



G. VAN DER LEE

ROPE FACTORY SINCE 1545

DISCOVER THE POWER OF DYNEEMA[®]-BASED ROPES

ULTRA-STRONG, INCREDIBLY LIGHT,
EXTREMELY DURABLE AND EASY TO HANDLE



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HMPE DYNEEMA® SK75

What is Dyneema®? Dyneema® is the world's strongest fibre. Invented and manufactured by DSM Dyneema. It is a HMPE (High Modulus PolyEthylene) fibre made from UHMWPE (Ultra High Molecular Weight PolyEthylene). The extreme strength of the fibre is due to a unique gel spinning process, also developed by DSM Dyneema.

The result is a fibre which is 15 times stronger than steel on a weight-for-weight basis. Besides having the best strength to weight ratio, Dyneema® offers dynamic properties and is highly resistant to abrasion, bending fatigue, and environmental influences such as UV radiation and salt water.

Dyneema® SK75 is the multi-purpose grade. This versatile grade is used in most marine and offshore products such as ropes, lines and lifting gear.

Dyneema® rope finishing by Van der Lee

Van der Lee's rope finishing is based on centuries-old knowledge, experience, and true craftsmanship:

- Termination with hand spliced eyes
- Eyes with or without protection, thimbles, links, etc.
- End-to-end splicing (grommet construction)
- Slings or grommets with or without sleeve
- Tailor-made strands and/or rope construction

APPLICATIONS

Mooring

Today's largest ships, such as LNG carriers, oil tankers, bulk carriers and container carriers, need mooring lines with a very high breaking load. Traditional steel wire mooring lines are too heavy and difficult to handle with these larger ships, and even conventional synthetic mooring lines made from nylon and polyester are bulky and heavy. Mooring lines made with Dyneema® are the proven, workable solution. They are much lighter and easier to work with than other types. They are as strong as steel wire lines of the same diameter, yet less than one-seventh of the weight. And compared to equally strong polyester or nylon lines, they are around 60% of the diameter and a third of the weight.

Towing and salvage

The increasing size of ships means tugboats are becoming more powerful. The substantial pulling power of modern tugboats increases the tension on the towing lines, which must be strong, durable and lightweight as well as easy and safe to handle. Towing lines made with Dyneema® are ideal.

Deep sea installation/pipe-laying A&R

For working in deeper waters, ropes made with Dyneema® have many advantages. Capable of replacing steel wire size-for-size, a Dyneema®-based rope is just 15% of the weight, and actually weightless when submerged. This means the full winch capacity is available for lifting at all depths in ultra-deep operations.

Working ropes

Lightweight, compact ropes made with Dyneema® have flexible tension members meaning they are easy to handle on board, by divers or by Remotely Operated Vehicles. Many offshore applications – including turret pull-in ropes, stinger ropes, anchor retrieval lines and riser tensioning ropes – benefit from replacing steel wire with ropes made with Dyneema®.





Applications:

- **Mooring lines**
- **Anchor lines**
- **Towing rope**
- **Deep sea installation**
- **Pipe-laying A&R**
- **Lifting slings & grommets**

TECHNICAL SPECIFICATIONS

- Melting point: 150 °C
- Specific gravity: 0.97
- Elongation at break: 4 – 5%
- Water absorption: None
- UV resistance: Good
- Colour: orange
- Construction: 8 and 12 strands

CHARACTERISTICS

- Maximum strength to weight ratio, and strength comparable to steel wire rope
- Lowest elongation
- Longer life, and easy handling
- Super abrasion resistance
- Non-kinking, and non-rotational
- Easy to splice

Diameter mm	Circumference inches	Weight Kg/100mtr	MBL Tons	MBL kN
6	3/4	2.3	4.2	41.2
8	1	3.9	6.7	65.7
10	1 1/8	5.9	10.8	105.9
12	1 1/2	9.5	16.5	161.9
14	1 3/4	12.8	22.0	215.8
16	2	16.0	27.5	269.8
18	2 1/4	20.8	35.0	343.3
20	2 1/2	25.5	41.5	407.1
22	2 3/4	30.5	50.0	490.5
24	3	35.8	58.0	569.0
26	3 1/4	41.0	66.0	647.4
28	3 1/2	46.5	74.0	725.9
30	3 3/4	52.0	81.5	799.5
32	4	57.0	88.5	868.2
34	4 1/4	62.5	96.0	941.7
36	4 1/2	68.0	104.0	1,020.2
38	4 3/4	74.0	112.0	1,098.7
40	5	84.0	127.0	1,245.8
42	5 1/4	93.0	140.0	1,373.4
44	5 1/2	102.0	152.0	1,491.1
46	5 3/4	111.0	165.0	1,618.6
48	6	121.0	179.0	1,755.9
50	6 1/4	131.0	193.0	1,893.3
52	6 1/2	141.0	206.0	2,020.8
56	7	163.0	236.0	2,315.1
60	7 1/2	175.0	252.0	2,472.0
64	8	200.0	282.0	2,766.3
68	8 1/2	226.0	316.0	3,099.9
72	9	254.0	348.0	3,413.8
80	10	313.0	422.0	4,139.7
88	11	379.0	503.0	4,934.3
96	12	451.0	588.0	5,768.1
104	13	531.0	641.0	6,284.3
112	14	615.0	736.0	7,215.6
120	15	710.0	836.0	8,196.0
128	16	805.0	940.0	9,215.6
136	17	915.0	1,047	10,264.7
144	18	1,020.0	1,169	11,460.7



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G. van der Lee Rope Factory is member of the Hendrik Veder Group since April 2013. Van der Lee was established in the 16th century and ever since managed by the direct descendants of Jan Pietersz van der Lee (1545-1613), making Van der Lee the oldest family-owned business in The Netherlands. Currently the company produces and distributes high-quality natural and synthetic fibre rope products under ISO 9001 certification. At the production location in Oudewater a complete range of ropes are manufactured, fabricated to final products and certified, serving predominantly customers in offshore and maritime industries, and government and defence.

G. van der Lee Rope Factory is a subsidiary of Hendrik Veder Group B.V.



Dyneema® is a trademark owned by Royal DSM N.V.