

Dyform[®] 8 PI MAX

BRIDON
steel wire ropes by BEKAERT

Enhance your offshore productivity

with high performance ropes

Minimised downtime

Improved safety

Optimised TCO

Longer service-life

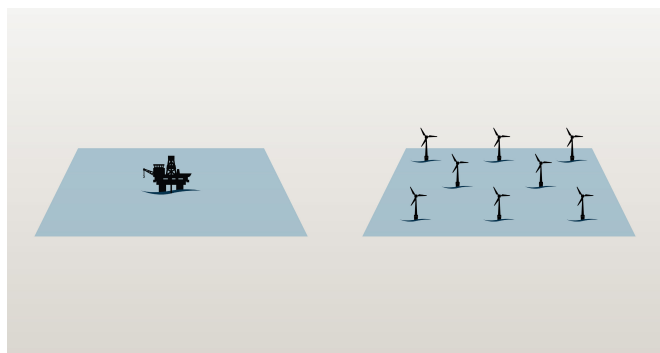


Bekaert



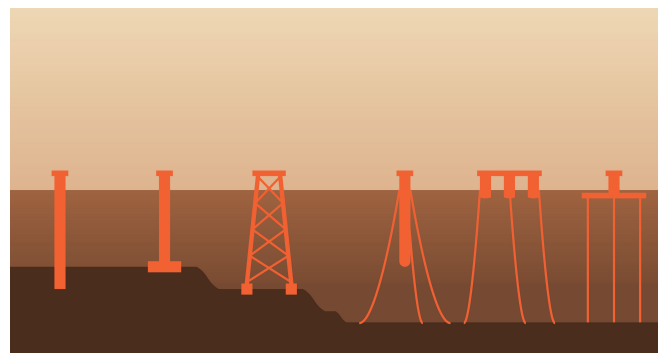
Experienced in offshore lifting applications

Bridon® Steel Wire Ropes by Bekaert has extensive experience in offshore lifting applications for the oil and gas industry, where safety, reliability, and performance are critical. This deep knowledge base, developed through years of tackling complex offshore challenges, positions **Bridon® Steel Wire Ropes by Bekaert** as the perfect partner to solve the future challenges presented by offshore wind installation projects.



Key differences between offshore wind and traditional oil & gas

Offshore oil and gas installations typically involve a single, large lifting operations, such as placing a massive drilling platform in a fixed position. In contrast, offshore wind installations require multiple, complex lifting tasks for various components, each with unique handling requirements.



Types of offshore wind foundations and wind farm components

Offshore wind foundations range from fixed-bottom to floating with the most common being monopiles. Wind farms consist of numerous turbines, with each one having many interconnected parts – including foundations, towers, blades, and nacelles that must be lifted individually and precisely assembled during offshore operations.

Unique rope solutions for specific challenges of offshore wind farm installations

This multi-component approach demands greater utilisation of the installation vessel therefore will require specialised lifting solutions with ropes that ensure longevity, contributing to the efficiency of the entire wind farm installation.

Dyform® 8 PI MAX

The increased demand in offshore wind installations combined with larger capacity turbines will provide major challenges to the market. The scale of modern wind turbines will require longer crane booms, which will result in higher forces on the rope and drum – this can lead to potential issues with drum damage.

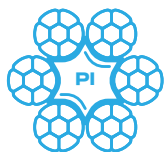
The limited availability of installation vessels combined with the significantly increasing number of lifts per crane will make rope longevity critical for operational efficiency.

Dyform® 8 PI MAX has been specifically developed to solve these challenges.



Dyform® MAX Technology

Double compacted rope via Dyform® strands and MAX rope compaction. Providing ultimate rope to sheave contact as well as reducing potential drum damage.



Plastic Injected IWRC

Designed to offer an internal cushioning layer between the IWRC and the outer strands, therefore reducing the contact stresses during the MAX compaction process and during multilayer spooling.



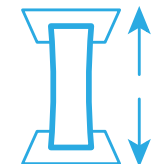
Multi-layer Spooling (MLS) Lifetime

Provides best-in-class drum damage resistance on a multi-layer spooling drum. Improved surface results in lower contact stresses and reduced potential to pinch wires during relative movement on the rope layers in the cross-over and climbing zones of the drum.



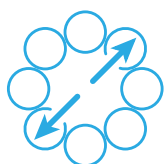
Cyclic Bending Over Sheave (CBOS)

Offers similar level of cyclic bending over sheave (CBOS) performance as non-double compacted ropes such as Dyform® 8.



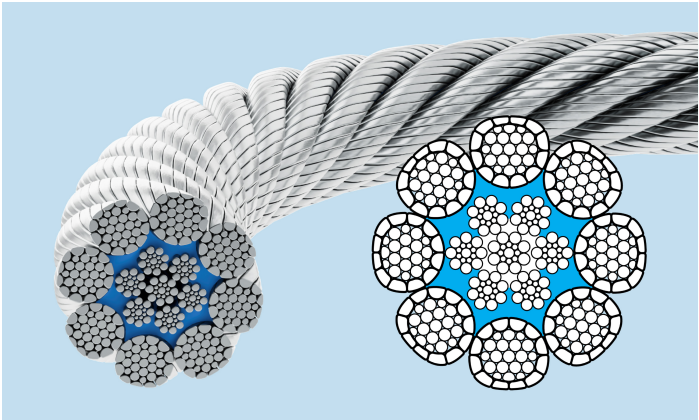
Wire Tensile Grade

As a result of the MAX compaction process the metallic area of the rope is increased, therefore similar minimum breaking loads (MBL) can be achieved using lower tensile grade wire.



Rope Diameter

Possible to achieve even the most challenging specified rope diameter tolerances for demanding crane applications due to reduced wire flattening and excellent diameter stability during multi-layer spooling.



Dyform® 8 PI MAX

A high-performance rope utilising **Dyform®** compacted strands and has undergone the **MAX-technology** double compaction process. This maximises sheave area contact for enhanced durability and best-in-class multi-layer spooling lifetime. **Plastic injection (PI)** also provides internal cushioning between the internal IWRC and the outer rope strands reducing internal friction and improving rope stability.

Nominal Diameter		Weight		Minimum Breaking Load (MBL)			
				Rope Grade: 1960			
mm	Inch	kg / m	lbs / ft	kN	t (metric)	lbs	t (short)
50		12.90	8.67	2,289.9	233.5	514,792	257.4
50.8	2	13.32	8.95	2,341.8	238.8	526,460	263.2
52		13.96	9.38	2,424.2	247.2	544,984	272.5
54	2 1/8	15.05	10.11	2,575.2	262.6	578,931	289.5
56		16.19	10.88	2,741.9	279.6	616,407	308.2
57.2	2 1/4	16.88	11.34	2,849.8	290.6	640,664	320.3
58		17.36	11.67	2,924.3	298.2	657,412	328.7
60		18.58	12.49	3,122.4	318.4	701,947	351.0
62		19.83	13.33	3,337.2	340.3	750,236	375.1
63.5	2 1/2	20.81	13.98	3,508.8	357.8	788,813	394.4
64		21.13	14.20	3,567.7	363.8	802,055	401.0
66		22.48	15.11	3,813.8	388.9	857,380	428.7
68		23.86	16.03	4,075.6	415.6	916,236	458.1
69.9	2 3/4	25.21	16.94	4,340.4	442.6	975,765	487.9
70		25.29	16.99	4,354.2	444.0	978,868	489.4
72		26.75	17.98	4,648.4	474.0	1,045,007	522.5

This table is for guidance purposes only with no guarantee or warranty (express or implied) as to its accuracy. The products described may be subject to change without notice, and should not be relied on without further advice from Bekaert. The cross section and rope image are for reference only. Actual cross sections vary due to diameter. For higher breaking loads a 2060 rope grade is available upon request.

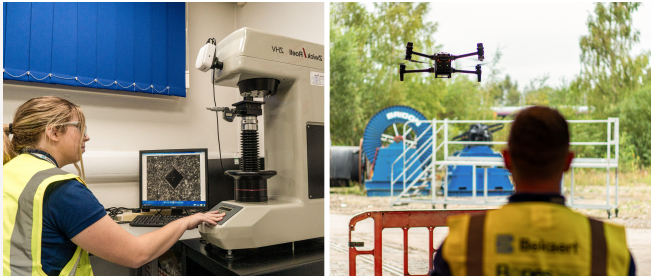
Bexco® Offshore Lifting Slings

Bexco® Synthetic Ropes by Bekaert offers a range of purpose-built, heavy lift installation ropes and slings made with Dyneema® as custom-made solutions.



Ropes360® Advanced Services

Ropes360® offer a range of services including inspection, maintenance, testing and training to help maximise your safety and ropes' operational life.



www.ropes.bekaert.com →