# **DYNAMICA** ropes

## Strong Light Easy to handle



Heavy Lifting | Offshore | Wind | Industrial











## Dynamica Ropes - a Danish manufacturer of rope solutions made with Dyneema®

DYNAMICA ropes are made with Dyneema® DYNAMICA ropes are produced in Denmark fibers produced by DSM in Holland.

Dyneema® is the strongest fiber in the world. Ropes made with Dyneema® have excellent properties with regard to strength, weight, UV-stability (daylight), safety, abrasion, tension fatigue, bending fatigue.

DYNAMICA ropes are the most compact ropes in the world made with Dyneema®.

on state of the art machinery, to ensure the best obtainable quality.

DYNAMICA ropes are coated with a unique coating that ensures shape stability and increased abrasion resistance for longer workinglife.

DYNAMICA ropes are heat-set under tension to ensure maximum strength, durability and uniformity.





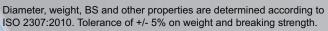




#### Dyneema\*

## Dyneema® the world's strongest man made fiber

DYNAMICA SK78 12 strand braided		
Diameter mm	BS in t	Kg/100 m
5	3.0	1.4
6	4.0	2.1
7	6.1	2.7
8	7.7	3.5
9	9.0	4.2
10	10.0	4.6
11	13.9	6.2
12	17.8	8.5
14	22.0	12.0
16	26.1	13.0
18	36.0	19.0
20	41.0	21.0
22	50.5	26.0
24	55.0	31.5
26	65.0	36.0
28	70.0	40.0
30	78.0	43
32	84.5	47.0
34	94.0	53.0
36	110.0	61.0
38	133.0	72.0
40	145.0	76.5
42	155.0	84.5
44	170.0	100.0
48	180.0	120.0
52	220.0	143.0
56	275.0	180.0
60	310.0	200.0
64	350.0	230.0
72	400.0	260.0
80	470.0	300.0
88	525.0	430.0
96	625.0	500.0
104	690.0	600.0
112	790.0	700.0
120	900.0	800.0





Slings for Heavy Lifting



Wind turbine foundation



4x4 Winch Line











#### Strength

Dyneema® is more than 10 times stronger than steel per unit of weight. This means that DYNAMICA ropes have a slightly higher strength than a steel wire of the same dimension, while being 7 to 10 times lighter in weight.





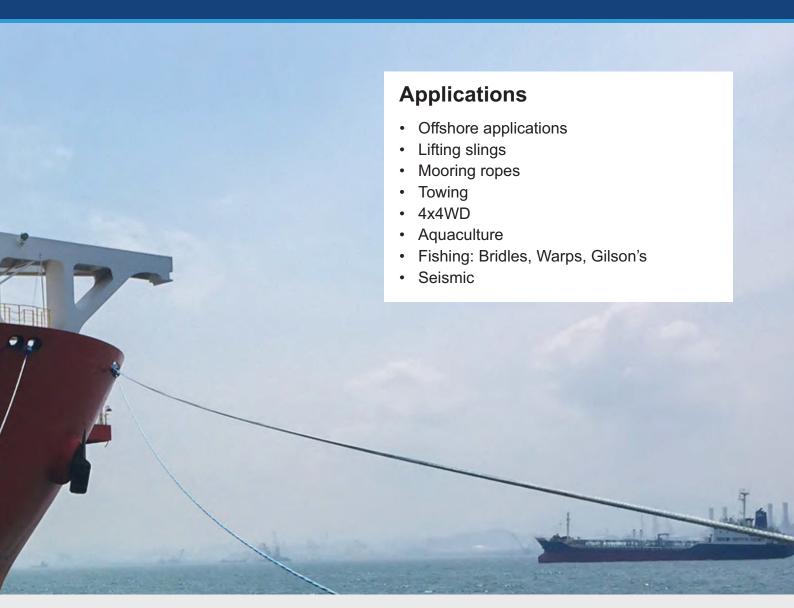
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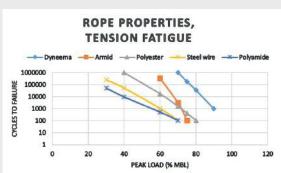






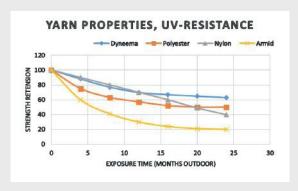
#### **Tension fatigue**

Dyneema® fibers can sustain a very large number of peak loads (loads close to the breaking strength). This gives a long life and a high safeworking load. While steel-wire can take 6500 loads at 50 % of the maximum breaking load, DYNAMICA ropes can take 10 million cycles at the same load level. DYNAMICA ropes are therefore an excellent material for dynamic applications.



#### **UV-stability**

Dyneema® has a better stability to sunlight than other relevant fibers. After two years of exposure, 80% of the strength is retained.





















#### Safety

Dyneema® has a very low elongation (2-3% at break). DYNAMICA ropes store little energy and therefore has little backlash - even at hundreds of tonnes of load. Using Dyneema®, the amount of stored energy is much lower vis á vis nylon or steel wire ropes. This is a very important safety feature.

#### Resistance to chemical substances

Dyneema® is resistant to chemical substances and will not be affected by oil, acids or other commonly used substances.

#### **Abrasion**

Dyneema® has excellent abrasion resistance compared with other synthetic fibers (five times better than polyester). However, special care has to be taken. Avoid sharp edges and only move the ropes over clean and nonrust surfaces etc.

#### **Bending fatigue**

Dyneema® has good bending properties. However, it is recommended to bend over diameters of at least 10 times the diameter of the rope.







We offer In-house testing up to 500 t

#### Major certifications available













### **DYNAMICA** covers

We also supply DYNAMICA ropes with braided covers made with Dyneema® or Polyester fibers

- DYNAMICA SUPREME PES cover
- DYNAMICA SUPERIOR D cover
- **DYNAMICA Dual Lock cover**









