Slings

20 ft long / 3.5 inch diameter / 32.7 lbs

6.0 m / 90 mm diameter / 14.9 kg

HMPE Chafe Protection

COMPARISON Samson high-performance synthetics vs wire rope



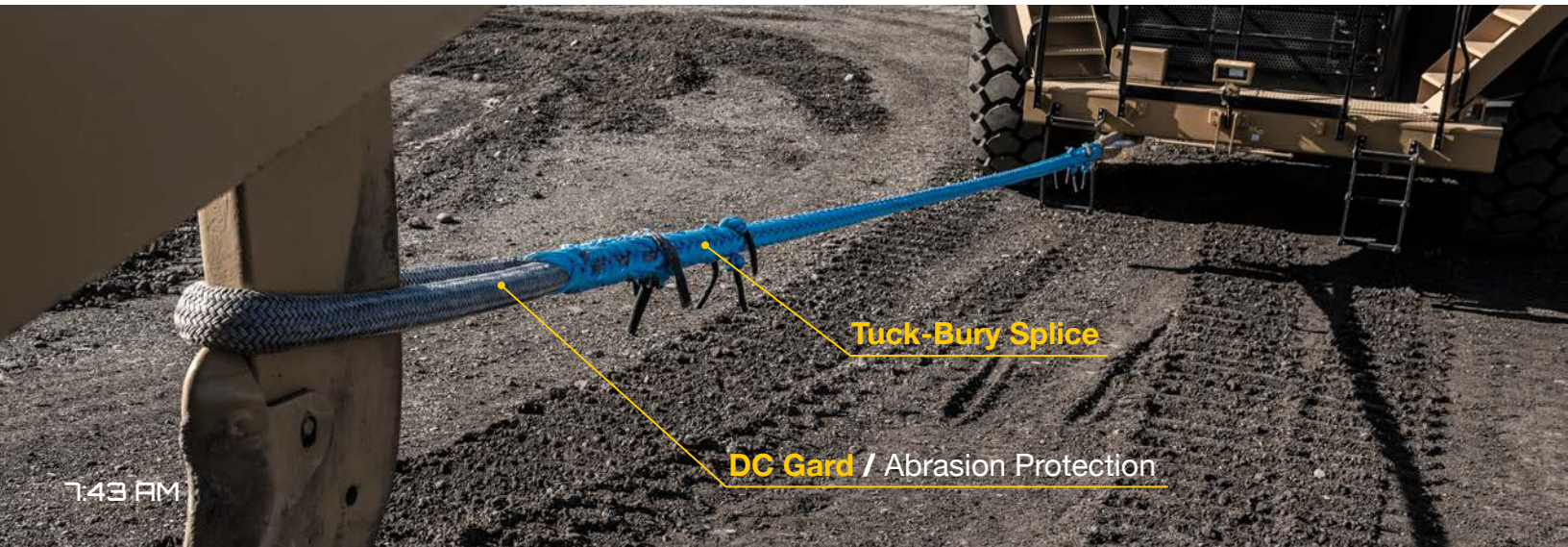
FASTER

Our lightweight rope construction and ease of handling means faster change-outs and less downtime.

EASIER

Increased operational efficiency /
Reduced line change-outs /
Prolonged service life / Strong distribution network

Samson Dramatically Reduces Change-Out Times



Proven to outlast wire and chain

In mines that have switched to Samson high-performance synthetics, users report that properly utilized ropes last significantly longer than the wire they replace, are much safer to handle, and easier to maintain. Change-out operations are much quicker, and the absence of metal-on-metal damage significantly extends equipment life.

Gain the certainty of sound guidance

What are your operational priorities? Which performance and value criteria must our rope meet to make sound business sense to you? Working in tandem with our distributors, we take the time to thoroughly support you in effectively selecting and deploying the right working-line solutions. This makes your transition away from conventional wire and chain a smooth and seamless one.

As a Samson customer you're backed by the complete Samson engineering and service teams. We support you every step of the way, from product selection and installation, to on-site training, maintenance, and replacement. This ensures that you gain superior performance, not just in the mine, but on your bottom line as well.

Expertise in innovation

Samson has already led synthetic rope innovation in aerospace, offshore drilling, tanker mooring, and other industries. Now, as the mining industry embraces the benefits of synthetic rope solutions, Samson is the ideal partner to guide you into this new era. We've revolutionized new rope technologies for more than 140 years—we're here to support you for the long haul.



Strong, lightweight *Panther*, Samson's fabricated recovery tow sling, helps reduce manpower requirements and safety concerns on your site.

Mine the bottom-line benefits of our superior synthetic rope solutions. Contact a Samson technical specialist today.

AmSteel®-Blue / High-Performance Synthetic Rope PRODUCT CODE 872



Same strength as wire and chain, yet 85% lighter

AmSteel®Blue is a torque-free, 12-strand single braid that yields the maximum in strength-to-weight ratio and, size-for-size, is the same strength as steel—yet it floats. AmSteel®Blue is an excellent wire rope replacement with extremely low stretch, plus superior flex fatigue and wear resistance.

- Increased efficiency of manpower
- Faster change-outs for less downtime
- Comparable elastic elongation to wire
- Easy inspection and field splicing
- Virtually corrosion-proof
- Low maintenance
- Increased safety

DIAMETER INCHES	CIRCUMFERENCE INCHES	WEIGHT PER 100 FT. POUNDS	AVERAGE STRENGTH* POUNDS	MINIMUM STRENGTH* POUNDS	DIAMETER MILLIMETERS	CIRCUMFERENCE MILLIMETERS	WEIGHT PER 100 m KILOGRAMS	AVERAGE STRENGTH* KILOGRAMS	MINIMUM STRENGTH* KILOGRAMS
1/2"	1-1/2"	5.9 lb	34,000 lb	30,600 lb	12 mm	36 mm	8.8 kg	15,400 kg	13,900 kg
3/4"	2-1/4"	13.3 lb	64,400 lb	58,000 lb	18 mm	54 mm	19.8 kg	29,200 kg	26,300 kg
13/16"	2-1/2"	17.0 lb	82,000 lb	73,800 lb	20 mm	60 mm	25.3 kg	37,200 kg	33,500 kg
7/8"	2 3/4"	19.6 lb	90,800 lb	81,700 lb	22 mm	66 mm	29.2 kg	41,200 kg	37,100 kg
1"	3"	21.8 lb	109,000 lb	98,100 lb	24 mm	72 mm	32.4 kg	49,400 kg	44,500 kg
1-1/16"	3-1/4"	27.5 lb	134,000 lb	121,000 lb	26 mm	78 mm	40.9 kg	60,800 kg	54,700 kg
1-1/8"	3-1/2"	31.9 lb	148,000 lb	133,000 lb	28 mm	84 mm	47.5 kg	67,100 kg	60,400 kg
1-1/4"	3-3/4"	36.2 lb	165,000 lb	149,000 lb	30 mm	90 mm	53.9 kg	74,800 kg	67,400 kg
1-5/16"	4"	41.8 lb	185,000 lb	167,000 lb	32 mm	96 mm	62.2 kg	84,000 kg	75,600 kg
1-3/8"	4-1/8"	45.0 lb	205,000 lb	185,000 lb	34 mm	100 mm	67.0 kg	93,000 kg	83,700 kg
1-1/2"	4-1/2"	51.7 lb	228,000 lb	205,000 lb	36 mm	108 mm	76.9 kg	103,000 kg	93,100 kg
1-5/8"	5"	65.2 lb	283,000 lb	255,000 lb	40 mm	120 mm	97.0 kg	128,000 kg	116,000 kg
1-11/16"	5-1/4"	71.0 lb	307,000 lb	276,000 lb	42 mm	126 mm	106 kg	139,000 kg	125,000 kg
1-3/4"	5-1/2"	78.4 lb	335,000 lb	302,000 lb	44 mm	132 mm	117 kg	152,000 kg	137,000 kg
2"	6"	87.0 lb	381,000 lb	343,000 lb	48 mm	144 mm	129 kg	173,000 kg	156,000 kg
2-1/4"	7"	116 lb	537,000 lb	483,000 lb	56 mm	168 mm	173 kg	244,000 kg	219,000 kg
2-1/2"	7-1/2"	148 lb	588,000 lb	529,000 lb	60 mm	180 mm	220 kg	267,000 kg	240,000 kg
2-5/8"	8"	167 lb	662,000 lb	596,000 lb	64 mm	192 mm	248 kg	300,000 kg	270,000 kg
2-3/4"	8-1/2"	187 lb	735,000 lb	662,000 lb	68 mm	204 mm	278 kg	333,000 kg	300,000 kg
3"	9"	206 lb	832,000 lb	749,000 lb	72 mm	216 mm	307 kg	377,000 kg	340,000 kg
3-1/8"	9-1/2"	228 lb	920,000 lb	828,000 lb	76 mm	228 mm	339 kg	417,000 kg	376,000 kg
3-1/4"	10"	240 lb	1,007,000 lb	906,000 lb	80 mm	240 mm	357 kg	457,000 kg	411,000 kg
3-1/2"	10-1/2"	295 lb	1,170,000 lb	1,053,000 lb	86 mm	254 mm	439 kg	531,000 kg	478,000 kg
3-5/8"	11"	340 lb	1,459,000 lb	1,313,000 lb	88 mm	264 mm	506 kg	662,000 kg	596,000 kg
3-3/4"	11-1/4"	362 lb	1,627,000 lb	1,464,000 lb	92 mm	272 mm	539 kg	738,000 kg	664,000 kg
4"	12"	399 lb	1,819,000 lb	1,637,000 lb	96 mm	288 mm	594 kg	825,000 kg	743,000 kg

*Spliced strength.

Additional sizes available, see SamsonRope.com or contact customer service.

Saturn-12™ / High-Performance Synthetic Rope PRODUCT CODE 882



All the benefits of AmSteel®Blue with increased service life

Saturn-12 has proven to be one of the longest lasting, most durable ropes available, increasing residual strength as much as 15–20% when compared with other HMPE lines and their conventional coatings. Saturn-12's proprietary Samthane coating improves abrasion resistance and has been enhanced for greater UV resistance.

- Proprietary coating improves abrasion resistance and extends service life
- Increased efficiency of manpower
- Faster change-outs for less downtime
- Comparable elastic elongation to wire
- Easy inspection and field splicing
- Virtually corrosion-proof
- Low maintenance
- Increased safety

DIAMETER INCHES	CIRCUMFERENCE INCHES	WEIGHT PER 100 FT. POUNDS	AVERAGE STRENGTH* POUNDS	MINIMUM STRENGTH* POUNDS	DIAMETER MILLIMETERS	CIRCUMFERENCE MILLIMETERS	WEIGHT PER 100 m KILOGRAMS	AVERAGE STRENGTH* KILOGRAMS	MINIMUM STRENGTH* KILOGRAMS
1-1/2"	4-1/2"	51.7 lb	228,000 lb	205,000 lb	36 mm	108 mm	76.9 kg	103,000 kg	93,100 kg
1-5/8"	5"	65.2 lb	283,000 lb	255,000 lb	40 mm	120 mm	97.0 kg	128,000 kg	116,000 kg
1-3/4"	5-1/2"	78.4 lb	335,000 lb	302,000 lb	44 mm	132 mm	117 kg	152,000 kg	137,000 kg
2"	6"	87.0 lb	381,000 lb	343,000 lb	48 mm	144 mm	129 kg	173,000 kg	156,000 kg
2-1/4"	7"	116 lb	537,000 lb	483,000 lb	56 mm	168 mm	173 kg	244,000 kg	219,000 kg
2-1/2"	7-1/2"	148 lb	588,000 lb	529,000 lb	60 mm	180 mm	220 kg	267,000 kg	240,000 kg
2-5/8"	8"	167 lb	662,000 lb	596,000 lb	64 mm	192 mm	248 kg	300,000 kg	270,000 kg
2-3/4"	8-1/2"	187 lb	735,000 lb	662,000 lb	68 mm	204 mm	278 kg	333,000 kg	300,000 kg
3"	9"	206 lb	832,000 lb	749,000 lb	72 mm	216 mm	307 kg	377,000 kg	340,000 kg
3-1/8"	9-1/2"	228 lb	920,000 lb	828,000 lb	76 mm	228 mm	339 kg	417,000 kg	376,000 kg
3-1/4"	10"	240 lb	1,007,000 lb	906,000 lb	80 mm	240 mm	357 kg	457,000 kg	411,000 kg
3-1/2"	10-1/2"	295 lb	1,170,000 lb	1,053,000 lb	86 mm	254 mm	439 kg	531,000 kg	478,000 kg

*Spliced strength.

Additional sizes available, see SamsonRope.com or contact customer service.

Panther™ / Recovery Tow Sling PRODUCT CODE 804

Panther is a lightweight, high-strength, low-stretch recovery tow sling designed to be reliable and safe for your mining and vehicle recovery operations. The 12-strand multiple grommet strength member is made of 100% Dyneema® fiber, with chafe protection that provides Panther with the appearance and ease of handling of a single leg tow sling, while providing superior abrasion resistance.

- Abrasion resistant and durable
- Reduced recoil risk with HMPE cover
- Light weight with faster change-outs
- Flexible

At a fraction of the weight of wire, chain, or Kevlar®, Panther radically reduces manpower requirements and safety hazards..



AVERAGE STRENGTH* TONS	MINIMUM STRENGTH** TONS	NOMINAL EYE SIZE INCHES	OVERALL LENGTH FEET	UNIT WEIGHT POUNDS
22 t	20 t	12"	20 ft	6.3 lb
			33 ft	10.1 lb
			50 ft	14.9 lb
33 t	30 t	12"	20 ft	8.4 lb
			33 ft	13.5 lb
			50 ft	19.9 lb
61 t	54 t	12"	20 ft	13.7 lb
			33 ft	22.1 lb
			50 ft	32.6 lb
127 t	114 t	18"	20 ft	25.5 lb
			33 ft	40.9 lb
			50 ft	57.6 lb
166 t	149 t	18"	20 ft	32.7 lb
			33 ft	51.7 lb
			50 ft	69.5 lb
221 t	198 t	18"	20 ft	47.2 lb
			33 ft	73.8 lb
			50 ft	104 lb
287 t	258 t	18"	20 ft	56.7 lb
			33 ft	89.5 lb
			50 ft	131 lb
347 t	312 t	18"	20 ft	72.6 lb
			33 ft	114 lb
			50 ft	166 lb
458 t	412 t	18"	20 ft	95.6 lb
			33 ft	149 lb
			50 ft	216 lb
770 t	693 t	24"	20 ft	159 lb
			33 ft	243 lb
			50 ft	347 lb

AVERAGE STRENGTH* METRIC TONS	MINIMUM STRENGTH** METRIC TONS	NOMINAL EYE SIZE MILLIMETERS	OVERALL LENGTH METERS	UNIT WEIGHT KILOGRAMS
20 mt	18 mt	300 mm	6 m	2.9 kg
			10 m	4.6 kg
			15 m	6.8 kg
30 mt	27 mt	300 mm	6 m	3.8 kg
			10 m	6.1 kg
			15 m	9.0 kg
55 mt	49 mt	300 mm	6 m	6.2 kg
			10 m	10.0 kg
			15 m	14.8 kg
115 mt	104 mt	450 mm	6 m	11.6 kg
			10 m	18.6 kg
			15 m	26.1 kg
150 mt	135 mt	450 mm	6 m	14.9 kg
			10 m	23.4 kg
			15 m	31.5 kg
200 mt	180 mt	450 mm	6 m	21.4 kg
			10 m	33.5 kg
			15 m	47.1 kg
260 mt	234 mt	450 mm	6 m	25.7 kg
			10 m	40.6 kg
			15 m	59.2 kg
315 mt	283 mt	450 mm	6 m	32.9 kg
			10 m	51.8 kg
			15 m	75.5 kg
415 mt	374 mt	450 mm	6 m	43.4 kg
			10 m	67.6 kg
			15 m	97.8 kg
700 mt	630 mt	600 mm	6 m	72.2 kg
			10 m	110 kg
			15 m	157 kg



For information on other sizes available, contact your Samson distributor or visit SamsonRope.com

*Panther lengths/strengths listed in the table above are standard product offerings. Other lengths require additional lead time.

DC Gard™ / High-Performance Abrasion Protection PRODUCT CODE 706



Abrasion protection can be installed on rope assemblies in places where the wear commonly occurs. Particularly useful if wear consistently occurs in the same location.

- Light, flexible, and it floats
- Can be removed for rope inspection
- Cut resistant
- Superior durability

Due to our continued research and development of product performance, the specifications listed herein are subject to change. For the most current sizes, weights, and strengths, go to SamsonRope.com.



Samson / Where People and Technology Make the Difference

The Samson team works with you to provide proper product selection for unique applications, full service fabrication, on-site training, rope inspection and maintenance, proper installation, and a full technical resource library. It embodies the promise that our customers have come to expect; exceptional people providing an exceptional experience while delivering an exceptional product. **Samson brings customers peace of mind.**

Samson is built upon five key elements:

- Innovative Technology
- Superior Products
- Industry-Leading Service
- In-House Manufacturing
- Global Experience



SAMSON
THE STRONGEST NAME IN ROPE

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REGISTERED TRADEMARK NOTICES

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Dyneema® is a registered trademark of Royal DSM N.V. Dyneema® is DSM's high-performance polyethylene product.

Kevlar® is a registered trademark of E. I. du Pont de Nemours and Company.

