

# Saturn-12

Product Code: 882

Class II

## Saturn-12 brings safety and efficiency to mining operations

### FEATURES:

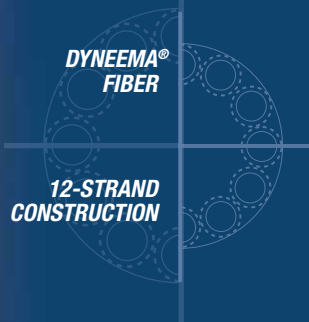
- > Similar to AmSteel®Blue with improved coating to reduce internal yarn to yarn abrasion
- > Decreased coefficient of friction at winch surfaces
- > A size-for-size strength replacement for wire rope at only 1/7th the weight
- > Safer handling due to light weight and flexibility
- > Easier handling results in less down time during change-outs
- > Similar elastic elongation to wire rope

### APPLICATIONS:

- > Material handling winch lines
- > Belt pull-in ropes
- > Retrieval and towing assemblies
- > Secondary safety ropes for rail cars

Saturn-12 has an enhanced coating that improves abrasion resistance and increases residual strength as much as 15–20% when compared with other HMPE lines and their conventional coatings. Its light weight, high strength, and low stretch make it ideal for quick, efficient connections and controlled response. Saturn-12 has been tested in extreme conditions and is proven to provide a longer service life while reducing costs when compared to standard HMPE ropes available today.

Saturn-12 is a torque-free 12-strand single braid synthetic line that yields the maximum in strength-to-weight ratio and, size-for-size, is the same strength as steel wire rope. At 1/7th the weight of wire, Saturn-12 is an excellent wire rope or chain replacement for mining operations. This lightweight construction will increase safety and operating efficiencies due to fewer handling injuries and less downtime when changing out the line. It has extremely low stretch and superior flex fatigue and wear resistance.



SIZE DIAMETER INCHES	SIZE CIRC. INCHES	WEIGHT PER 100 FT. POUNDS	SAMSON MBS* POUNDS	SIZE DIAMETER MILLIMETERS	WEIGHT PER 100 m KILOGRAMS	SAMSON MBS* METRIC TONS	ISO 2307 STRENGTH** METRIC TONS
1-1/8"	3-1/2"	31.9 lb	133,000 lb	28 mm	47.5 kg	60.4 t	67.1 t
1-1/4"	3-3/4"	36.2 lb	149,000 lb	30 mm	53.9 kg	67.4 t	74.8 t
1-5/16"	4"	41.8 lb	166,000 lb	32 mm	62.2 kg	75.1 t	83.5 t
1-3/8"	4-1/8"	45.0 lb	185,000 lb	34 mm	67.0 kg	83.7 t	93 t
1-1/2"	4-1/2"	51.7 lb	205,000 lb	36 mm	76.9 kg	93.1 t	103 t
1-5/8"	5"	65.2 lb	255,000 lb	40 mm	97.0 kg	116 t	128 t
1-3/4"	5-1/2"	78.4 lb	302,000 lb	44 mm	117 kg	137 t	152 t
2"	6"	87.0 lb	343,000 lb	48 mm	129 kg	156 t	173 t
2-1/8"	6-1/2"	109 lb	411,000 lb	52 mm	162 kg	187 t	207 t
2-1/4"	7"	116 lb	483,000 lb	56 mm	173 kg	219 t	244 t
2-1/2"	7-1/2"	148 lb	529,000 lb	60 mm	220 kg	240 t	267 t
2-5/8"	8"	167 lb	596,000 lb	64 mm	248 kg	270 t	300 t
2-3/4"	8-1/2"	187 lb	662,000 lb	68 mm	278 kg	300 t	333 t
3"	9"	206 lb	749,000 lb	72 mm	307 kg	340 t	377 t
3-1/8"	9-1/2"	228 lb	828,000 lb	76 mm	339 kg	376 t	417 t
3-1/4"	10"	240 lb	906,000 lb	80 mm	357 kg	411 t	457 t

\*Spliced strength \*\* This standard replaces BS EN 919 and ISO 2307:1995 and is for unspliced strengths.

### SPECIFICATIONS†

FIBER: Dyneema®

SPECIFIC GRAVITY: 0.98 (floats)

STANDARD COLOR: Orange, sizes 13/16" and above have black longitudinal line

#### ELASTIC ELONGATION PERCENTAGE

At % of break strength  
 10% ..... 0.46%  
 20% ..... 0.70%  
 30% ..... 0.96%

SPLICE: For sizes 1/4"–1-1/4" 12-strand Class II  
 For sizes above 1-1/4" 12-strand Class II Modified Tuck Bury

†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.



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

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