



VESTO ROPES

TOC ASIA

2024



VESTO ROPES

**Steelwire ropes as a
strategic tool for preventive
maintanance of terminal
equipment**

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2. Steel wire rope basics
3. Vesto product program
4. Patented DX11 Smart Termination
5. Applications
6. Steel wire ropes as a strategic asset





Today's speakers

Tom Vermeulen jr.

CEO and Founder Vesto Ropes

Young challenges the older generation

Together with Bernard, we have developed innovative steel wire ropes, designed specifically to extend service life and reduce downtime and replacements. Our cables are achieving outstanding results on terminals around the world.

A white handwritten signature on a dark blue background, consisting of a long horizontal stroke with a vertical line crossing it near the left end.

Tom Vermeulen Jr.
Founder Vesto Ropes

A white handwritten signature on a dark blue background, featuring a large, stylized 'B' followed by a cursive name.

Bernard Guenot
Design and Application expert

Everything under one roof



1 - Raw Material

We only work with the best partners for our raw materials, this is the base of your wire

2 - Factory

Our wire ropes are only made on the best machines

3 - Wholesaler

Full reels can be supplied from stock

4 - Rigging shop

We have an in-house rigging shop to make every possible fitting

Where are we located?

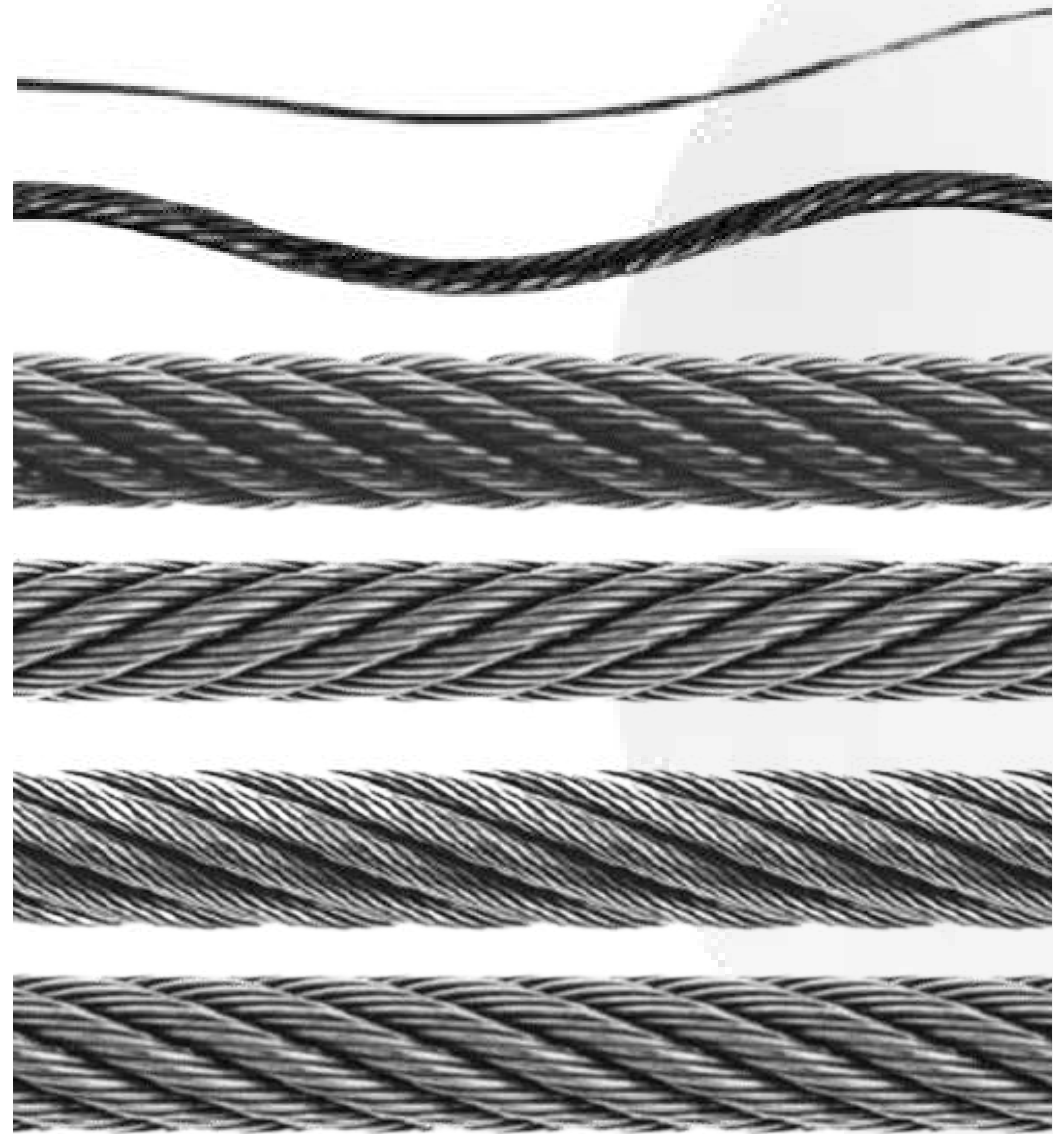
Production located in the logistic center of Europe:
Rotterdam, The Netherlands

- DX11 Production plant Rotterdam, Netherlands.
- DX11 Production plant Gdansk, Poland
- Rope Production is done in Busan, South Korea.
- Distributors in: Middle-east / UK / South-America



Steel wire rope Basics





Wire

Strand

Rope

Left hand Lay

Right Hand Lay

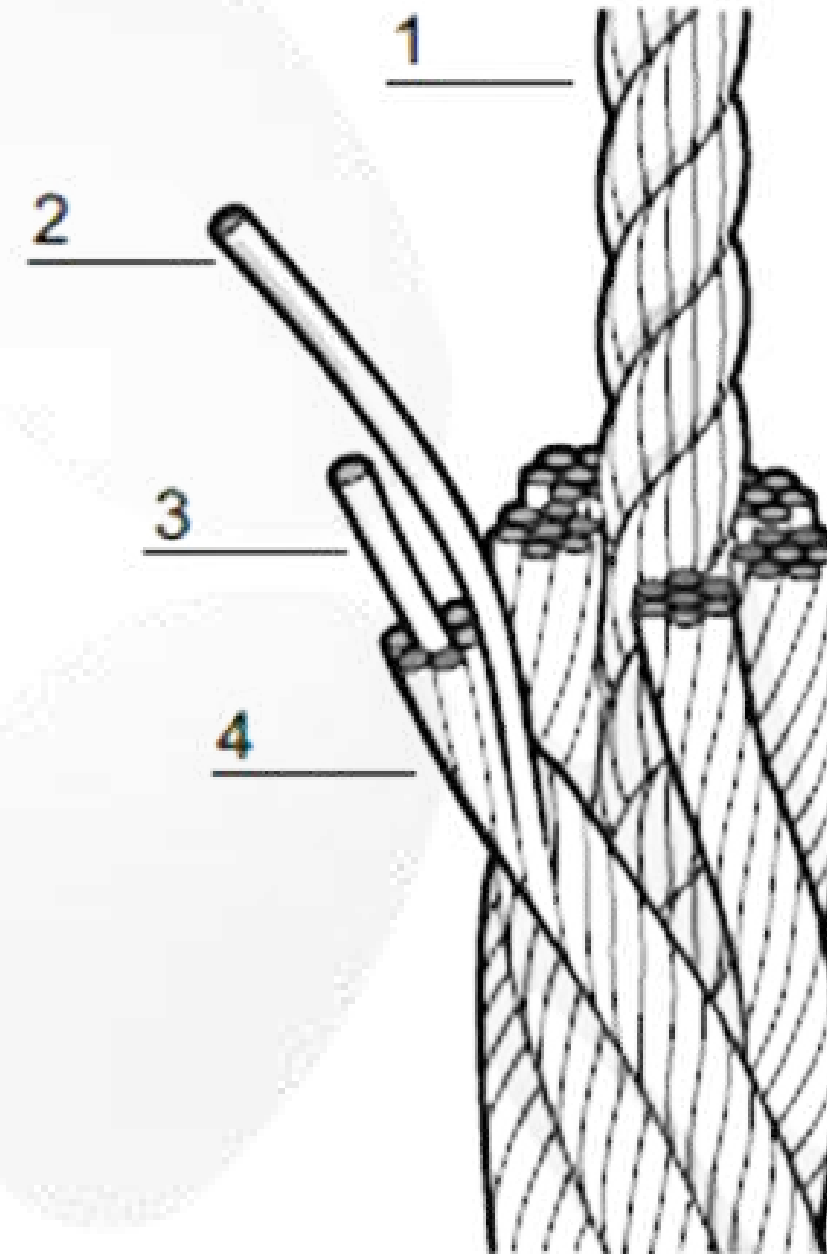
Langs Lay

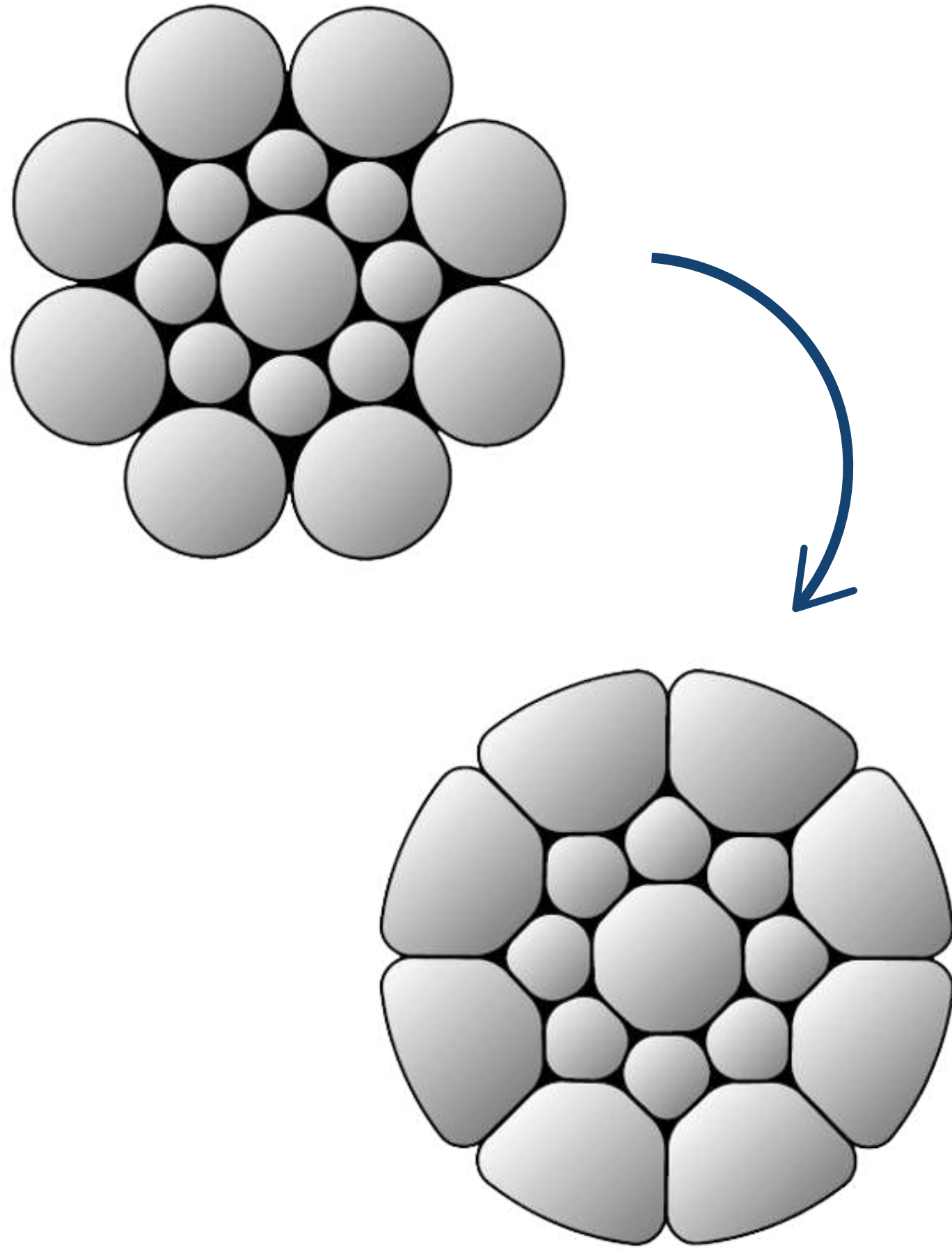
1. Core

2. Wire

3. Strand Core

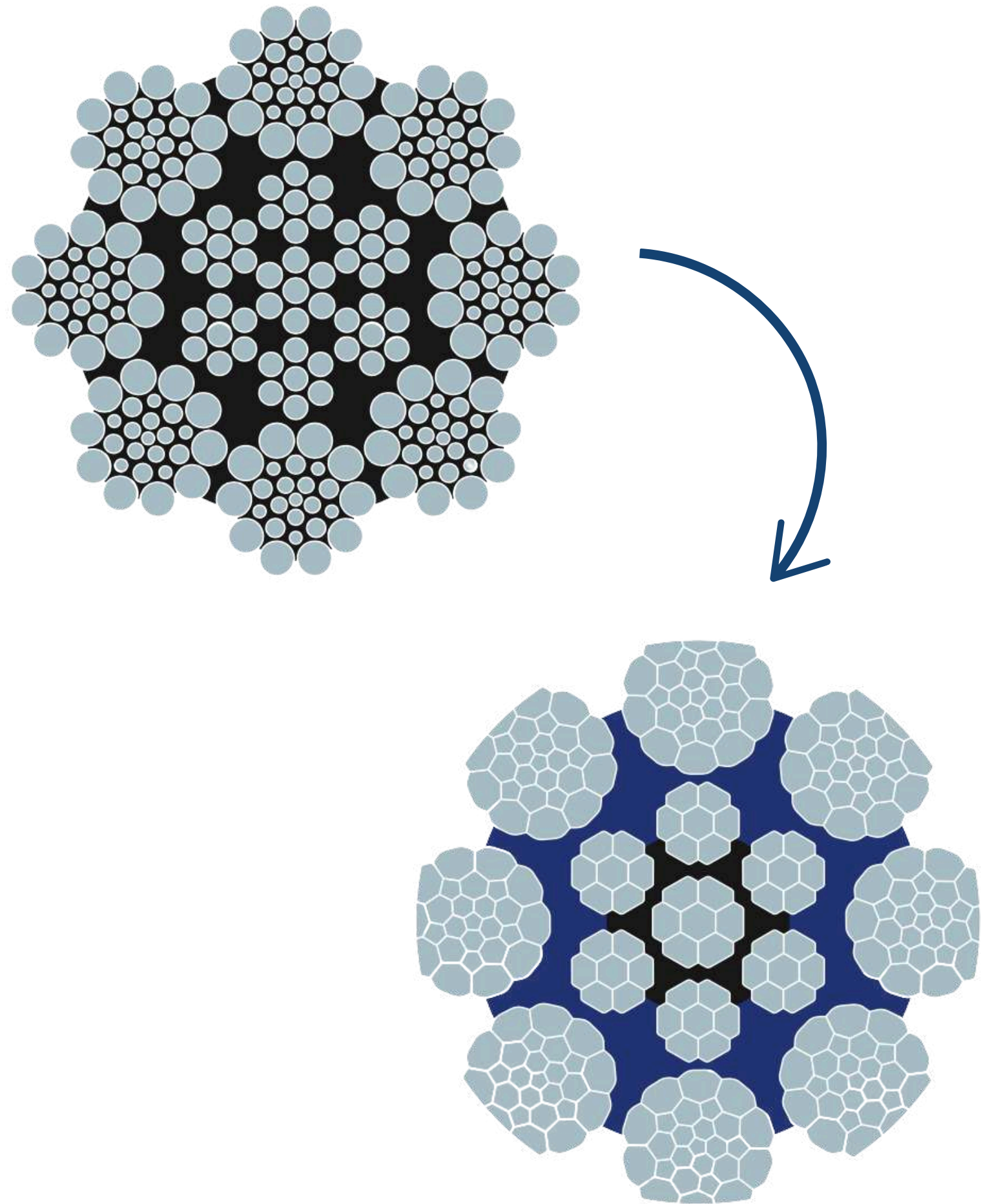
4. Strand





Compacting of the strands

- Higher breaking load
- Greater flexibility
- Better rope to sheave contact
- More abrasion and corrosion resistant



FLATTEN[®] Technology

- Increasing the outer surface of the rope
- Increasing MBL
- Elimination of negative imprints on the sheave or drum
- Less chance of 'bird-caging' (wire core coming out)

Plastic Impregnation

Keeps water/dust out

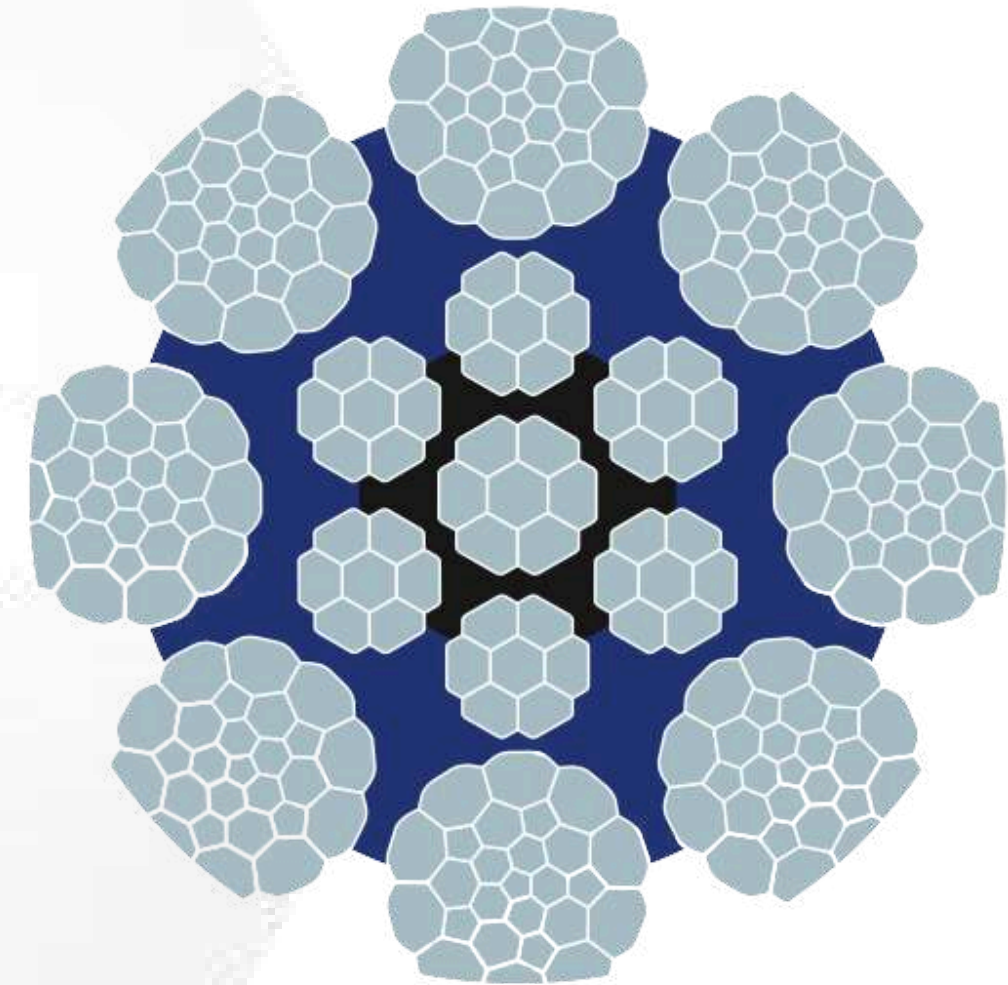
Cushion between layers (reduces internal friction)

Prevents internal wire break

Reduces internal stresses

Shock absorbing

Seals lubricant





Tensile Strength

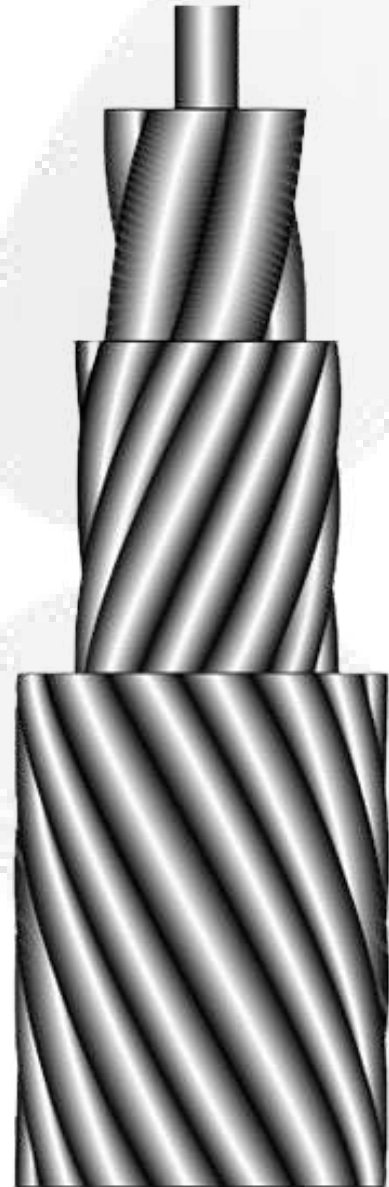
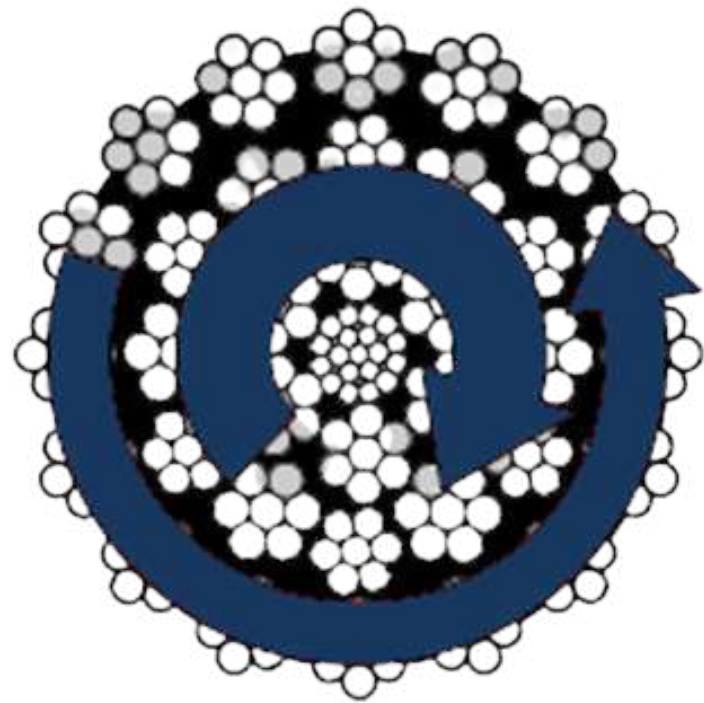
Individual wire rods:

- 1770N/mm²
- 1960N/mm²
- 2160N/mm²

1770N/mm² is slowly disappearing

1960N/mm² is becoming the new standard

Dual tensile is a hybrid form with good performance



Rotation resistant rope

Rope made of multiple layers of strands
Each layer closed in opposite direction

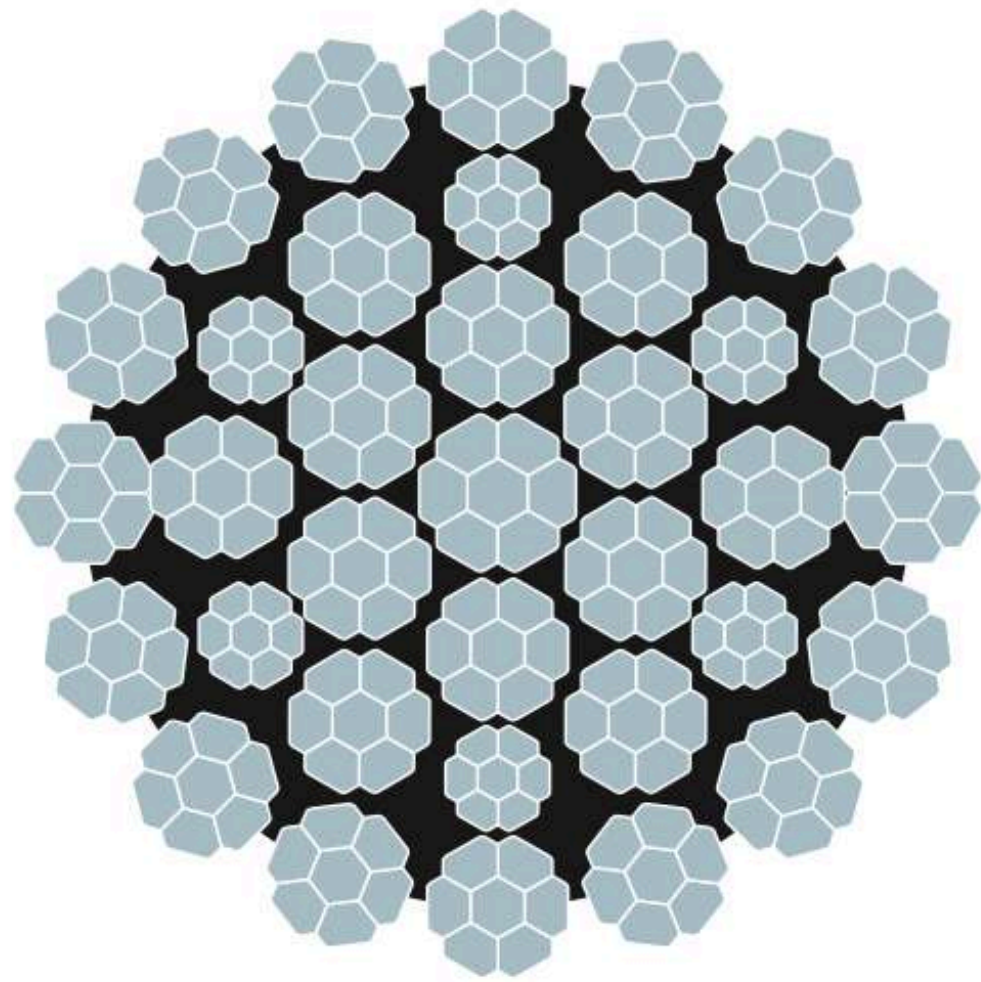
No un-twisting of the rope
No rope twist even with great lifting heights

VESTO 35C
VESTO FLATTEN 35
VESTO FLATTEN 29I
VESTO 9C
VESTO 8
VESTO 8C
VESTO FLATTEN 8
VESTO FLATTEN 8DT
VESTO FLATTEN 4
VESTO FLATTEN 17DP
VESTO 6C
VESTO FLATTEN 6

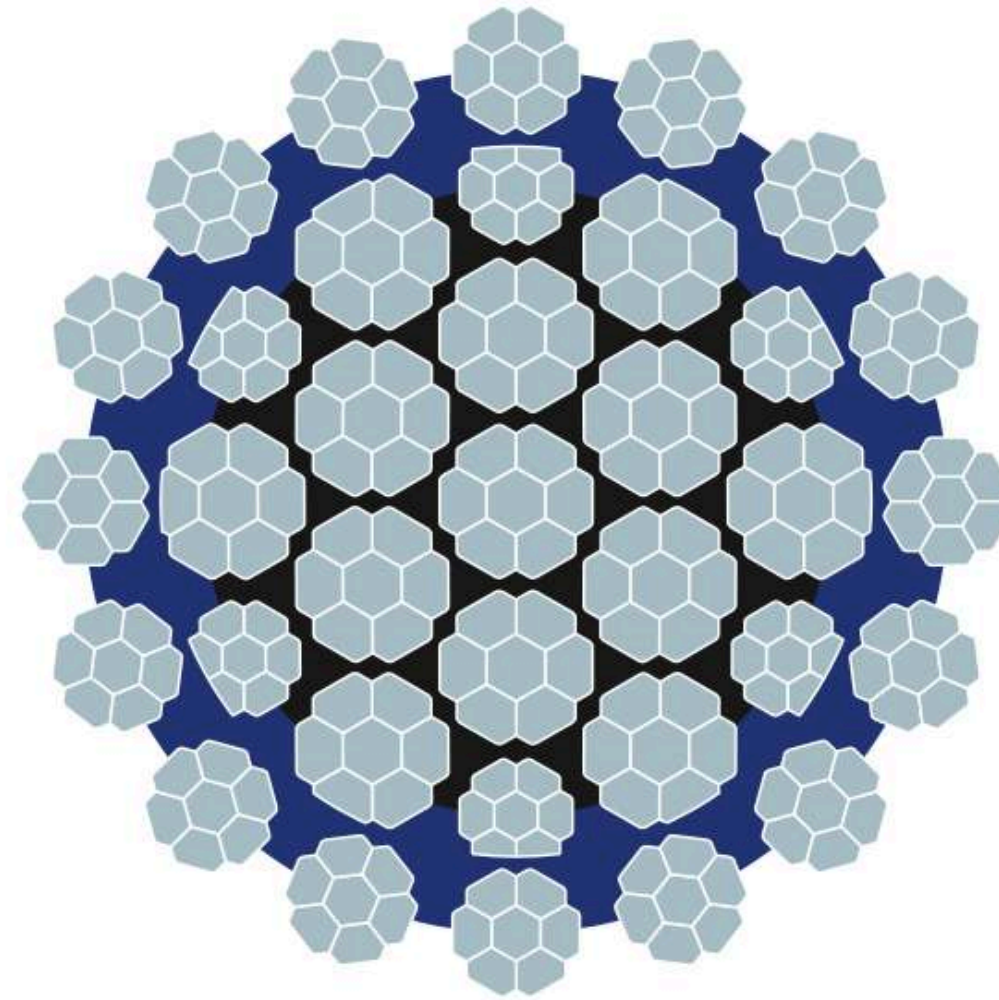
Vesto Ropes product program



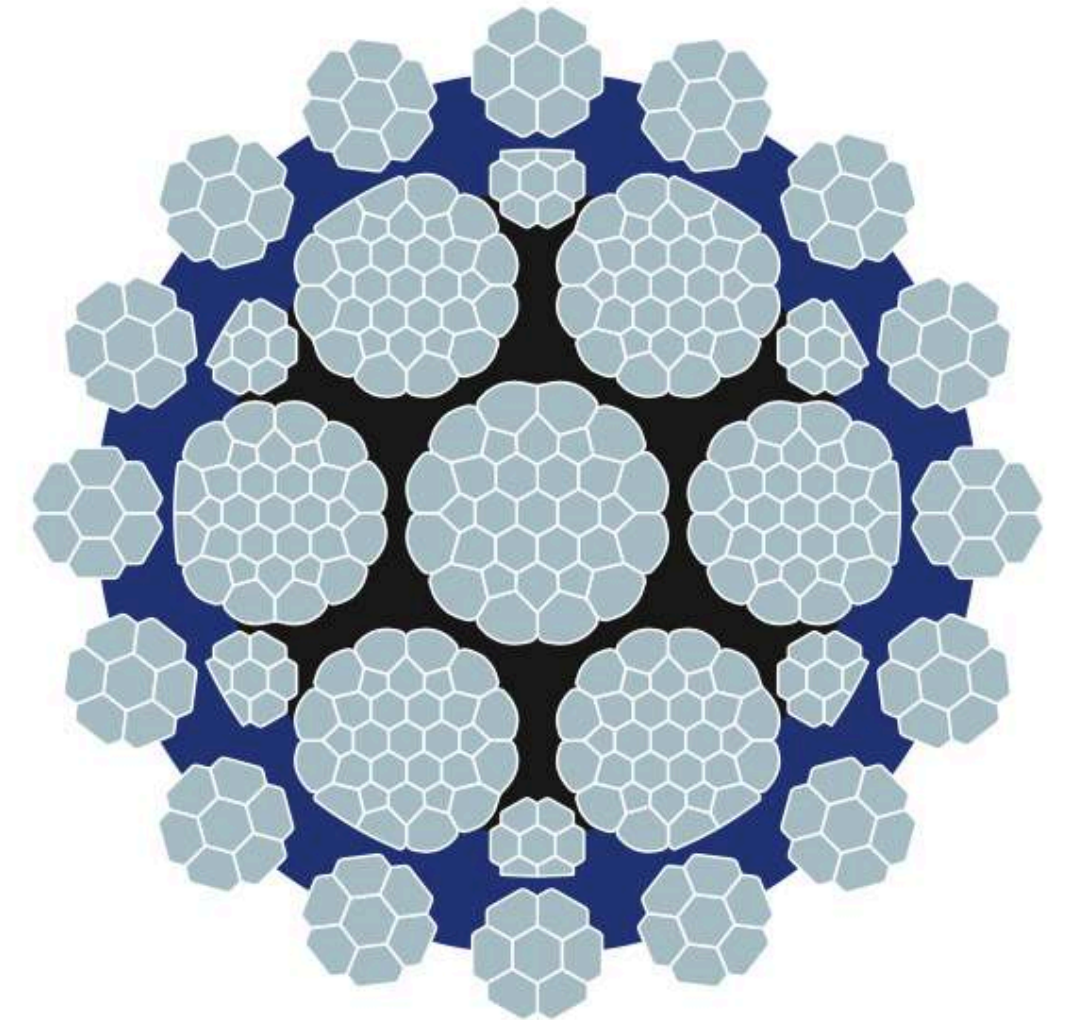
Rotation Resistant Ropes



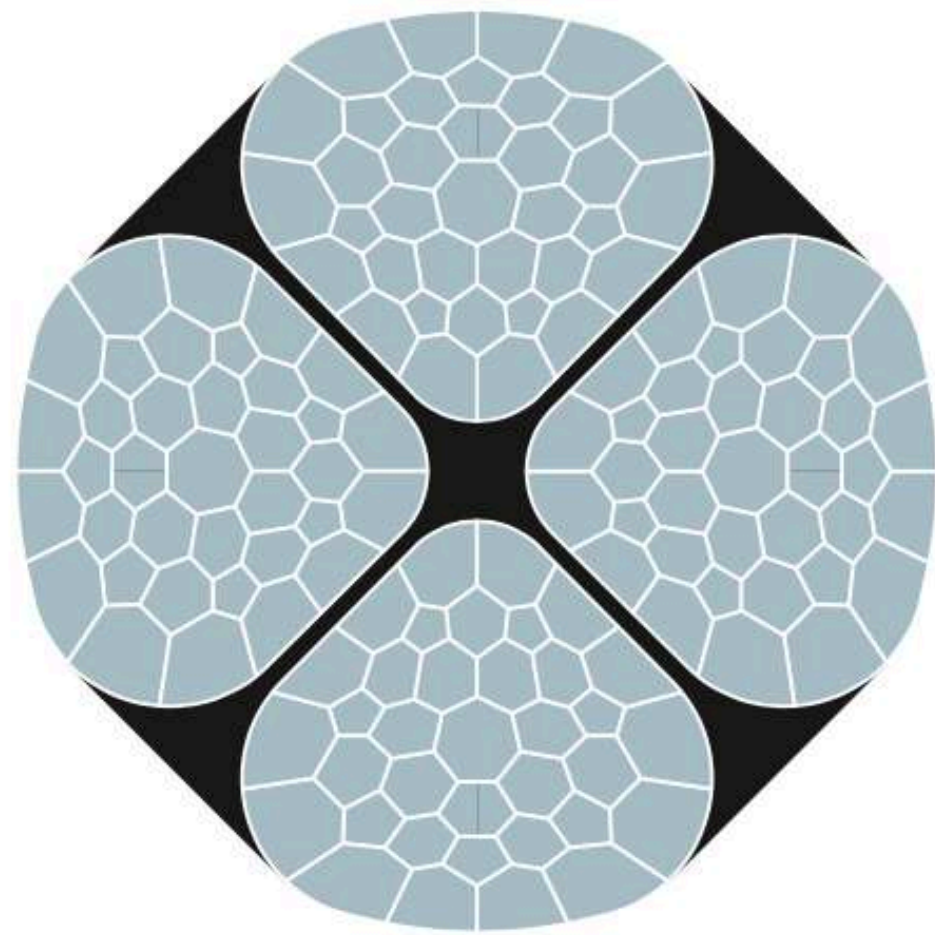
VESTO 35C



VESTO FLATTEN 35

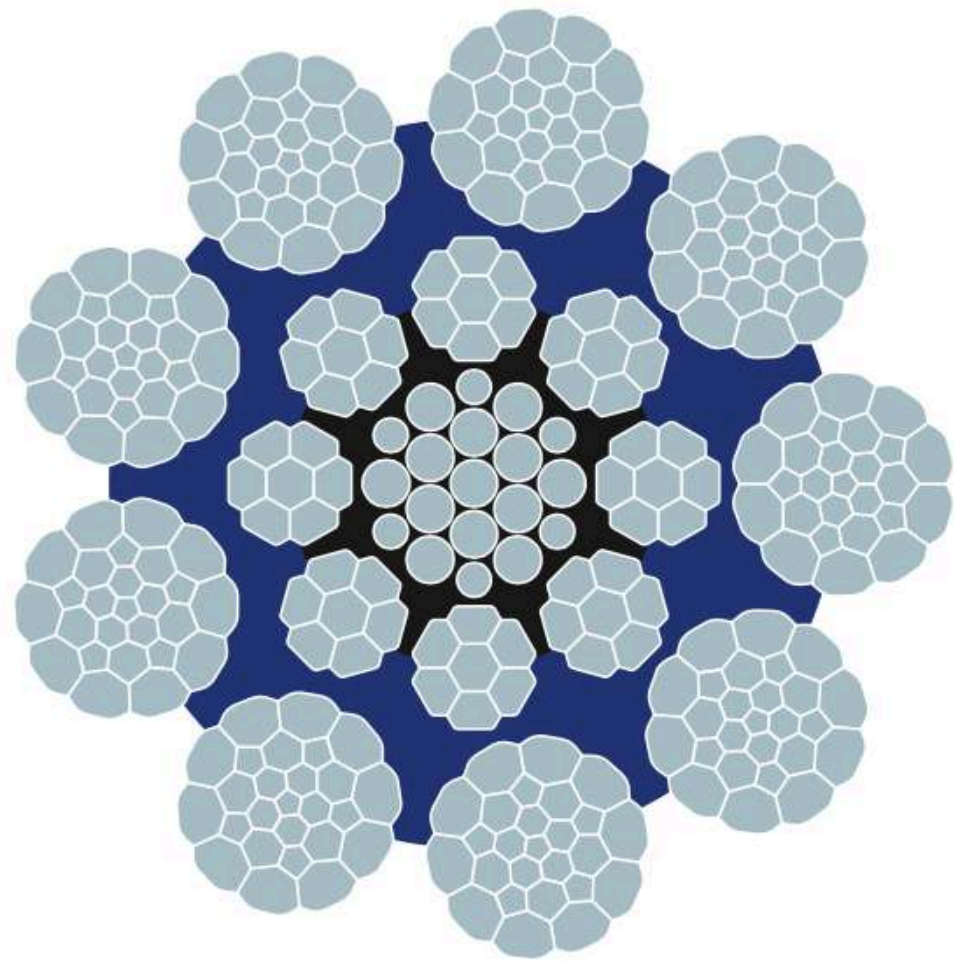


VESTO 29SI



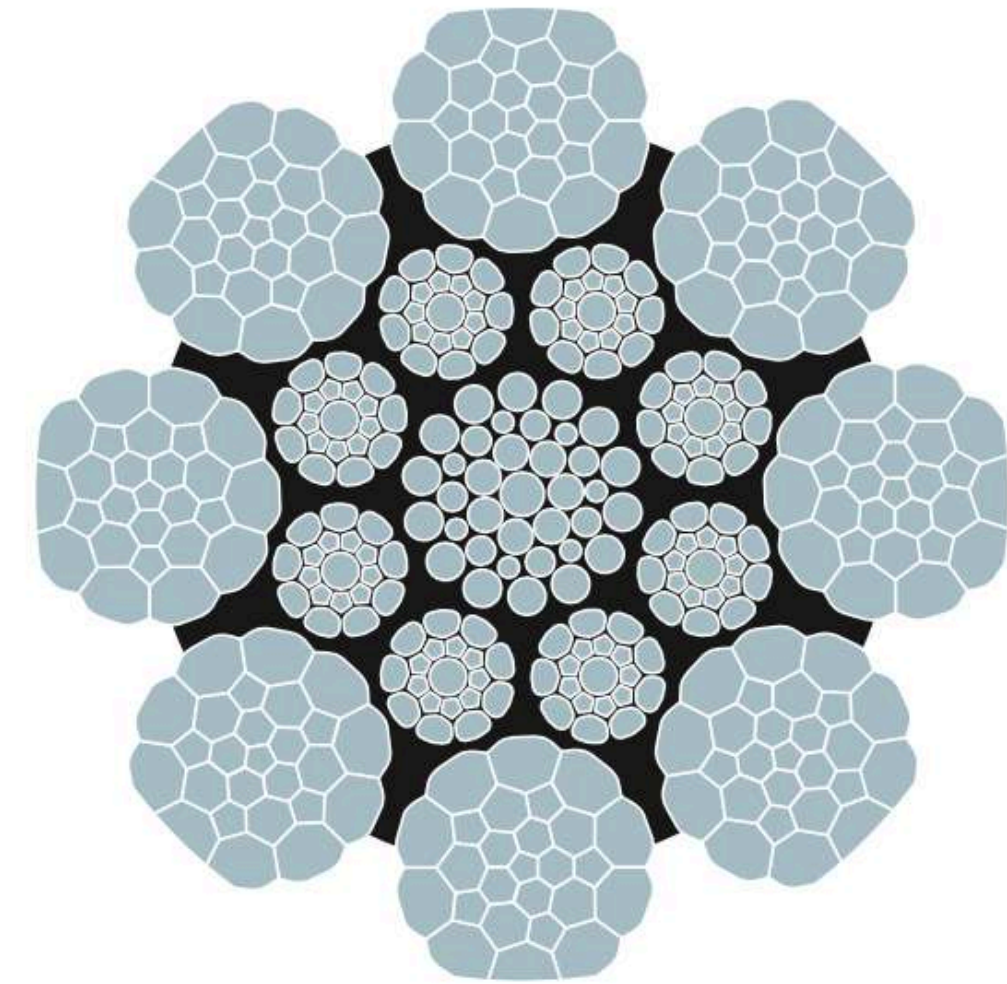
VESTO FLATTEN 4

9-Strand Ropes



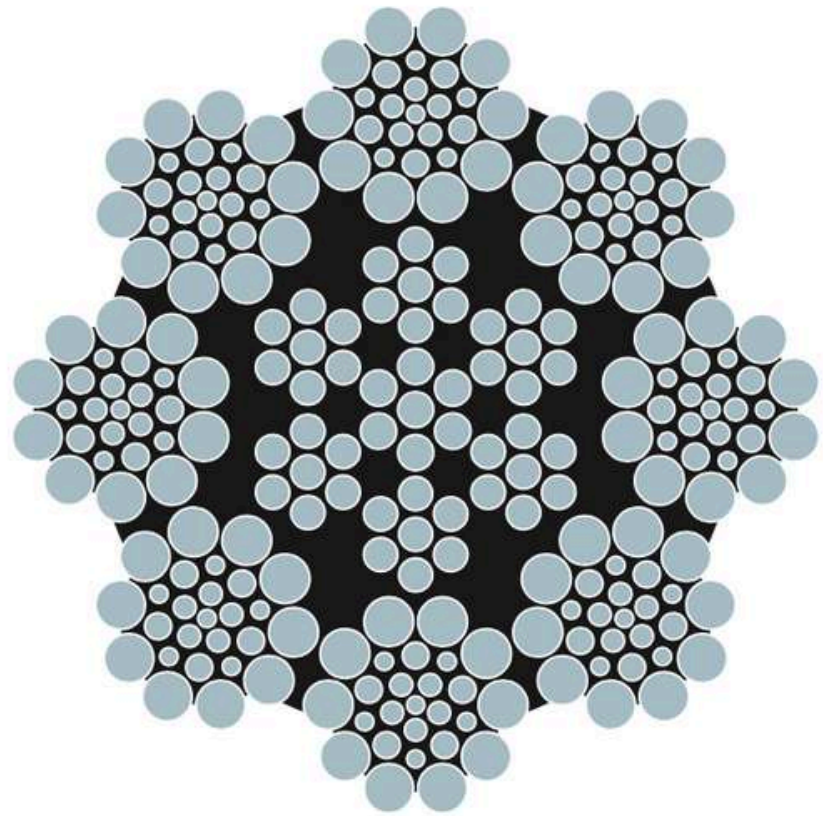
VESTO 9C

Parallel Ropes

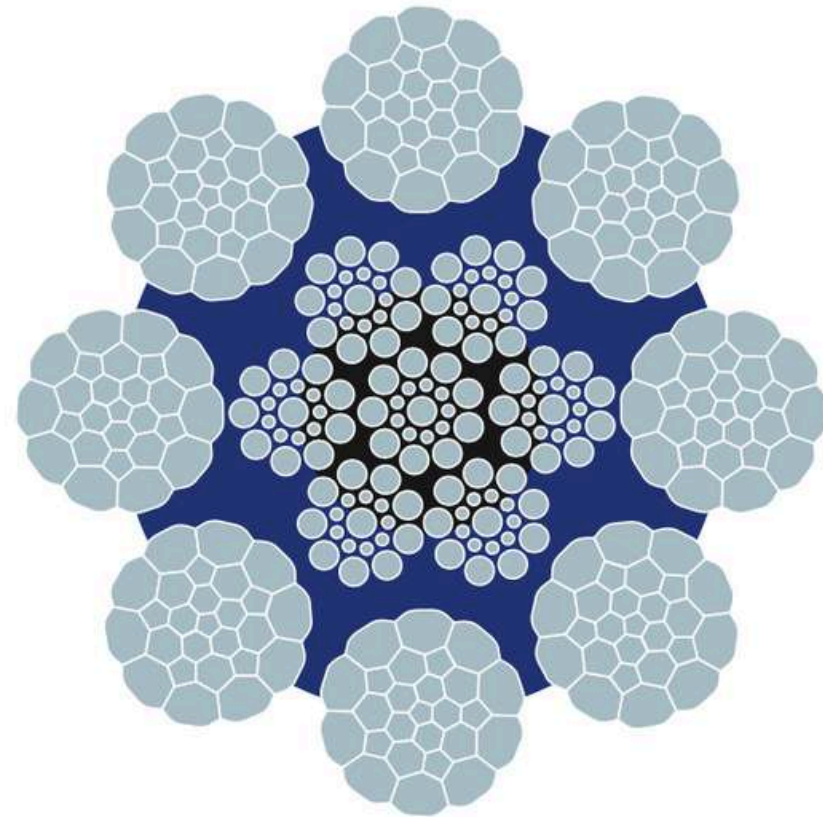


VESTO 17DP

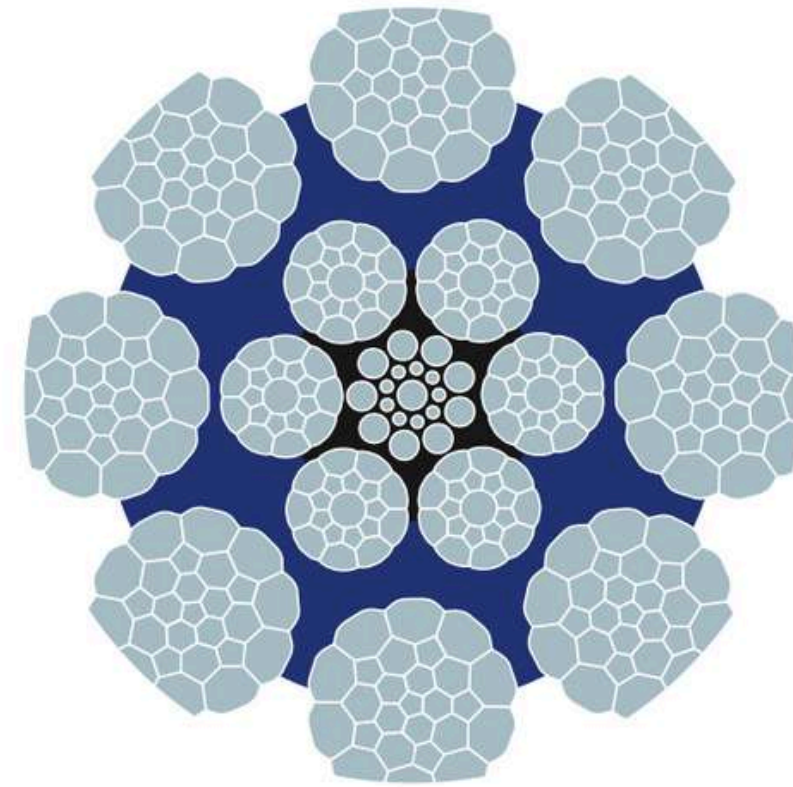
8-Strand Series



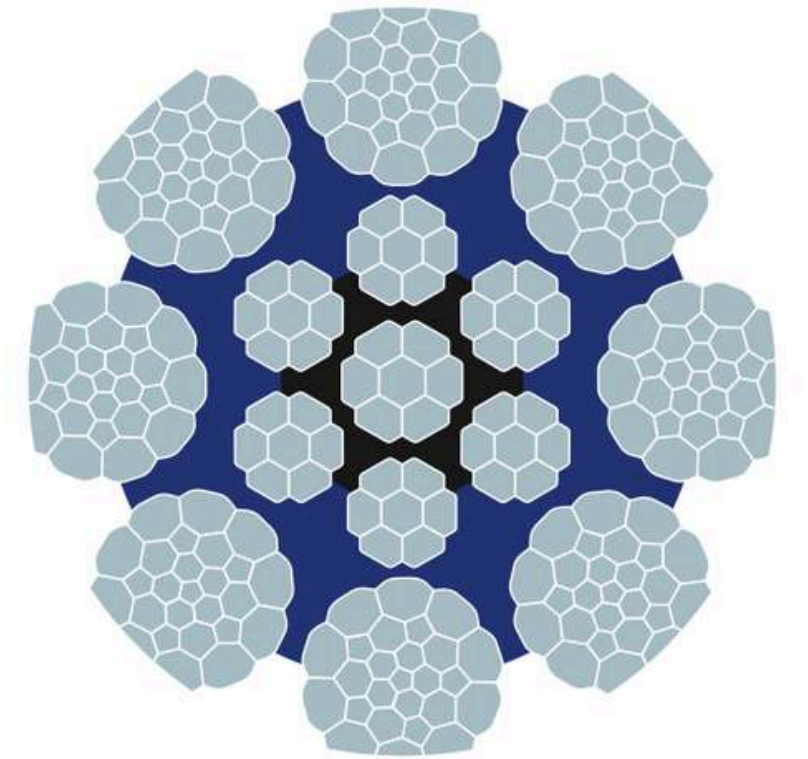
VESTO 8



VESTO 8C



VESTO FLATTEN 8



VESTO FLATTEN 8DT

DX11 Smart Termination



What is DX11?

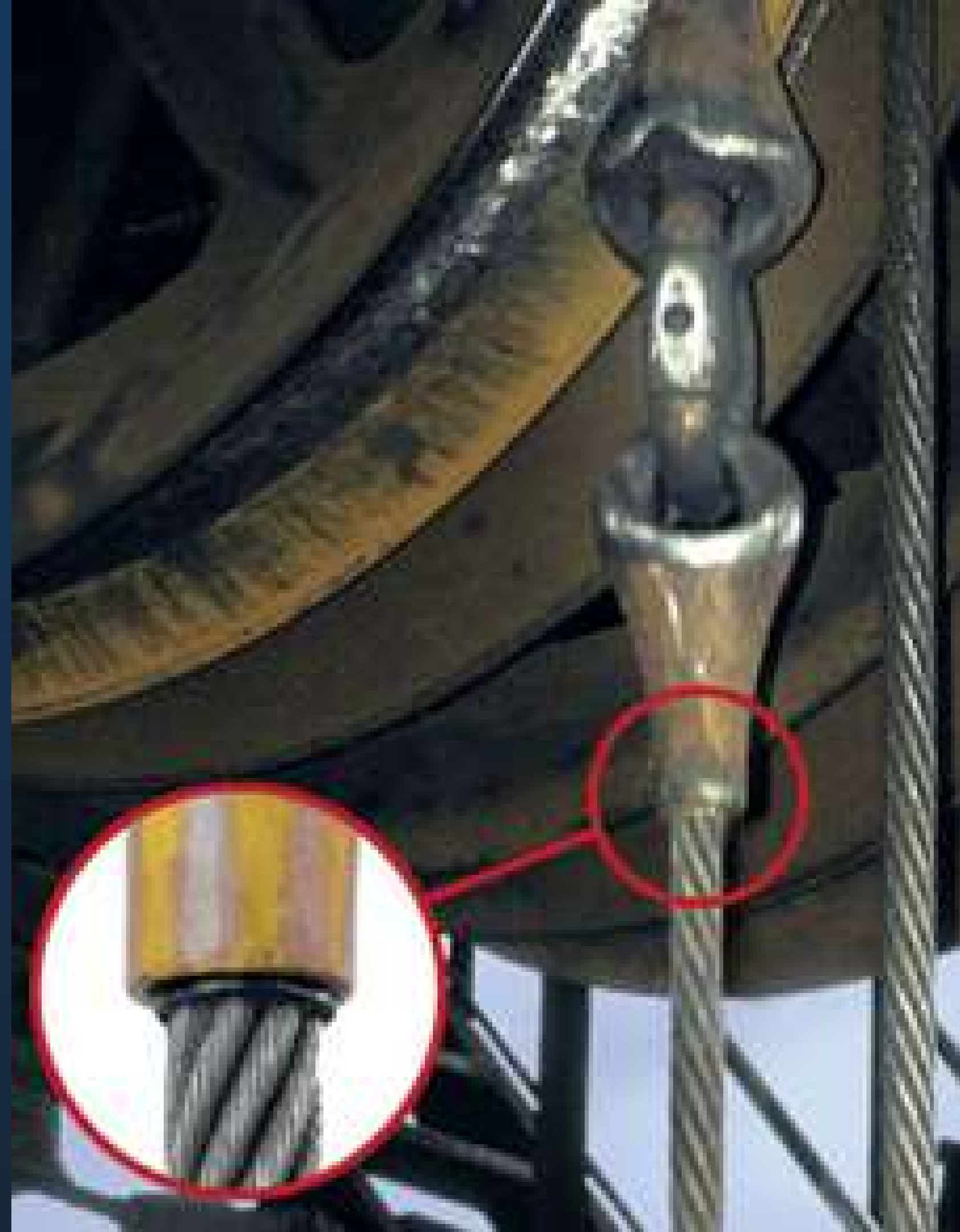
A patented socketing method for:

- Increased safety
- Longer rope lifetime
- Less down time of equipment
- Optimized operation
- No more breaking in socket neck
- High annual cost reduction
- Perfect alignment socket and rope



What do we see in the market?

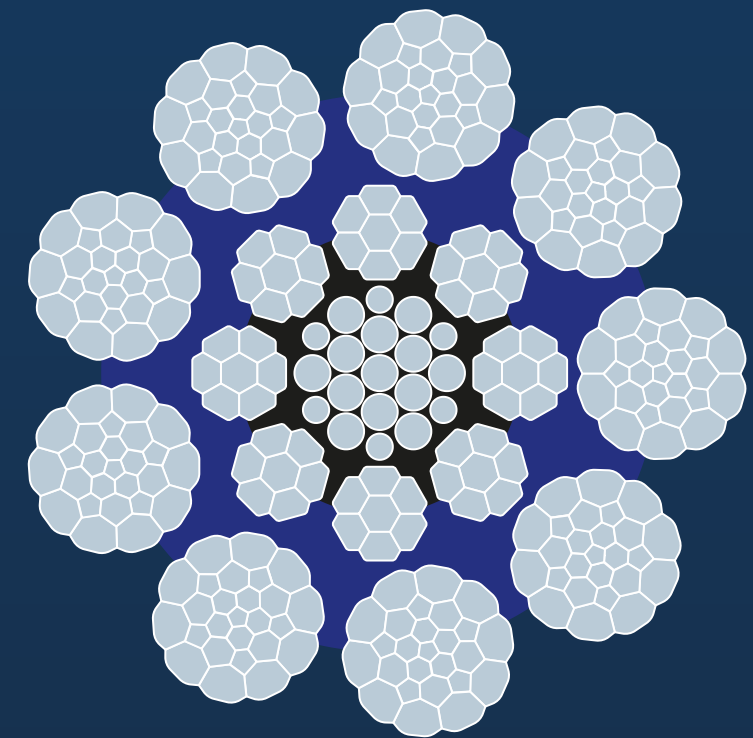
1. A similar damage pattern at multiple terminals globally.
2. Wire ropes breaking in the socket neck
3. Small wire rope breaks occurring in the socket neck
4. Wire rope meeting the discard criteria too early



ON-SITE TEST RESULTS AT MULTIPLE CUSTOMER TERMINALS:

- Competitor 1: +- 1400 hours
- Competitor 2: +- 1800 hours
- Competitor 3: +- 1800 hours

Vesto Ropes+ DXII : > 3000 hours
(No breaking in the neck of
the socket)





RESULTS AT ROTTERDAM'S LARGEST BULK TERMINAL

2013 test with ship unloader:

Operational hours traditional closing
wire: 257 hours

Operational hours Smart Termination
closing wire: 1103 hours



RESULTS AT ROTTERDAM'S LARGEST BULK TERMINAL

Subsequently Smart Termination was applied on all unloaders, during 15 contract years and more than 1000

Smart Terminations, no failure of the socket / rope connection was reported.

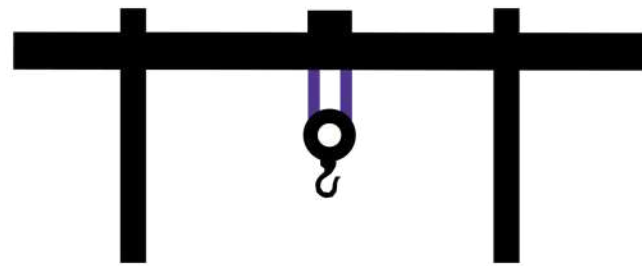
Value generation

Increase in unloaded tons per installed crane wire rope

Applications

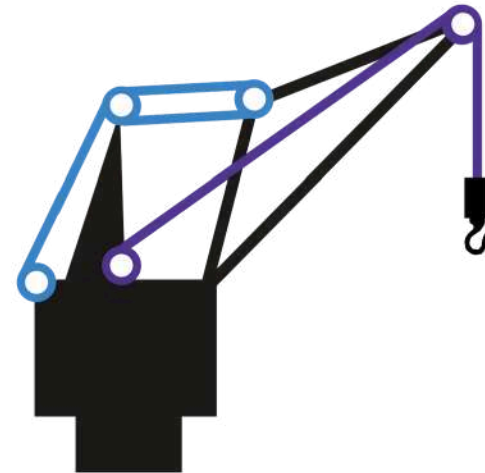
A wide-angle photograph of a busy port at sunset. The sky is a mix of deep blue and orange, with the sun low on the horizon. In the foreground, the water reflects the golden light. On the left, a large container ship is docked, with the letters 'M S C' clearly visible on its side. The ship's deck is filled with stacks of white containers. To the right, several large gantry cranes are silhouetted against the sky. The cranes are tall and complex structures with multiple jibs. The overall scene is industrial and captures a moment of quiet activity in a major shipping hub.

**Rubber fired gantry
Rail mounted gantry**



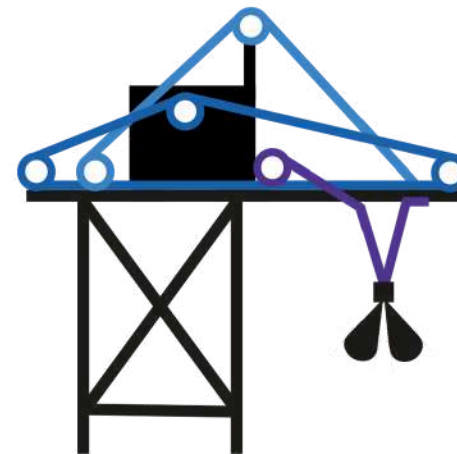
- 1 Vesto 8
Vesto 8C
- Vesto Flatten 8 (DT)
Vesto Flatten 6

Mobile harbour crane



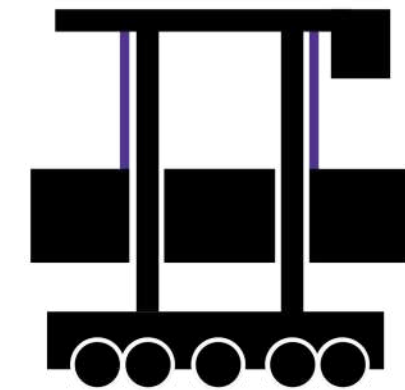
- 1 Vesto 8
Vesto 8C
Vesto Flatten 8 (DT)
- Vesto Flatten 6
Vesto 9C
Vesto 6C
- 2 Vesto 8
Vesto 8C
Vesto Flatten 8 (DT)
- Vesto Flatten 17DP
Vesto Flatten 6

Ship unloader



- 1 Vesto 8
Vesto 8C
- Vesto Flatten 8 (DT)
Vesto Flatten 6
- 2 Vesto 8
Vesto 8C
- Vesto Flatten 8 (DT)
Vesto Flatten 6
- 3 Vesto 8
Vesto 8C
- Vesto Flatten 8 (DT)
Vesto 9C

Straddle carriers



- 1 Vesto 8
Vesto 8C
Vesto Flatten 8 (DT)
Vesto Flatten 17DP
- Vesto 9C
Vesto 6C
Vesto Flatten 6

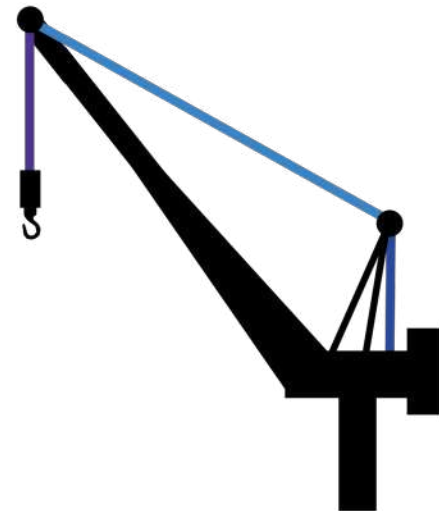
Overhead crane



1

Vesto 8	Vesto 9Cc
Vesto 8C	Vesto 35C
Vesto Flatten 8 (DT)	Vesto Flatten 35
Vesto Flatten 6	Vesto Flatten 29I

Luffing crane



1

Vesto 8	Vesto Flatten 8 (DT)
Vesto 8C	Vesto Flatten 6

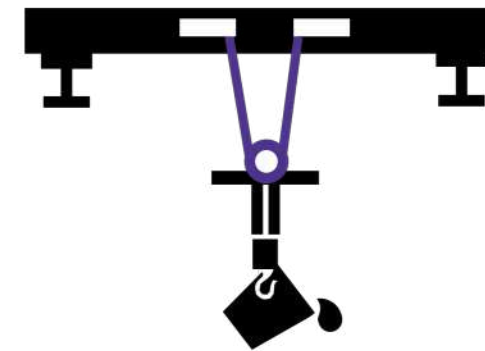
2

Vesto 8	Vesto Flatten 8 (DT)
Vesto 8C	Vesto Flatten 6

3

Vesto 8	Vesto Flatten 8 (DT)
Vesto 8C	Vesto 9C

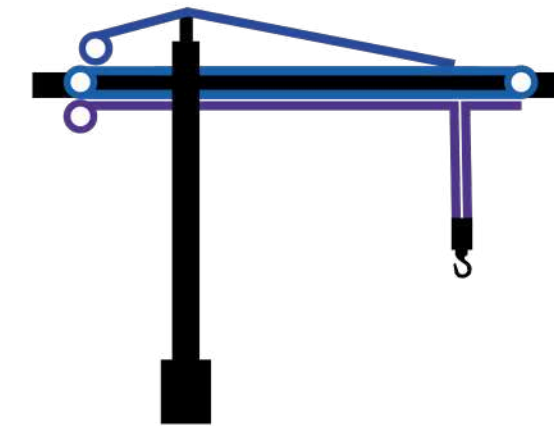
Steelworks ladle crane



1

Vesto 8	Vesto Flatten 8 (DT)
Vesto 8C	Vesto Flatten 6

Tower crane



1

Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I

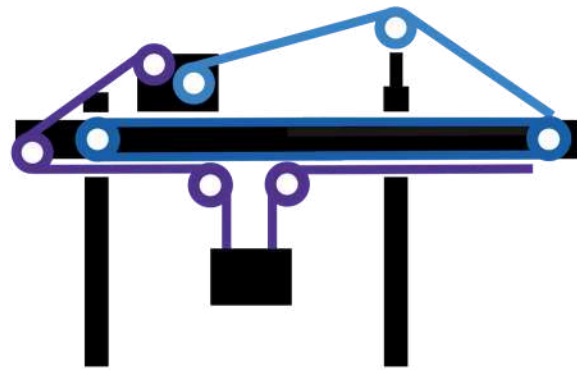
2

Vesto 8	Vesto Flatten 8 (DT)
Vesto 8C	Vesto Flatten 6

3

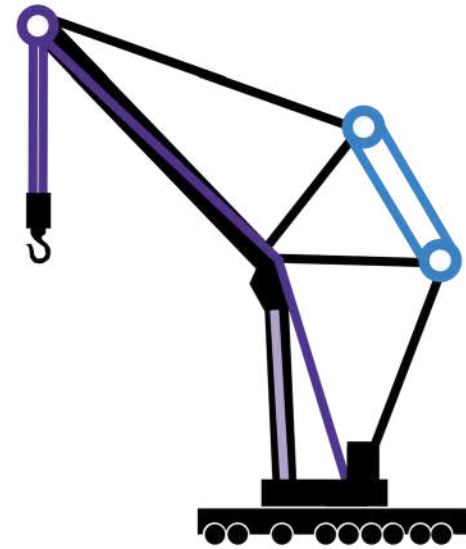
Vesto 8	Vesto 9C
Vesto 8C	Vesto 9Cc
Vesto Flatten 8 (DT)	

Container crane



- | | | |
|----------|---|---|
| 1 | Vesto 8
Vesto 8C
Vesto Flatten 8 (DT) | Vesto 9C
Vesto 6C
Vesto Flatten 6 |
| 2 | Vesto 8
Vesto 8C
Vesto Flatten 8 (DT) | Vesto Flatten 17DP
Vesto Flatten 6 |
| 3 | Vesto 8
Vesto 8C | Vesto Flatten 8 (DT)
Vesto 9C |

Boom mobile crane



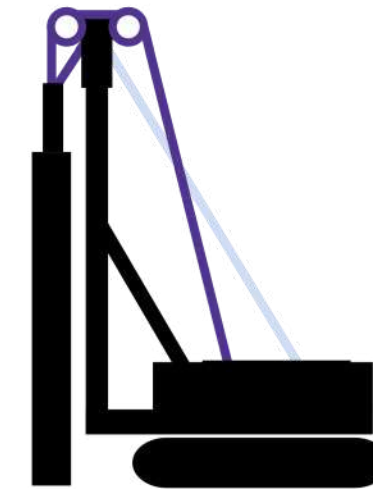
- | | | |
|----------|--|---------------------------------------|
| 1 | Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I | |
| 2 | Vesto 8
Vesto 8C | Vesto Flatten 6
Vesto Flatten 17DP |
| 7 | Vesto Flatten 17DP
Vesto Flatten 8 (DT) | |

Telescopic mobile crane



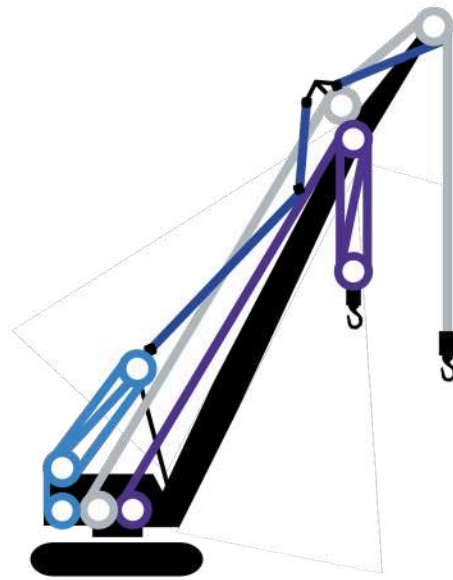
- | | |
|----------|--|
| 1 | Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I |
| 7 | Vesto Flatten 8 (DT)
Vesto Flatten 17DP |

Drilling / piling crane



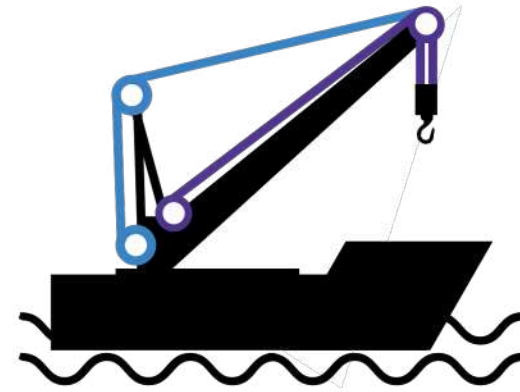
- | | | |
|----------|--|-----------------------------|
| 1 | Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I | |
| 6 | Vesto 8
Vesto 8C
Vesto Flatten 8 (DT) | Vesto Flatten 6
Vesto 6C |

Boom crawler crane



- 1 Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I
- 2 Vesto 8
Vesto 8C
- 5 Vesto Flatten 29I
Vesto 35C
Vesto Flatten 35
- 4 Vesto 8C
Vesto Flatten 6

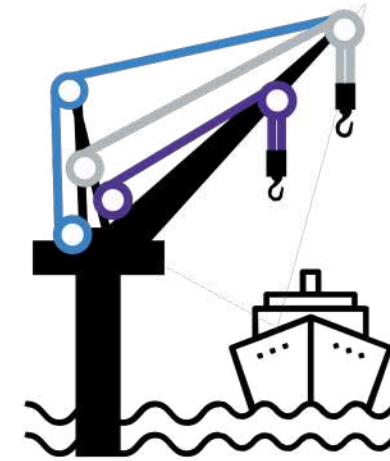
Deck crane



- 1 Vesto 35C
Vesto Flatten 4
- 2 Vesto 8
Vesto Flatten 17DP
Vesto 8C

- Vesto Flatten 35
Vesto Flatten 29I
- Vesto Flatten 6
Vesto Flatten 8 (DT)
Vesto 6C

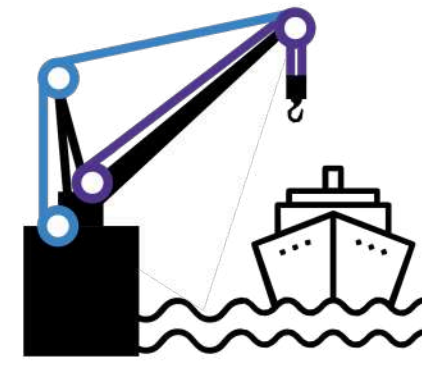
Offshore pedestal crane



- 1 Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I
- 2 Vesto 8
Vesto 8C
- 5 Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I

- Vesto Flatten 8 (DT)
Vesto Flatten 6

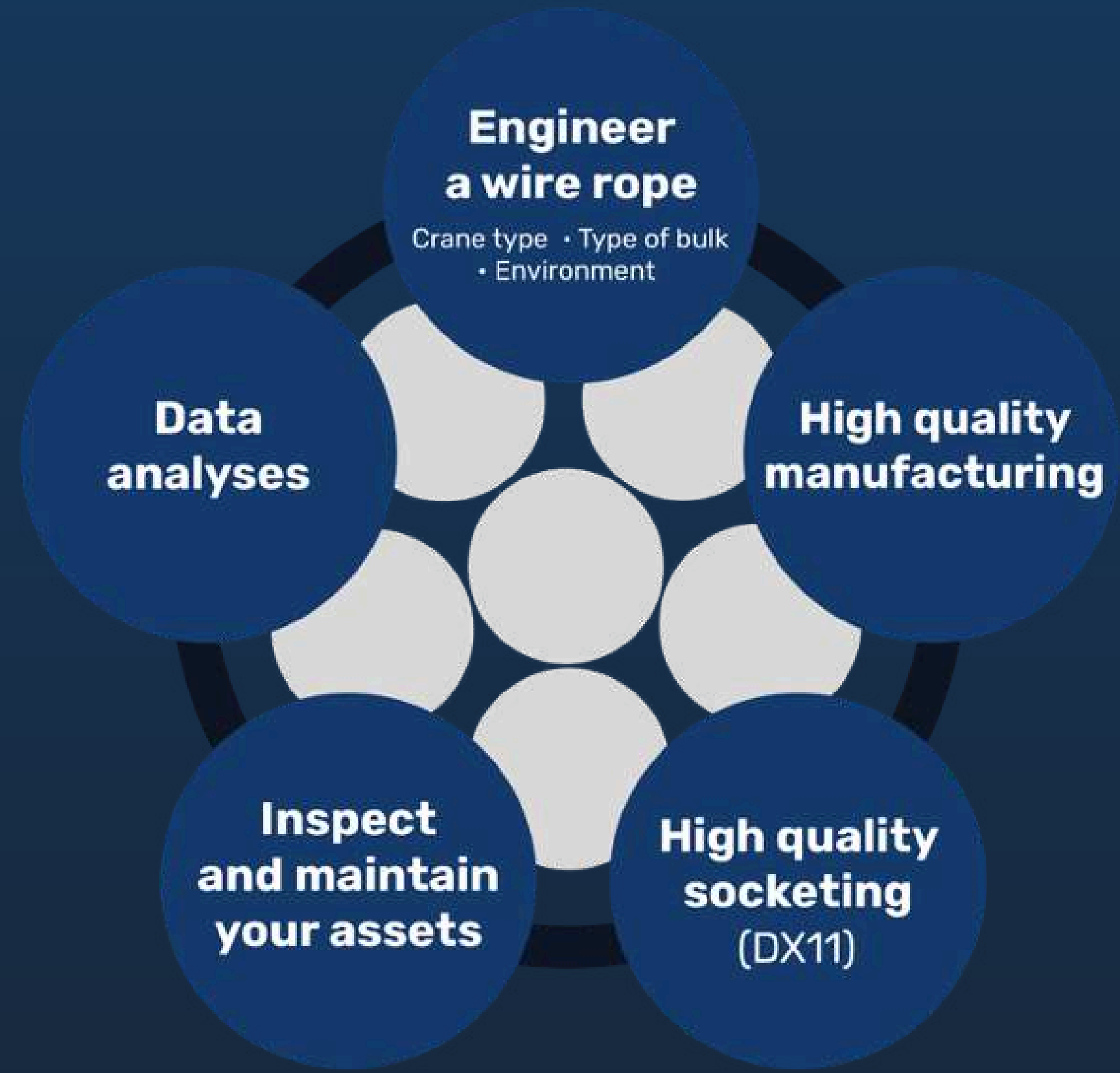
Dockside crane



- 1 Vesto 8
Vesto 8C
Vesto Flatten 8 (DT)
- 2 Vesto 8
Vesto 8C
Vesto Flatten 8 (DT)

- Vesto 35C
Vesto Flatten 35
Vesto Flatten 29I
- Vesto Flatten 17DP
Vesto Flatten 6
Vesto 6C

Steel wire ropes as a strategic asset for preventative maintenance





Thank you for your time