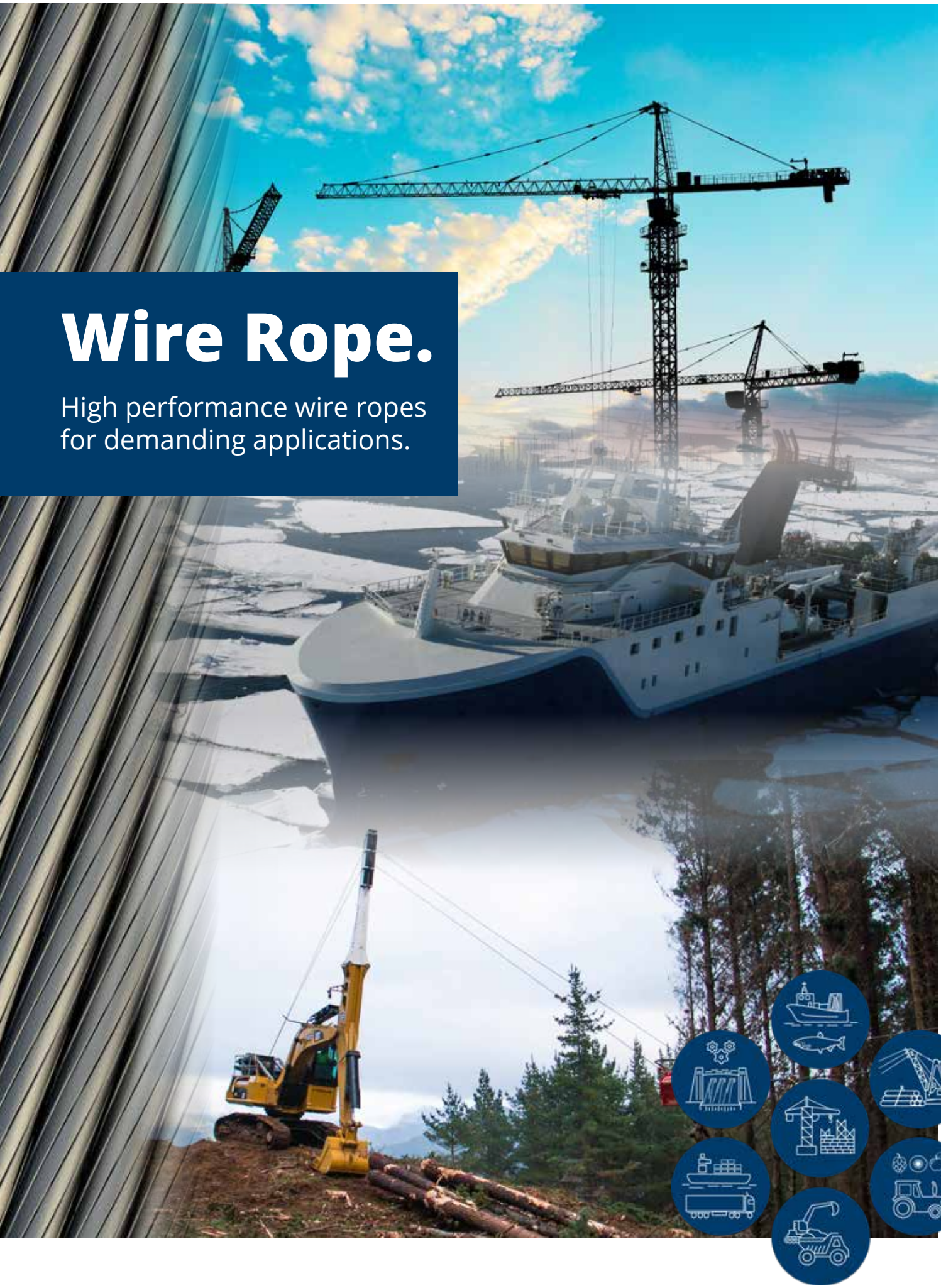
COOKES

Wire Rope.

High performance wire ropes
for demanding applications.



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Telarc. Registered
Quality ISO 9001

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LEEA Full Member

leenz inc.
Lifting Equipment Engineers New Zealand

Founding Member of
Lifting Equipment Engineers New Zealand

CONTENTS

COOKES: OUR ORGANISATION, OUR HISTORY

Cookes is the name at the very heart of how this country was built: our products have been doing New Zealand's heavy lifting, hauling, hoisting, trawling, digging (and more) for over a century.

World leaders in Wire Rope

As one of New Zealand's most dependable and recognised brands, Cookes is a leader in the supply of quality wire rope, lifting and marine products, services and solutions across almost every market in New Zealand and the wider South Pacific. We're proudly part of Bridon Bekaert The Ropes Group (BBRG), the world's premier supplier of mission-critical advanced cords and ropes. BBRG's position in demanding, worldwide markets stems from the ability to provide a comprehensive and competitive range of solutions in steel wire, rope and strand. Our customers benefit from a seamless service from initial specification and product selection through to on-site operational support by the team with over 300 years' experience in rope and lifting solutions.

WHAT MAKES US UNIQUE AND VALUABLE TO YOU?

We are problem solvers

Nationwide, our people have the collective knowledge and experience that spans years of service; you benefit from that every day. No matter the industry you are in – Construction, Forestry, Marine or Agriculture – if you have a problem, Cookes can solve it. That means better performance and profitability for your business.

International quality from local branches

You can shop at your local Cookes branch for a huge range of world-class industrial products. Our people enjoy making relationships personal. We aim to understand your industry, your business, and your unique needs. What you need is not on the shelf? Or in the warehouse? We can supply products from any of our 11 national branches. Have a problem? We can design and tailor a solution to meet your needs and requirements.

Health and safety come first

At Cookes, we are committed to ensuring that our activities and operations are conducted in a manner to not cause 'Harm to Anyone' and ensure the health, safety and welfare of all staff and others we interact with, including customers, contractors, visitors and the wider public. Everyone has the right to go home at the end of everyday unharmed

We are experts in ensuring that the equipment you use is fit for purpose. Cookes in-house testing, Height safety services, mobile testing services, non-destructive testing, and specialist rigging services ensure your equipment meets and or exceeds all relevant AS/NZS standards

Quality Assured

Cookes is absolutely committed to supplying quality products and service. We have held ISO 9001 certification since 1992 and expanded this to include the ISO 14001and OHSAS 18001 certification, demonstrating our commitment to quality, sustainability, and safety. More recently we have achieved Full Member accreditation with LEEA, the internationally recognised standard in lifting, providing further assurance of our ability to deliver quality solutions that consistently meet or exceed your needs.

Gourock - supplying New Zealand business since 1900

Cookes established in Auckland 1911

Cookes 1961

market leading wire rope solutions.

BRIDON · BEKAERT

THE ROPES GROUP

Bridon-Bekaert Ropes Group is the world's premier supplier of mission-critical advanced cords, steel wire ropes, and synthetic fibre ropes.

As a leading innovator, developer and producer of the best performing ropes and advanced cords globally, the Group provides superior value solutions to the oil & gas, mining, crane, elevator and other industrial sectors.

Two of the most enduring wire and rope pioneers joined forces in 2016 to make this ambition real. Bridon-Bekaert Ropes Group has a global manufacturing footprint and employs approximately 2500 people worldwide.

1975 Gourock

2013 Cookes & Gourock come together

COOKES
a BRIDON · BEKAERT Ropes Group Brand

2016 Cookes a Bridon-Bekaert Ropes Group brand

our brands.

a BRIDON · BEKAERT Ropes Group

High Performance Brands

BRIDON®

WRI®

ScanRope®

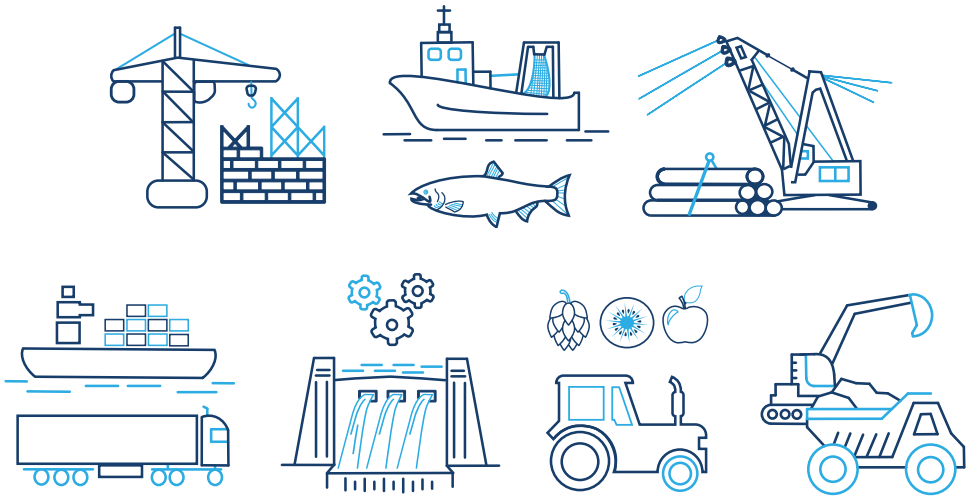
Value Brands

BlueStrand

CIMAF

PRODINSA

we are active in many industries.



COOKES 360

Cookes 360 services:

Technical Advice & Specification
- ✓ Expert knowledge
- ✓ Bespoke solutions
- ✓ Compliance & assurance

Sourcing & Transportation
- ✓ Sourcing quality products
- ✓ Global supplier network
- ✓ Indent supply & expediting

Assembly & Installation
- ✓ Lifting & rigging
- ✓ Height safety
- ✓ Net fabrication

In-service Inspection, Testing & Certification
- ✓ Non-destructive testing (NDT)
- ✓ Inspection & testing
- ✓ Certification

Maintenance & Repair
- ✓ Wire & fibre rope
- ✓ Lifting & height safety equipment
- ✓ Netting

Storage
- ✓ Lofting of lifting equipment
- ✓ Storage of customer product
- ✓ Insurance wire rope stock

Asset Management & Compliance
- ✓ BriCert
- ✓ Asset compliance
- ✓ Guidance on discard

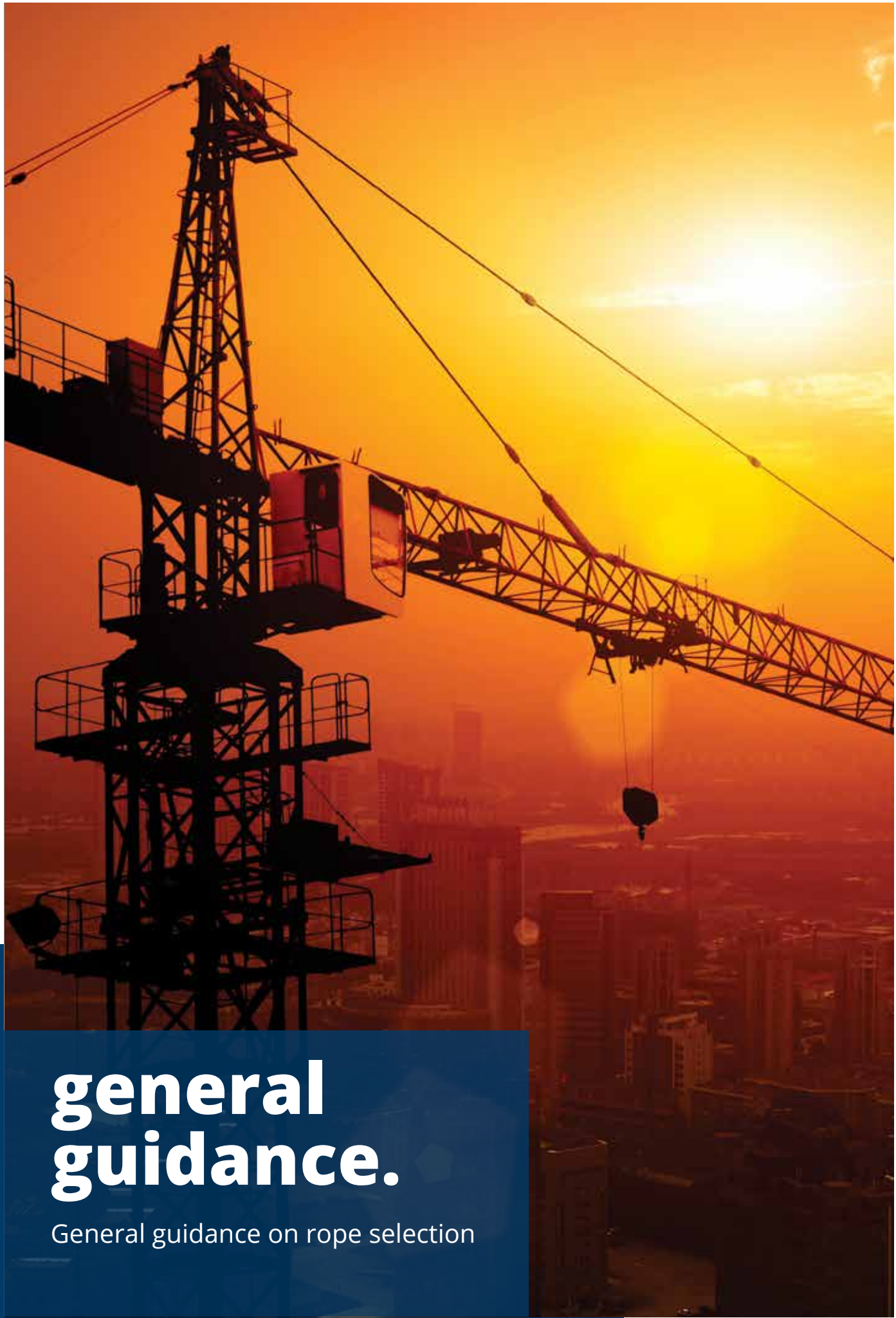
Advanced Services
- ✓ Customer training
- ✓ Sales & hire of load measurement solutions
- ✓ VR crane operator training

BBtec

The Bridon-Bekaert Technology Centre (BBtec) is our centre of excellence for rope technology development, testing, analysis and verification.

BBtec is equipped with unique equipment capable of testing steel/synthetic ropes and wires. It has extensive forensic analysis laboratory facilities and specialists capable of conducting detailed forensic evaluations of new or retired ropes.

BBtec accelerates Bridon-Bekaert's new product development, involving the latest rope technologies to increase safety, performance and operational life of ropes working in demanding and hostile environments typical to our core markets in the Oil and Gas, Mining, and Construction sectors.



general guidance.

General guidance on rope selection

WIRE ROPE GUIDANCE

To help you understand the complex nature of wire rope this guide aims to impart an understanding of the key factors that need to be considered and correctly balanced when choosing which type of rope will provide optimum service life and safety for a specific task, type of machinery and working environment.

An example rope nomenclature for the rope shown above is given below;

6 x 36WS - IWRC 1960 B sZ

What it means;

6 = numbers of strands

36 = number of wires in each strand

1-7-7+7-14 = Lay-up of wires in the strand

IWRC = Type of core

1960 = Rope grade

B = Drawn galvanised B(Zn)

sZ = Right Hand Ordinary (RHO) Lay

EQUAL LAY STRAND CONSTRUCTIONS

7-wires
(1-6)

Seale
19s(1-9-9)

Filler 25F
(1-6-6F-12)

Warrington
Seale36WS
(1-7-7+7-14)

6-STRANDED ROPE CONSTRUCTIONS

(For example nominal diameter 22mm)

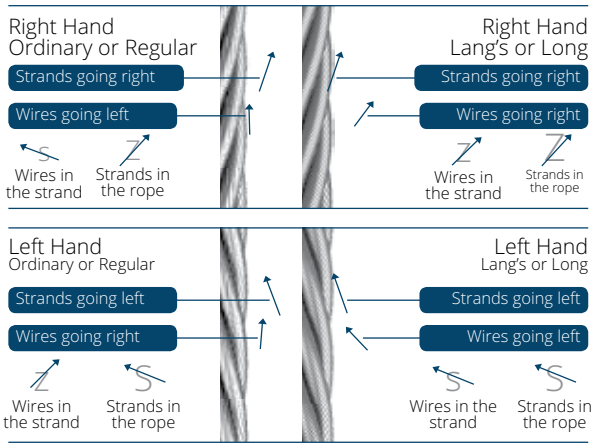
6x7
outer wire
2.2mm²
Metalic area
3.8mm²

6x19S
outer wire
1.8mm²
Metalic area
2.5mm²

6x25F
outer wire
1.5mm²
Metalic area
1.8mm²

6x36WS
outer wire
1.3mm²
Metalic area
1.3mm²

The rope lay of a wire rope may be described as;
sZ = Right hand ordinary/regular lay
zZ = Right hand lang's lay
aZ = Right hand alternate lay
zS = Left hand ordinary/regular lay
sS = Left hand lang's lay
aS = Left hand alternate lay



Lang's lay ropes offer greater wear resistance and minimise spooling damage at the cross-over zones when multi-layer wound on winch drum.

Wire ropes can also be swaged or Dyformed after completion, further increasing the steel fill factor, whilst creating a smooth surface to the exterior of the rope.

CORES

Steel Wire ropes are supplied with either fibre or steel cores, the choice being largely dependent on the use for which the rope is intended.
The principal function of the core is to provide support to the strands and maintain them in the correct positions under working conditions.
Steel Cores
Steel cores comprise an independent wire rope (IWRC) or in the case of small ropes, a wire strand (WSC). Such cores prove advantageous in severe working conditions involving low factors of safety, high operating speeds, wide fleet angles and are more resistant to crushing on drums and pulleys. The steel core provides better support for the outer strands, so that the rope retains its shape, resulting in a more effective distribution of stress in the individual wires.

PREFORMING

Generally, ropes are supplied preformed. In a preformed rope, the wires and strands are given the helix they take up in the completed rope.

COATINGS

Zinc Coated Wire Ropes – Galvanising

Zinc coatings provide sacrificial protection to the underlying steel wire for protection against corrosion where the rope is exposed to corrosive agents – salt, water, moisture, weather etc.

Various coat weights of zinc are available for particular applications; Bridon is ready to advise on the alternative procedures for achieving corrosion protection of wire rope appropriate to the particular environment and manner of usage.

ROPE GRADES

Rope Grade	Approximate Equivalent API 9A grade
1770	IPS
1860	EIPS
1960	EIPS
2160	EEIP

DEFINITION OF BREAKING LOADS AND FORCES

1.Minimum Breaking Force: The force, in kilonewtons or pounds force below which the rope shall not break when tested to destruction.

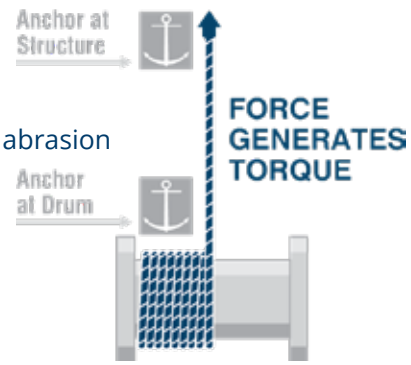
2.Minimum Breaking Load: The load in tonnes or tons corresponding to the minimum breaking force.

3.Minimum aggregate breaking force: The value calculated from the product of the sum of the cross-sectional metallic areas of all the individual wires in the rope and the tensile strength grades(s) of the wires.

Note: The minimum aggregate breaking force is sometimes used when Regulations permit, particularly in Europe. There is a direct relationship between minimum aggregate breaking force and minimum breaking force (through the spinning loss) and users must be absolutely sure that they are comparing like for like when ordering replacement ropes.

When selecting a steel wire rope to suit a particular application the following characteristics should be taken into consideration.

- ✓ Strength
- ✓ Rotation resistance
- ✓ Fatigue resistance
- ✓ Resistance to wear and abrasion
- ✓ Resistance to crushing
- ✓ Resistance to corrosion
- ✓ Rope extension



STRENGTH

The responsibility for determining the minimum strength of a rope for use in a given system rests with the manufacturer of the machine, appliance, or lifting equipment. As part of this process the manufacturer of the machine, appliance or lifting equipment will need to be aware of any local regulations, standards or codes of practice which might govern the design factor of the rope (often referred to nowadays as the coefficient of utilisation), and other factors which might influence the design of sheaves and drums, the shape of the groove profiles and corresponding radius, the drum pitch and the angle of fleet, all of which have an effect on rope performance.

Once the strength (referred to as minimum breaking force or minimum breaking load) of the rope has been determined it is then necessary to consider which type of rope will be suitable for the intended duty. It is important therefore for the designer to be fully aware of the properties, characteristics and limitations on use of the many different kinds of steel wire ropes which are available.

IMPORTANT NOTE FOR CRANE OPERATORS

COOKES recommends that once the machine, appliance or lifting equipment has been taken into service, any replacement rope should possess the required characteristics for the duty in question and should, as a minimum, at least comply with the minimum guaranteed breaking force stated by the original equipment manufacturer.

RESISTANCE TO ROTATION

It is important to determine whether there is a requirement to use a low rotation or rotation resistant rope. Such ropes are often referred to as multi-strand ropes.

Six or eight strand rope constructions are usually selected unless load rotation on a single part system or “cabling” on a multi-part reeving system are likely to cause operational problems.

When loaded, steel wire ropes will generate:

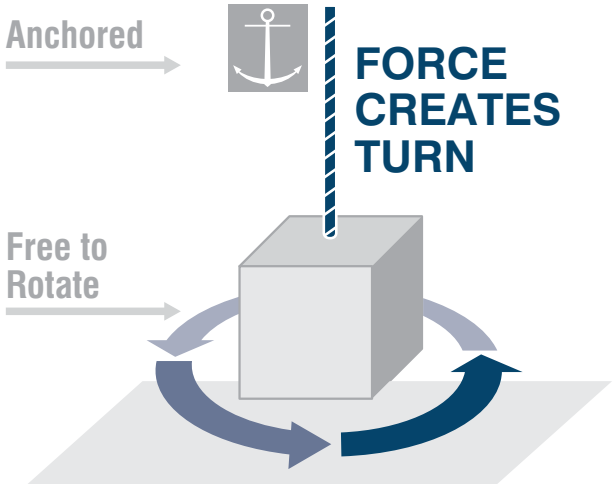
- ✓ “Torque” if both ends are fixed
- ✓ “Turn” if one end is unrestrained

TORQUE

When both ends of a rope are fixed, the applied force generates “torque” at the fixing points.

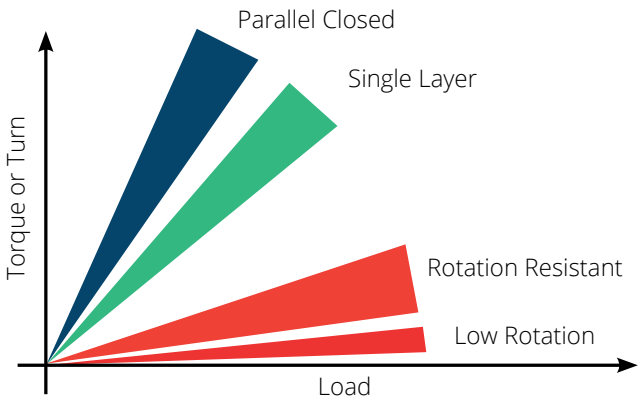
TURN

When one end of a rope is free to rotate, the applied load causes the rope to turn.



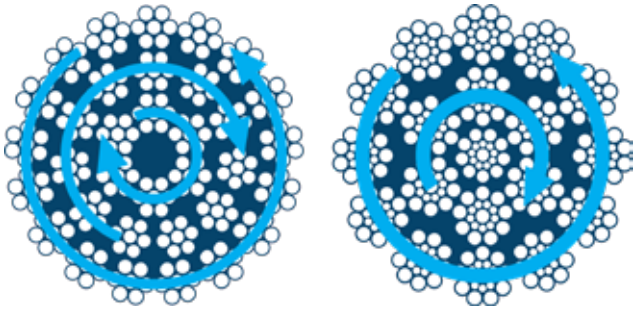
The torque or turn generated will increase as the load applied increases. The degree to which a wire rope generates torque or turn will be influenced by the construction of the rope. Having recognised what can happen when a rope is loaded it is necessary to select the correct type of rope. It should be noted that all ropes will rotate to some degree when loaded.

The diagram below serves to illustrate the differences in rotational properties between the four basic types of stranded rope.



The tendency for any rope to turn will increase as the height of lift increases. In a multi-part reeving system the tendency for the rope to cable will increase as the spacing between the parts of rope decreases. Selection of the correct rope will help to prevent "cabling" and rotation of the load.

"Endurance" low rotation and rotation resistant ropes ensure that problems associated with cabling and load rotation are minimised.



3 layer -
Low Rotation

2 layer -
Rotation Resistant

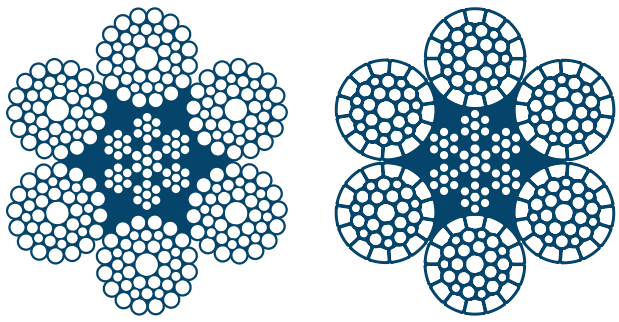
Cookes is pleased to offer advice on any specific problems associated with rope rotation.

FATIGUE RESISTANCE

Steel wire ropes are likely to deteriorate due to bend fatigue when subjected to bending around a sheave or drum. The rate of deterioration will be influenced by the number of sheaves in the system, the diameter of the sheaves and drum, and the loading conditions.

Bridon Bekaert carries out extensive testing on their products, providing comparative fatigue data to allow customers to make an informed choice. When selecting a wire rope for an application where bending fatigue is a principal cause of deterioration it is important to select a rope containing small wires e.g.

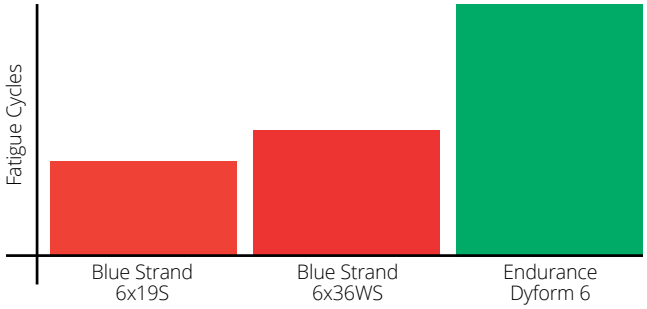
6x36WS(1-7-7+7-14) as opposed to a 6x19S(1-9-9). Additional resistance to fatigue leading to real cost savings can be achieved by selecting a "Dyform" wire rope.



Standard

Dyform

The smooth surface of the "Dyform" product improves rope to sheave contact leading to reduced wear on both rope and sheave. Increased cross-sectional steel area and improved inter-wire contact ensures that the rope will operate with lower internal stress levels resulting in longer bending fatigue life and lower costs.

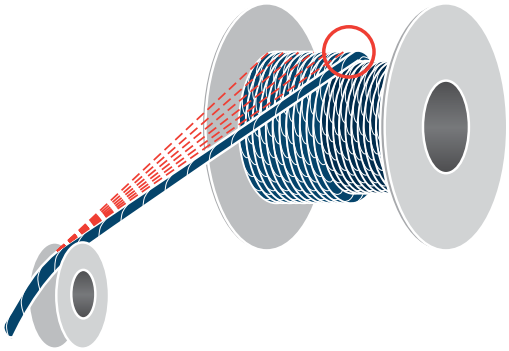


This graph illustrates a "doubling" in life when moving from Blue Strand 6x36 to Endurance Dyform 6. This same relationship can be found when moving from any construction into an equivalent Dyform construction e.g. 18x7 to Endurance Dyform 18 or 35x7 to Endurance Dyform 34LR.

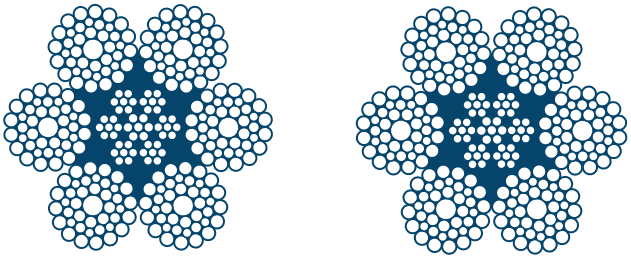
RESISTANCE TO ABRASIVE WEAR

Abrasive wear can take place between rope and sheave and between rope and drum but the greatest cause of abrasion is often through "interference" at the drum.

If abrasion is determined to be a major factor in rope deterioration then a wire rope with relatively large outer wires should be selected.

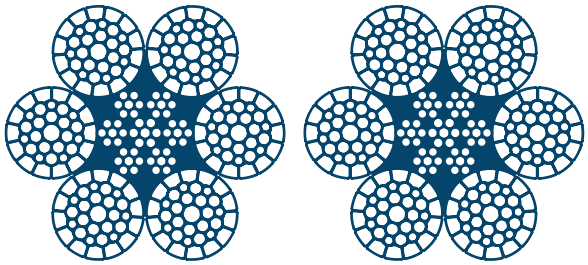


Wire rope on adjacent drum laps can cause point contact and accelerated wear.



Non Dyform wire rope on adjacent drum laps can cause point contact and accelerated wear.

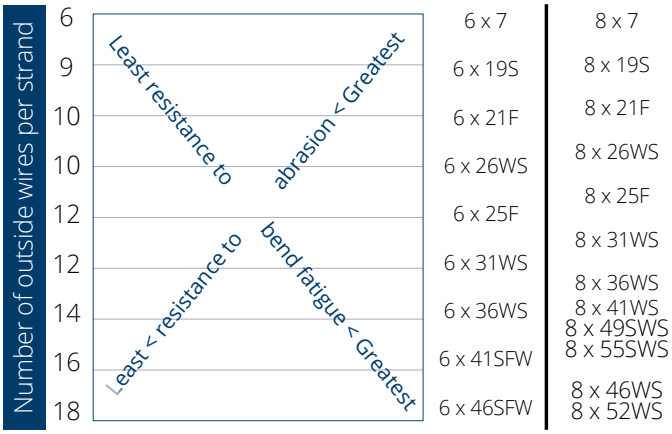
Selection of a Dyform product will reduce abrasion through improved contact conditions.



The smooth surface of Dyform rope creates better contact and leads to longer life.

ABRASION RESISTANCE VS BENDING FATIGUE RESISTANCE

When choosing a rope for a specific application it is often necessary to reach a balance between the two important rope characteristics of abrasion resistance and the resistance to bending fatigue. An established method of determining the best construction for the rope for the particular operating conditions is by use of the "X- Chart". By referring to this chart when selecting a rope, the mid-point of the "X" comes closest to a balance between resistance to abrasion and resistance to bending fatigue. As with most engineering challenges, some degree of compromise and trade-off of the two properties may be required in order to choose the best rope for the application. This will ultimately depend on the prevailing conditions under which the rope will be expected to operate in and the need to reach an efficient, economical solution.

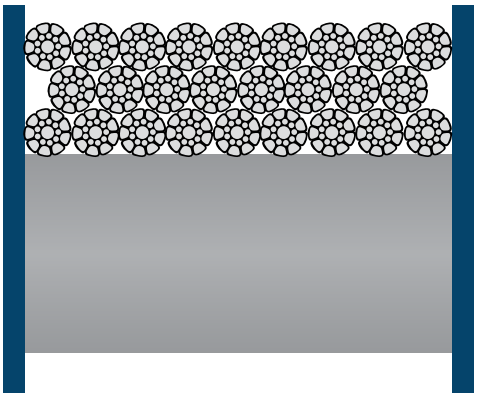


CRUSH RESISTANCE

In multilayer coiling applications where there is more than one layer of rope on the drum it is essential to install the rope with some back tension. Bridon recommends a minimum installation tension of between 2.5% and 10% of the minimum breaking force of the rope. If this is not achieved, or in certain applications where high pressure on underlying rope layers is inevitable e.g. a boom hoist rope raising a boom from the horizontal position, severe crushing damage can be caused to underlying layers. Selection of a steel core, as opposed to a fibre core, will help this situation. Additional resistance to crushing is offered by a Dyform rope resulting from its high steel fill-factor.

Dyform ropes are recommended for multilayer coiling operations where crushing on lower layers is inevitable.

Rotary hammer swaged Constructex ropes excel to combat problem spooling to minimise damage and crushing on the drum.



CORROSION RESISTANCE

If the wire rope is to be used in a corrosive environment then a galvanised coating is recommended. If corrosion is not a significant issue then a bright rope can be selected.

Where moisture can penetrate the rope and attack the core, plastic impregnation (PI) can be considered.

In order to minimise the effects of corrosion it is important to select a wire rope with a suitable manufacturing lubricant. Further advantages can be gained by lubricating the rope regularly whilst it is in service.

PROPERTIES OF EXTENSION OF STEEL WIRE ROPES

Any assembly of steel wires spun into a helical formation either as a strand or wire rope, when subjected to a tensile load, can extend in three separate phases, depending on the magnitude of the applied load.

There are also other factors which produce rope extension which are very small and can normally be ignored.

Phase 1 - Initial or Permanent Constructional Extension

At the commencement of loading a new rope, an extension is created by the bedding down of the assembled wires with a corresponding reduction in overall diameter. This reduction in diameter creates an excess length of wire which is accommodated by a lengthening of the helical lay. When sufficiently large bearing areas have been generated on adjacent wires to withstand the circumferential compressive loads, this mechanically created extension ceases and the extension in Phase 2 commences. The Initial Extension of any rope cannot be accurately determined by calculation and has no elastic properties.

The practical value of this characteristic depends upon many factors, the most important being the type and construction of rope, the range of loads and the number and frequency of the cycles of operation. It is not possible to quote exact values for the various constructions of rope in use, but the following approximate values may be employed to give reasonably accurate results.

	% of rope length	
	Fibre core	Steel Core
Lightly loaded factor of safety about 5:1	0.25	0.125
Normally loaded Factor of safety about 5:1	0.50	0.25
Heavily loaded Factor of safety about 3:1	0.75	0.50
Heavily loaded with many bends and/or deflections	Up to 2.00	Up to 1.00

The above figures are for guidance purposes. More precise figures are available upon request.

Phase 2 - Elastic Extension

Following Phase 1, the rope extends in a manner which complies approximately with Hookes Law (stress is proportional to strain) until the Limit of Proportionality or Elastic Limit is reached.

It is important to note that wire ropes do not possess a Young's Modulus of Elasticity, but an 'apparent' Modulus of Elasticity can be determined between two fixed loads.

The Modulus of Elasticity also varies with different rope constructions, but generally increases as the cross-sectional area of steel increases.

By using the values given, it is possible to make a reasonable estimate of elastic extension, but if greater accuracy is required it is advisable to carry out a modulus test on an actual sample of the rope.

$$\text{Elastic Extension} = \frac{WL}{EA} \quad \text{mm}$$

W = load applied (kN)
L = rope length (m)
EA = axial stiffness MN

Phase 3 - Permanent Extension

The permanent, non-elastic extension of the steel caused by tensile loads exceeding the yield point of the material.

If the load exceeds the Limit of Proportionality, the rate of extension will accelerate as the load is increased, until a loading is reached at which continuous extension will commence, causing the wire rope to fracture without any further increase of load.

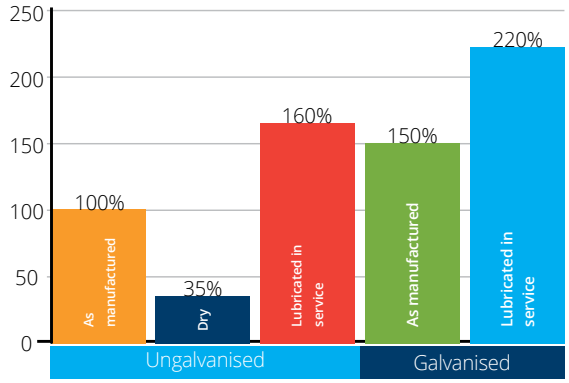
LUBRICATION

During the wire rope manufacturing process, the space between the wires is normally filled with petroleum based grease, these greases having a temperature operating range typically of 0°C to +60°C. Synthetic grease with an operating temperature range of -40°C to +90°C may be incorporated. It is important when specifying a particular rope to consider the type of lubricant required for the application and the amount of lubricant required on the exterior of the rope, as the tendency is to produce ropes with less grease on their exterior.

Lubricants may be applied to wire ropes during service to both increase their fatigue performance and protect the ropes from corrosion.

TYPICAL WIRE ROPE BEND FATIGUE RESULTS

(Bridon Endurance Dyform 34LR)



General Notes

GALVANIZED

Bridon Bekaert The Ropes Group has the capability to offer any crane product in either Bright or Galvanized finish. Typically, cranes use Bright ropes in North American and Galvanized ropes in the European Union and the GOM. Globally, local usage standards, application conditions and preference may define the actual rope finish selected.

SMOOTH DRUM

"When using multi-strand, rotation resistant products in multi-layer applications, the use of Lebus type grooved drums may provide superior spooling performance over smooth faced drums."

MINIMUM BREAKING FORCE

Many wire rope applications, mobile cranes and deep water mooring systems in particular benefit from very high strength to weight ratios. As a result, designers are constantly pushing the specific strength envelope of the wire rope used in their products. Bridon and many other rope companies have responded to these requirements with innovative materials and manufacturing techniques to push rope strengths past the highest values listed in national and international standards.

ASSESSING THE SAFE OPERATING CONDITION OF STEEL WIRE ROPES

Bridon-Bekaert recommends that the condition assessment of wire rope be carried out by a suitably qualified competent person against the requirements of BS ISO 4309.

Table 1: Rope Category Numbers for Non-Rotation Resistant Rope

Brand name	Rope	Strand	RCN
6 Series 6x19	6 x 19S-IWRC 6 x 25F-IWRC 6 x 26WS-IWRC	1-9-9 1-6-6F-12 1-5-5+5-10	02 04 06
6 Series 6x36	6 x 31WS-IWRC 6 x 36WS-IWRC 6 x 41WS-IWRC	1-6-6+6-12 1-7-7+7-14 1-8-8+8-16	08 09 11
Dyform 6 Series Dyform 6	6 x K19S-IWRC 6 x K26WS-IWRC 6 x K36WS-IWRC 6 x K41WS-IWRC	1-9-9 1-5-5+5-10 1-7-7+7-14 1-8-8+8-16	02 06 09 11
Dyform 6 Series Dyform Bristar 6	6 x K19S-EPIWRC 6 x K26WS-EPIWRC 6 x K36WS-EPIWRC 6 x K41WS-EPIWRC	1-9-9 1-5-5+5-10 1-7-7+7-14 1-8-8+8-16	02 06 09 11
Dyform 8 Series Dyform 8	8 x K19S-IWRC 8 x K26WS-IWRC 8 x K36WS-IWRC	1-9-9 1-5-5+5-10 1-7-7+7-14	04 09 13
Dyform 8 Series Dyform 8PI	8 x K19S-EPIWRC 8 x K26WS-EPIWRC 8 x K36WS-EPIWRC	1-9-9 1-5-5+5-10 1-7-7+7-14	04 09 13
Dyform 8 Series Dyform DSC8	8 x K19S-PWRC 8 x K26WS-PWRC	1-9-9 1-5-5+5-10	04 09
8 Series	8 x 19S-IWRC 8 x 25F-IWRC 8 x 36WS-IWRC	1-9-9 1-6-6F-12 1-7-7+7-14	04 06 13
Constructex	K(3x40FC+3x24 FC)-PWRC	FC-8-8-8F-16 FC-6-6F-12	06

TABLE 2: ROPE CATEGORY NUMBERS FOR ROTATION RESISTANT ROPE

Brand Name	Rope	Strand	RCN
18 Series	18 x K7 - WSC	1-6	23-1
50DB Series	26 xK7 - WSC	1-6	23-1
Dyform 34LR	35(W) x K7 - WSC 35(W) K19S - WSC	1-6 1-9-9	23-2 31
35LS	35(W) X 7-WSC 35(W) X 19S-WSC	1-6 1-9-9	23-2 31

DISCARD CRITERIA: SINGLE-LAYER AND PARALLEL CLOSED ROPES

For guidance on discard of steel wire ropes, the tables below taken from (1) should be used. When using this information in an official capacity, the latest version of the standard should be checked.

Rope Category Number (RCN)	Total Number of load bearing wires in the rope (a) (n)	Number of visible outer broken wires (b)					
		Sections of rope working in steel sheaves and/or spooling on a single-layer spooling drum.				sections of rope spooling on a multi-layer spooling drum (c)	
		Classes M1to M4 or class unknown (d)				All classes	
		Ordinary lay		Lang's Lay		Ord & Lang's	
		Over a length of 6d (e)	Over a length of 30d (e)	Over a length of 6d (e)	Over a length of 30d (e)	Over a length of 6d (e)	Over a length of 30d (e)
01	n ≤ 50	2	4	1	2	4	8
02	51≤ n ≤75	3	6	2	3	6	12
03	76≤ n ≤100	4	8	2	4	8	16
04	101≤ n ≤120	5	10	2	5	10	20
05	121≤ n ≤140	6	11	3	6	12	22
06	141≤ n ≤160	6	13	3	6	12	26
07	161≤ n ≤180	7	14	4	7	14	28
08	181≤ n ≤200	8	16	4	8	16	32
09	201≤ n ≤220	9	18	4	9	18	36
10	221≤ n ≤240	10	19	5	10	20	38
11	241≤ n ≤260	10	21	5	10	20	42
11	261≤ n ≤280	11	22	6	11	24	44
13	281≤ n ≤300	12	24	6	12	24	48
	n >300	0,4 x n	0,08 x, n	0,02 xn	0,04 x n	0,08 x n	

DISCARD CRITERIA: ROTATION-RESISTANT ROPES

Rope category Number (RCN)	Total Number of load bearing wires in the rope (a)	Number of visible outer broken wires (b)			
		Sections of rope working in steel sheaves and/or spooling on a single-layer spooling drum.		sections of rope spooling on a multi-layer spooling drum (c)	
		Over a length of 6d (d)	Over a length of 30d (d)	Over a length of 6d (d)	Over a length of 30d (d)
21	4 strands n ≤ 100	2	4	2	4
	3 or 4 strands n ≤100	2	4	4	8
	At least 11 outer strands				
23-1	71≤ n ≤100	2	4	4	8
23-2	101≤ n ≤120	3	5	5	10
23-3	121≤ n ≤140	3	5	6	11
24	141≤ n ≤160	3	6	6	13
25	161≤ n ≤180	4	7	7	14
26	181≤ n ≤200	4	8	8	16
27	121≤ n ≤220	4	9	9	18
28	221≤ n ≤240	5	10	10	19
29	241≤ n ≤260	5	10	10	21
30	261≤ n ≤280	6	11	11	22
31	281≤ n ≤300	6	12	12	24
	n >300	6	12	12	24

technologies.

Polymer Technologies

PLASTIC IMPREGNATION

High performance plastic impregnation is designed to offer an internal cushioning layer to the inter-strand contact points especially between core to cover on multi-strand low rotation ropes improving bend fatigue and core service life.

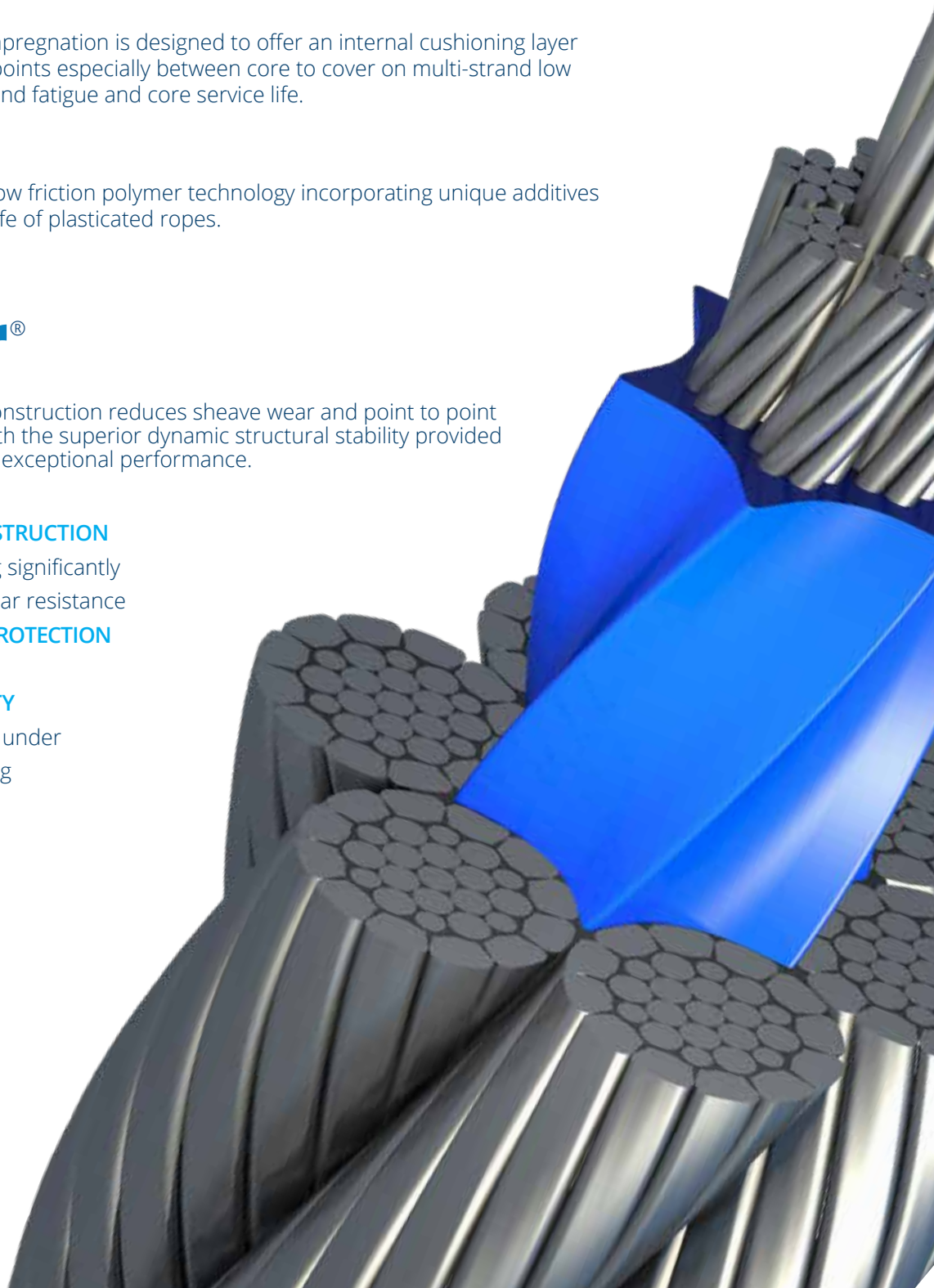
NXG

Advanced next generation low friction polymer technology incorporating unique additives to further enhance fatigue life of plasticated ropes.

Bristar®

DYFORM BRISTAR ropes construction reduces sheave wear and point to point loading, which combined with the superior dynamic structural stability provided by the Bristar core, ensures exceptional performance.

- **HIGH PERFORMANCE CONSTRUCTION**
  Improved strand positioning significantly increases fatigue life and wear resistance
- **GREATER INTERNAL ROPE PROTECTION**
  Enhanced core life
- **INCREASED ROPE STABILITY**
  Enhanced diameter stability under load improves drum spooling performance and reduces rope crushing

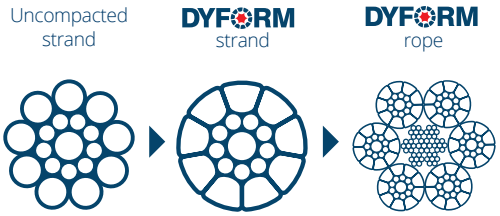


Rope Compaction

DYFORM

Bridon-Bekaert manufactures ropes using a unique Dyforming process that compacts the strands as shown below. The smooth surface of the "Dyform" product provides improved rope to sheave contact leading to reduced wear on both rope and sheave. Increased cross-sectional steel area increases breaking load and improves inter-wire contact ensures that the rope will operate with lower internal stress levels resulting in longer bending fatigue life and lower costs.

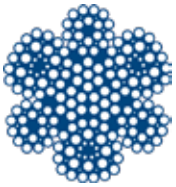
DYFORM®



MAX TECHNOLOGY

Bridon-Bekaert manufactures ropes using rotary hammer swaging and a unique roller compaction process that compacts the outer rope surface as shown. In comparison to tradition-al Dyform ropes, the Max technology further improves rope to sheave contact and improved diameter stability leading to reduced wear on both rope and sheave. Further increased cross-sectional steel area provides a robust construction with high breaking force and excellent crush resistance. Improved inter-wire contact ensures optimum spooling performance offering maximum resistance to damage for exceptional service life in the most demanding multi-layer drum applications.

DYFORM 8 MAX



CONSTRUCTEX

Lubricants

BRILUBE® FIT

- Traditional wire rope lubricants suitable for a wide range of offshore applications
- Corrosion protection
- Wear resistant

BRILUBE® ULTRA

- Developed to perform in more challenging environments
- Enhanced rope lubricant, manufactured with a unique hybrid grease
- A wide operating temperature range suitable for active heave compensation systems and warmer tropical climates
- Along with a three stage corrosion protection system with a unique 'water wash off' performance

EU Ecolabel : UK/027/016

cranes & industrial

Product Selection
Port & Maritime Cranes

✔ INDICATES COOKES RECOMMENDED ROPE PER APPLICATION

Mobile harbour cranes

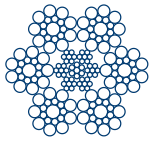
✔ Dyform 8 / PI / Bristar

Dyform 6 / PI / Bristar

Ship to shore cranes

✔ Dyform 6 / PI / Bristar

✔ Dyform8 / PI / Bristar

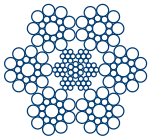


6 Series

Container handlers

✔ Dyform 6 / PI / Bristar

✔ Dyform 8 / PI / Bristar



6 Series

Bulk unloader cranes

✔ Dyform 8 / PI / Bristar

Dyform 6 / PI / Bristar

Product Selection
Port & Maritime Cranes

✔ INDICATES COOKES RECOMMENDED ROPE PER APPLICATION

Ship cranes
Pedestal cranes / knuckle boom cranes


✔ Dyform 34LR / PI / MAX

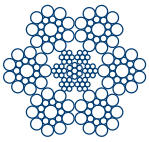

✔ Dyform 6 / PI / Bristar


✔ Dyform 8 / PI / Bristar

Ship lifter


✔ Dyform 6 / PI / Bristar


✔ Dyform 8 / PI / Bristar

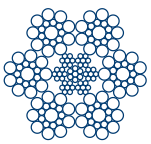

6 Series

Floating cranes


✔ Dyform 34LR / PI / MAX


✔ Dyform 6 / PI / Bristar


✔ Dyform 8 / PI / Bristar


6 Series

Offshore cranes

Pedestal cranes

✔ Dyform 34LR / PI / MAX

✔ Dyform 8 / PI / Bristar

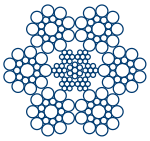
Dyform 6 / PI / Bristar

Ship derrick cranes

✔ Dyform 34LR / PI / MAX

✔ Dyform 6 / PI / Bristar

✔ Dyform 8 / PI / Bristar



✔ 6 Series

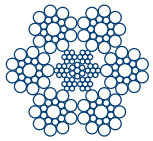
Product Selection
Industrial

✔ INDICATES COOKES RECOMMENDED ROPE PER APPLICATION

Overhead hoist / gantry cranes
E.O.T. / Outdoor / Indoor in text / CDQ cranes

✔ Dyform 6 / PI / Bristar

✔ Dyform 8 / PI / Bristar



6 Series

Steel works ladle / charging cranes

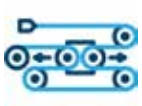
✔ Dyform 8 / PI / Bristar

✔ Dyform 6 / PI / Bristar

Steel works blast furnace skips

✔ Dyform 6 / PI / Bristar

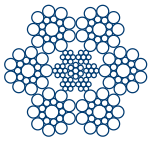
✔ Dyform 8 / PI / Bristar



Cold rolling / looper car

✔ Dyform 6 / PI / Bristar

✔ Dyform 8 / PI / Bristar



6 Series

Product Selection
Construction

✔ INDICATES COOKES RECOMMENDED ROPE PER APPLICATION

Tower cranes
Flat top / high top / luffing / derrick / heavy load

✔ Dyform 34LR / PI

✔ Dyform 8 / PI / Bristar

Telescopic mobile cranes
All terrain / Telescopic / Rough terrain

✔ Dyform 34LR / PI

Truck mounted cranes

✔ Dyform 34LR / PI

Product Selection
Construction

✔ INDICATES COOKES RECOMMENDED ROPE PER APPLICATION

Crawler cranes
Lattice boom

✔ Dyform 34LR / PI / MAX

✔ Dyform 8 / PI / Bristar

Dyform 6 / PI / Bristar

Foundation Works
Rotary drilling / Piling / Diaphram walling

✔ Dyform 34LR / PI / MAX

our products

BRIDON

BlueStrand

To explore our full range of wire rope offerings into the cranes and industrial sector please refer to the Bridon-Bekaert Cranes and Industrial Catalogue. This can be found at www.bridon-bekaert.com or alternatively get in touch with us at: customerservices@cookes.co.nz

All ropes are available on indent and can be made to custom diameters where required.

Dyform 34LR / PI / MAX

Dyform 28 MAX / PI

Dyform 18

Dyform 18 / PI

Dyform DSC8 MAX

*for boom hoist only

Dyform 6 / PI / Bristar

Dyform 8 / PI / Bristar

50DB Series

35 LS

Constructex

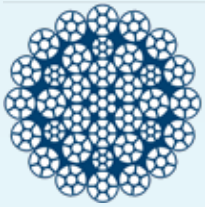
*for boom hoist only

Brifill

8 Series

6 Series

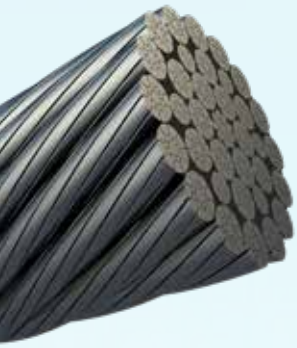
* ALL ROPES AVAILABLE IN DIFFERENT LAYS
* OTHER GRADES AVAILABLE ON REQUEST
* CUSTOM ROPE CAN BE MADE AVAILABLE UPON REQUEST



DYFORM 34LR

High Performance Crane Ropes

The Dyform 34 LR is a high performance compacted low rotational rope that combines varying multistrand rope designs to achieve excellent rotation resistance in high lift operations.



Benefits

- ✓ Excellent rotation resistance
- ✓ Highly efficient due to its flexibility
- ✓ Suitable for single part and multi-part reeving
- ✓ Suitable for single part reeving of an unguided load

BRIDON
a BRIDON - BEKAERT Ropes Group Brand

Dyform 34LR

ROPE DIAME-TER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE				AXIAL STIFF-NESS @20% LOAD	TORQUE GENERATED AT 20% LOAD		METALLIC CROSS SECTION (MM^2)
		1960 (kN)	1960 (TONNES)	2160 (kN)	2160 (TONNES)		ORDINARY (N.m)	LANGS (N.m)	
DYFORM 34x7									
10	0.5	90.8	9.25	95.3	9.71	5.8	1.5	3.3	58
11	0.61	109	11.1	117	11.9	7	2	4.4	70
12	0.72	130	13.2	137	13.9	8.3	2.5	5.7	84
13	0.85	153	15.6	161	16.4	9.7	3	7.3	98
14	0.98	179	18.2	191	19.5	11	3.2	9.1	114
15	1.13	204	20.8	214	21.8	13	4	11	131
16	1.28	232	23.6	251	25.6	15	5	14	149
17	1.45	262	26.7	275	28	17	6	16	168
18	1.62	298	30.4	319	32.5	19	7.2	19	188
19	1.81	331	33.7	356	36.3	21	8.6	23	210
20	2	370	37.7	397	40.5	23	10	27	232
21	2.21	400	40.7	420	42.8	25	12	31	256
22	2.42	442	45.1	482	49.1	28	1416	35	281
23	2.65	480	48.9	504	51.36	30	18	40	307
24	2.88	528	53.8	569	58	33	20	46	335
25	3.13	568	57.9	595	60.6	36	23	52	363
26	3.38	618	63.0	660	67.3	39	26	58	393
27	3.65	662	67.5	694	70.7	2	29	65	424
28	3.92	712	80.0	758	77.3	45	32	73	456
29	4.21	764	77.9	801	81.6	48	36	81	489
30	4.5	823	83.9	857	87.3	52	40	90	523
32	5.12	919	93.7	1008	102.8	59	48	108	595
34	5.78	1050	107	1151	117.3	67	58	130	672
35	6.43	1110	113	1214	123.8	70	63	142	712
36	6.48	1170	119	1287	131.2	75	68	154	753
38	7.22	1310	133	1444	147.2	83	81	181	839
40	8	1450	147	1590	162.1	92	94	211	930
DYFORM 34X19									
42	8.82	1600	163	1758	179.2	101	109	245	1025

DYFORM 8PI & BRISTAR 8

Dyform Bristar 8

Dyform Bristar 8 is a high performance compacted single layer constructed rope which incorporates an engineered extruded plastic profile between the 8 outer strands and the rope core for cranes and industrial applications including mobile, crawler and tower cranes.

Dyform 8PI

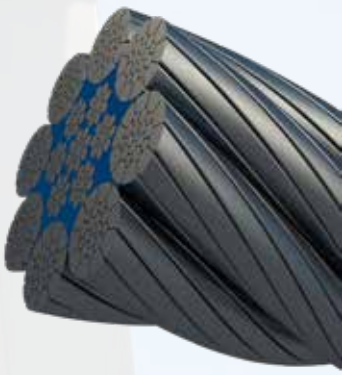
Dyform 8 PI is a high performance compacted single layer constructed rope which incorporates a plastic layer below the 8 outer strands.

Dyform Bristar 8 Benefits

- ✓ Outstanding bending fatigue performance
- ✓ Very stable rope construction
- ✓ Improved support of outer strands in service

Dyform 8PI Benefits

- ✓ Improved bending fatigue performance
- ✓ Stable rope construction
- ✓ Diameter stability, a requirement of multi-layered spooling



BRIDON
a BRIDON · BEKAERT Ropes Group Brand

Dyform 8PI & Bristar 8

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE				AXIAL STIFFNESS @20% LOAD	TORQUE GENERATED AT 20% LOAD		METALLIC CROSS SECTION (MM^2)
		1960 (kN)	1960 (TONNES)	2160 (kN)	2160 (TONNES)		ORDINARY (N.m)	LANGS (N.m)	
DYFORM 8PI 20-34MM 8x26WS 36-50MM 8x36WS									
16	1.21	226	23.0	236	24.1	14	51	65	137
18	1.53	286	29.2	299	30.5	17	72	93	173
20	1.88	353	36	369	37.6	21.3	98.8	127	214
22	2.28	427	43.5	446	45.5	25.8	132	169	258
24	2.71	508	51.8	531	54.1	30.7	171	220	308
26	3.18	596	60.8	623	63.5	36	217	280	361
28	3.69	691	70.5	723	73.7	41.7	271	349	419
30	4.24	794	81	830	84.6	47.9	334	430	481
32	4.82	903	92.1	944	96.3	54.5	405	521	547
34	5.44	1020	104	1070	109	61.5	486	625	617
36	6.1	1140	116	1200	122	69	577	742	692
38	6.8	1270	130	1330	136	76.8	679	873	771
40	7.54	1410	144	1480	151	85.2	792	1020	854
42	8.31	1560	159	1630	166	93.9	917	1180	942
44	9.12	1710	174	1790	183	103	1050	1360	1030
46	9.97	1870	191	1950	199	113	1210	1550	1130
48	10.9	2030	207	2130	217	123	1370	1760	1230
50	11.8	2210	225	2310	236	133	155	1990	1340

DYFORM 6

Dyform 6 is a high performance compacted single layer construction rope for various cranes and industrial applications.

Benefits

- ✓ Exceptional service life
- ✓ High Strength
- ✓ Robust crush resistant rope construction
- ✓ Good bending fatigue performance

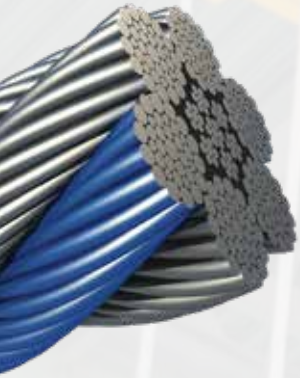
BRIDON
a BRIDON · BEKAERT Ropes Group Brand

Dyform 6

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE				AXIAL STIFFNESS @20% LOAD	TORQUE GENERATED AT 20% LOAD		METALLIC CROSS SECTION (MM²)
		1770 (kN)	1770 (TONNES)	1960 (kN)	1960 (TONNES)		ORDINARY (N.m)	LANGS (N.m)	
DYFORM 6 16-24MM 6X36WS 25-32MM 6X47WS 34-36MM 6X36WS 48 & 50MM 6X41WS									
16	1.17	193	19.6	212	21.6	13.7	47.2	74.6	133
18	1.48	244	24.8	268	27.5	17.3	67.2	106	168
19	1.65	272	27.7	299	30.5	19.3	79.1	124	187
20	1.83	301	30.6	331	33.8	21.4	92.2	145	208
22	2.21	365	37.2	401	40.9	25.9	122	194	251
24	2.63	434	44.2	477	48.6	30.8	159	251	299
25	2.81	464	47.3			33.5	180		325
26	3.09	510	52	560	57.1	36.2	202	320	351
28	3.58	591	60.2	649	66.2	41.9	253	399	407
30	4.11	679	69.2	745	76.0	48.2	311	491	468
32	4.68	772	78.7	848	86.5	54.8	377	597	532
34	5.28	872	88.9	957	97.6	61.9	453	716	601
36	5.92	978	99.7	1070	109	69.4	538	850	673
38	6.6	1080	110	1200	122	77.3	632	999	750
40	7.31	1200	122	1320	135	85.7	738	1160	832
42	8.06	1330	135	1460	149	94.4	854	1340	917
44	8.84	1460	148	1600	163	106	982	1550	1000
46	9.67	1590	162	1750	178	113	1120	1770	1100
48	10.53	1730	176	1910	195	123	1270	2010	1190
50	11.42	1880	191	2070	211	133	1440	2270	1300

BLUE STRAND 6 SERIES

The 6 series is a range of general purpose 6 stranded galvanised ropes produced with a steel core, fully lubricated during manufacture producing in accordance with EN 12385.



Benefits

- ✓ Fit for purpose, robust rope construction
- ✓ Fully lubricated during manufacture
- ✓ For use on single layer drums only

BlueStrand

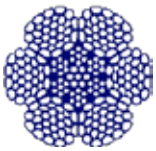
6 series

ROPE DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE				AXIAL STIFFNESS @20% LOAD	TORQUE GENERATED AT 20% LOAD		METALLIC CROSS SECTION (MM^2)
			1770 (kN)	1770 (TONNES)	1960 (kN)	1960 (TONNES)		ORDINARY (N.m)	LANGS (N.m)	
BLUE STRAND 6x36 CLASS										
8	6x31	0.256	40.3	4.11	44.7	4.56	2.96	4.88	6.43	28.7
9	6x31	0.324	51	5.2	56.5	5.76	3.75	6.96	9.16	36.4
10	6x31	0.400	63	6.42	69.8	7.12	4.63	9.6	12.6	44.9
11	6x31	0.494	79.1	8.07	90.7	9.25	5.71	13.1	17.2	55.4
12	6x31	0.576	90.7	9.25	100	10.2	6.66	16.6	21.7	64.7
12.5	6x36	0.650	100.06	10.2			7.46	19.7	25.7	72.4
13	6x31	0.676	106	10.8	118	12	7.82	21.1	27.6	75.9
14	6x36	0.784	124	12.6	137	14	9.07	26.4	34.5	88
16	6x36	1.02	161	16.4	183	18.7	11.8	39.5	51.4	115
19	6x36	1.45	228	23.2	262	26.7	16.8	66.8	86.8	163
20	6x36	1.60	252	25.7	279	28.4	18.5	77.4	100	180
22	6x36	1.98	308	31.4	354	36. 1	22.8	106	138	222
24	6x36	2.30	363	37	402	41	26.6	134	173	259
26	6x36	2.70	426	43.4	472	48.1	31.3	171	221	304
28	6x41	3.14	494	50.4	547	55.8	36.3	213	275	352
32	6x41	4.10	645	65.8	715	72.9	47.4	319	411	460
35	6x41	4.88	772	78.7			56.9	433	555	550
36	6x41	5.18	817	83.3	904	92.2	59.9	456	585	582
38	6x41	5.81	910	92.8	1010	103	67.1	541	694	652
40	6x41	6.40	1010	103	1120	114	74.0	626	803	718
42	6x41	7.71	1142	116.4	1235	125	82.7	743	951	802
44	6x41	7.90	1220	124	1360	139	91.4	861	1100	887
48	6x41	9.22	1450	148	1610	164	107	1080	1390	1030
52	6x41	10.80	1700	173	1890	193	125	1380	1760	1210
56	6x41	12.50	1980	202	2190	223	145	1730	2200	1410
60	6x41	14.60	2270	231	2510	256	168	2160	2750	1630

fishing

Product Selection
fishing

Trawl warps

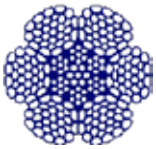

Dyswage


Dyform IWRC


Dyform Starfish IWRC


Blue strand 6 series

Purse wires


Dyswage

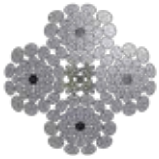

Dyform SEAPURSE IWRC


Dyform SEAPURSE PolyCore

Torque resistant trawl warps


Swage 4 -FC


Dyform 3


Swage IWRC


Blue Strand-Series 3

our products

BRIDON

COOKES

BlueStrand


Dyform Starfish 6x26 Poly Core


Dyform Starfish 6x26 IWRC


Dyform 6x26 Poly Core


Dyform 6x26 IWRC


Marblue 6x19 Poly Core


Marblue 6x19 IWRC

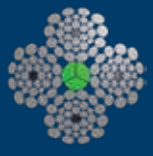

SeaBeam 6x26 Poly Core


SeaBeam 6x26 IWRC

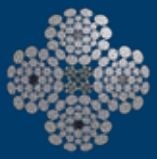

Dyform 6x19 Poly Core


Dyform 6x19 IWRC


Dyswage


Swage 4 - FC


Dyform 3

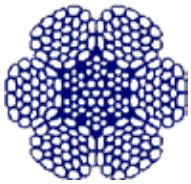

Swage - IWRC


Blue strand Series 3

To explore our full range of wire rope offerings into the fishing industry please refer to the Bridon-Bekaert Fishing Catalogue. This can be found at www.bridon-bekaert.com or alternatively get in touch with us at customerservices@cookes.co.nz. All ropes are available on indent and can be made to custom diameters where required.

* ALL ROPES AVAILABLE IN DIFFERENT LAYS
* OTHER GRADES AVAILABLE ON REQUEST
* CUSTOM ROPE CAN BE MADE AVAILABLE UPON REQUEST

FISHING - TRAWL WARP



DYSWAGE

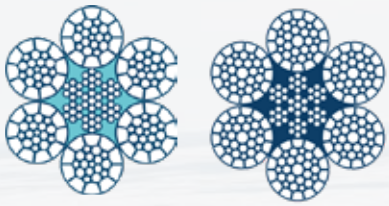
High Performance Trawl Warps

Designed specifically to meet NZ's demanding deepwater trawling needs. Dyswage is a double compacted (strand/rope) trawl warp offering the best diameter retention while in service, combined with the highest strength to diameter ratio.

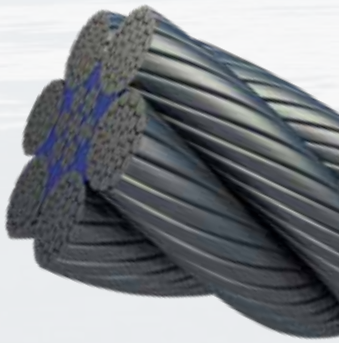
Benefits

- ✓ Highest strength to diameter
- ✓ Higher resistance to crushing
- ✓ High surface contact area
- ✓ Accurate diameter for effective spooling
- ✓ Reduced elongation
- ✓ Excellent abrasion resistance

COOKES Dyswage			
ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
6X19S IWRC (1420/177 N/mm²)			
18	1.64	246.5	25.1
20	2.00	297	30.2
22	2.39	349	35.5
6X26WS IWRC (1420/1770 N/mm²)			
24	2.72	446.4	45.51
26	3.36	510	54
28	3.8	601	61.2
29.5	4.54	675	68.8
30	4.58	680	69.4
32	5.13	774	78.9



DYFORM & DYFORM STARFISH



High Performance Trawl Warps

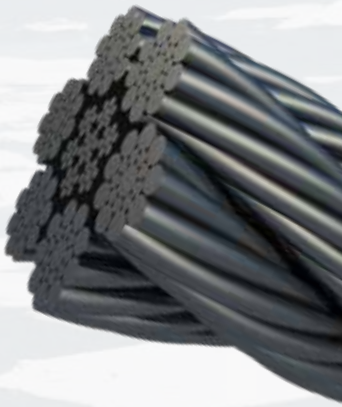
Premium quality strand compacted trawl warp.

Dyform Starfish features a plastic impregnated core preventing core corrosion and providing diameter stability.

Benefits

- ✓ High Strength
- ✓ Accurate Diameter for effective spooling
- ✓ High resistance to crushing

BLUE STRAND 6X19 CLASS



Trawl Warps

Blue strand is a range of 6 stranded galvanized fishing ropes available in a variety of constructions in steel and fibre core.

Benefits

- ✓ Fit for purpose, robust rope construction
- ✓ Fully lubricated during manufacture

BRIDON — Dyform & Dyform Starfish

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE (kN)	MINIMUM BREAK FORCE (TONNES)
6X26WS IWRC (1420/1770 N/MM²)			
16	1.05	168	17.1
18	1.29	212	21.6
20	1.70	252	26.6
22	1.99	302	30.8
24	2.47	332	33.8
26	2.93	413	42.1
28	3.21	514	52.4
30	3.88	589	60.0
32	4.09	671	68.4

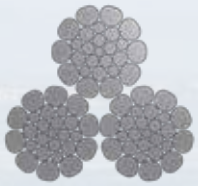
BlueStrand — 6X19 Class

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS IWRC (KG/M)	MINIMUM BREAK FORCE (kN)	MINIMUM BREAK FORCE (TONNES)	NOMINAL LENGTH MASS POLY CORE (KG/M)	MINIMUM BREAK FORCE (kN)	MINIMUM BREAK FORCE (TONNES)
INCLUDES 6X19S, 6X19F, 6X26WS (1420/1770 N/MM²)						
10	0.41	61.7	6.30	0.37	50.9	5.20
12	0.59	91.2	9.30	0.54	81.4	8.30
14	0.80	110	11.20	0.73	105.3	10.70
16	1.02	143	14.57	0.95	137.7	14.00
18	1.29	181	18.45	1.25	168	17.12
19	1.44	199	20.20	1.35	187	19.00
20	1.59	224	22.83	1.45	207	21.10
22	1.99	283	28.85	1.80	251	25.58
24	2.29	322	32.82	2.08	298	30.37
26	2.77	387	39.40	2.45	350	35.67
28	3.16	454	46.20	2.80	406	41.38
30	3.65	521	53.10	3.00	468	47.70
32	4.19	580	59.10	3.70	533	54.30

TORQUE RESISTANT TRAWL WARPS

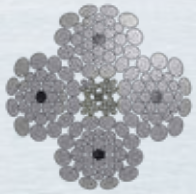
BLUE STRAND SERIES 3

Fit for purpose three strand torque resistant trawl wrap.



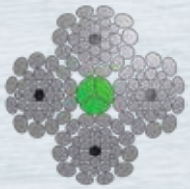
DYFORM 3 (3X26WS)

High performance compacted three strand torque resistant trawl warp.



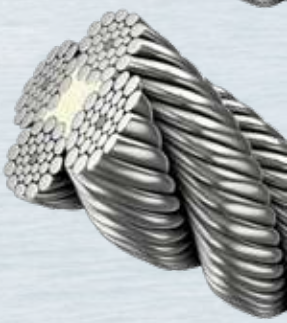
SWAGE 4 - IWRC

Robust hammer swaged four strand torque resistant trawl warp with steel core.



SWAGE 4 - FC

Robust hammer swaged four strand torque resistant trawl warp with fibre core.



BlueStrand Series 3

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
BLUE STRAND 3 INCLUDES: 3X19F, 3X26WS,3X31WS & 3X36WS (1420/1770 N/MM²)			
10	0.36	59.2	6.36
11	0.44	73.1	7.45
12	0.52	91.0	9.20
13	0.62	102.8	10.50
14	0.71	115.5	11.77
16	0.95	155.8	15.80
18	1.20	184.4	18.80
19	1.30	213.4	21.76
22	1.79	289.6	29.53
24	2.29	338.9	34.50

BRIDON a BRIDON - BEKAERT Ropes Group Brand Dyform 3

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
DYFORM 3 3X26WS (1420/1770 N/MM²)			
14	0.75	120	12.23
16	1.00	185	18.80
18	1.23	196.0	20.63

COOKES Swage 4- IWRC & FC

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M) IWRC	MINIMUM BREAK FORCE		NOMINAL LENGTH MASS (KG/M) POLY CORE	MINIMUM BREAK FORCE	
		(kN)	(TONNES)		(kN)	(TONNES)
4X30WS (1420/1770 N/MM²)						
10				0.40	73	7.44
12				0.58	105	10.70
14	0.87	140	13.50	0.80	132	13.46
16	1.17	188	19.2	1.08	174	17.80
19				1.70	254	25.90

DYFORM SEAPURSE

High Performance Purse Ropes

Dyform SeaPurse is a compacted strand wire rope recommended for purse seining (tuna fishing).

* Available in steel or fibre core

Benefits

- ✓ Increased abrasion resistance
- ✓ Reduced wear from roller rings
- ✓ High fatigue resistance

BRIDON
a BRIDON · BEKAERT Ropes Group Brand

Dyform Seapurse

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M) IWRC	MINIMUM BREAK FORCE		NOMINAL LENGTH MASS (KG/M) (POLY CORE)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)		(kN)	(TONNES)
6X19S (1420/1770N/MM²)						
20	1.70	252	25.60	1.60		
22	2.19	302	30.79	1.90	290	29.50
24	2.47	377	39.40	2.20	343	35.00
26	2.93	413	42.11	2.67	443	45.1
28	3.21	514	52.40	2.85	460	46.90
30	3.88	589	60.06	3.51	529	54.00

COMBINATION ROPE

High Performance Sweep Wire

Four and six strand combination rope manufactured from galvanised wires covered in a heavy layer of tough danline yarns. Offering a much larger diameter when compared weight for weight with standard wire ropes. Combination rope is ideal for sweeps and bottom bridles when bottom trawling, sliding over the seabed without penetrating into it.

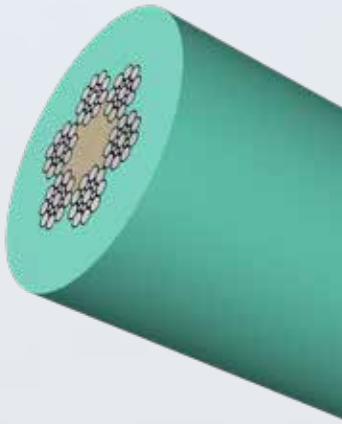
Benefits

- ✓ Durable
- ✓ Suitable for soft and hard sea floor
- ✓ Galvanised

BONDED ROPES

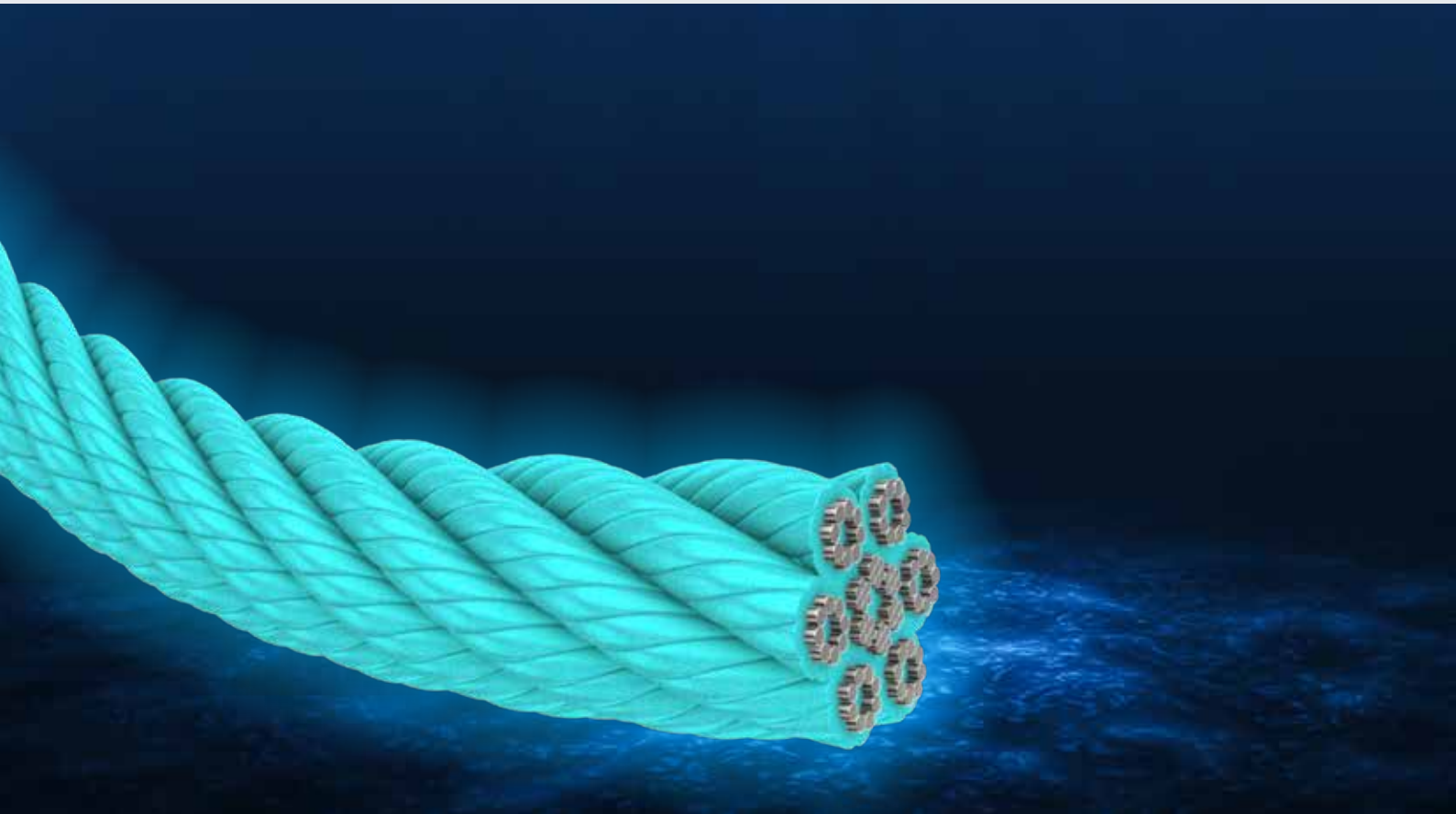
Bonded sweep & bottom bridle wire

PVC coated wire rope for sweep wires when bottom trawling.



Benefits

- ✓ Extra thick abrasion resistant cover
- ✓ Large Diameter / weight ratio



Combination Rope

ROPE DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
4x19 GALV COMBINATION				
32	4x19	1.18	15.5	1.58
38	4x19	1.38	25.1	2.56
42	4x19	1.68	27.6	2.81
6 STRAND COMBINATION ROPE IWRC				
12	6x6	0.120	37.59	3.80
14	6x8	0.280	45.60	4.60
16	6x8	0.370	61.71	6.20
18	6x8	0.460	74.60	7.60
20	6x8	0.590	95.20	9.70
22	6x8	0.870	139.30	14.20
26	6x8	1.180	186.00	19.00

BRIDON
a BRIDON · BEKAERT Ropes Group Brand

Bonded Ropes

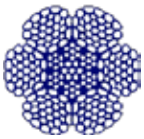
ROPE DIAMETER (MM)	PVC DIAMETER	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
6X19S FFC (1420/1770N/MM²)				
14	30	1.69	105.3	10.70
16	32	1.88	137.7	14.04

forestry

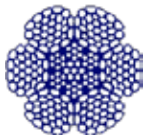
Product Selection forestry

✔ INDICATES COOKES RECOMMENDED ROPE PER APPLICATION

Swing yarder

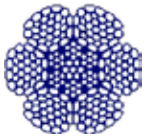


✔ Swage



Dyswage

Excavator yarder



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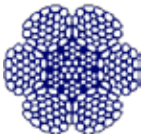
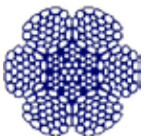


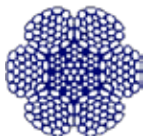
Dyswage

Tower yarder



✔ Swage

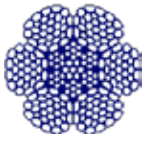
Blue Strand 6 Series



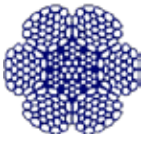
Dyswage

Dyform

Cable assist



✔ Swage



✔ Dyswage

our products


Duraswage


Swage 6x31

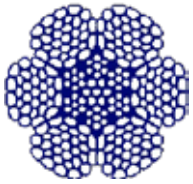

Dyform


Blue Strand
6 series


Dyswage

* ALL ROPES AVAILABLE IN DIFFERENT LAYS
* OTHER GRADES AVAILABLE ON REQUEST
* CUSTOM ROPE CAN BE MADE AVAILABLE UPON REQUEST

FORESTRY



SWAGE 6X26 & 6X31

High Performance Forestry Rope

Robust hammer swaged forestry rope designed to meet the needs of today's forestry technology. Swage 6x31 offers the best bend cycle performance for a swaged rope, meaning fewer rope changes and improved production. The only rope to use for grapple yarding applications due to it's increased flexibility.

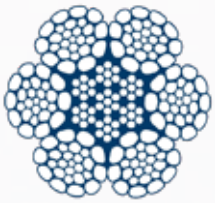
Benefits

- ✓ High strength
- ✓ High resistance to crushing
- ✓ High surface contact area
- ✓ Accurate diameter for effective spooling
- ✓ Reduced elongation
- ✓ Excellent abrasion resistance
- ✓ Swage 6x31 - improved flexibility

Applications

- ✓ Skyline
- ✓ Main Rope
- ✓ Tail Rope
- ✓ Guy Ropes
- ✓ Cable Assist

COOKES	Swage		
ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
13	0.84	147	14.9
16	1.29	226	23.0
19	1.81	302.0	30.7
23	2.61	440	44.8
26	3.44	550	56.1
28	3.97	664.8	67.8
32	5.08	827	84.3



DYSWAGE

High Performance Forestry Rope

Dyswage double compacted forestry ropes with roller Dyform strands and hammer swaged rope for applications demanding the highest break loads.

Applications

- ✓ Main Rope
- ✓ Sky Line
- ✓ Guy Ropes
- ✓ Cable Assist

Benefits

- ✓ Highest strength to diameter
- ✓ Highest resistance to crushing
- ✓ High surface contact area

BLUE STRAND 6 SERIES

Blue strand general purpose six stranded ropes produced with a steel core fully lubricated in manufacture in accordance with EN12385.

Applications

- ✓ Sky Lines
- ✓ Main Rope
- ✓ Tail Rope & Strop Rope
- ✓ Straw Lines & Guy Lines

Benefits

- ✓ Fit for purpose, robust rope construction
- ✓ Fully lubricated during manufacture

COOKES Dyswage

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
6X26WS (IWRC 1770 N/MM²)			
19	2.04	345	35.2
23	2.84	481	49.0
28	4.15	712	72.6

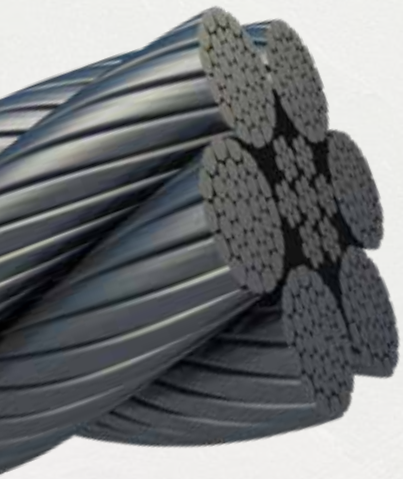
BlueStrand 6 Series

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
6X26WS (IWRC 1770 N/MM²)			
9	0.33	51	5.1
16	1.02	161	16.4
19	1.44	253	25.8
23	2.00	330	33.6
26	2.69	435	44.4
28	3.21	494	50.3
32	4.08	645	65.7
35	4.88	804	82.0

DYFORM

High Performance Forestry Rope

High performance roller compacted strand rope for applications requiring improved bend fatigue performance.



ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
6X26WS (IWRC 1770 N/MM²)			
23	2.28	382	38.9

Benefits

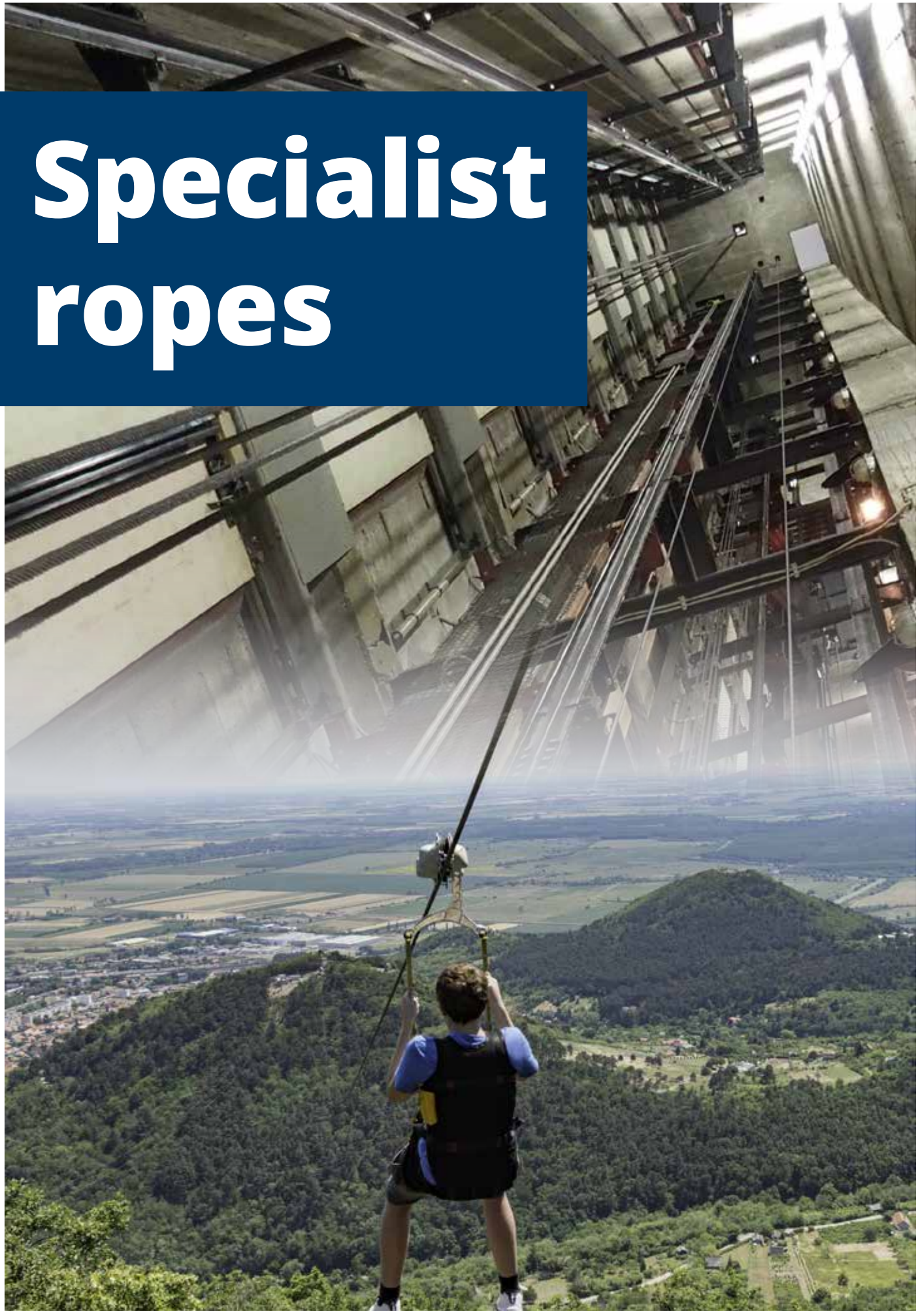
✓ Superior bend fatigue resistance

Applications

✓ Tail Rope - Tower yarder

✓ Grapple closing line

Specialist ropes



ELEVATOR ROPES

High performance ropes manufactured using on-line pre-stretching for the highest most demanding Elevator applications.

8X19 (S) + FC

Benefits

- ✓ Dual tensile wires for improved fatigue resistance
- ✓ Flexible fibre core construction
- ✓ Pre-stretched for low elongation
- ✓ Long service life

8X19 (S) + IWRC

Benefits

- ✓ Dual tensile wires for improved fatigue resistance
- ✓ High strength
- ✓ Pre-stretched for low elongation
- ✓ Long service life

8X19 IWRC			
ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
8x19S IWRC (1570/1770 N/mm2)			
10	0.40	59.5	6.10
13	0.69	100	10.20
16	1.04	152	15.50

8X19 FC			
ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
8x19S FC (1370/1770 N/mm²)			
9.5	0.31	40	4.07
11	0.42	53.2	5.40
13	0.58	74.3	7.57
16	0.88	113	11.50

ZIPLINE

DYFORM 6X19

Dyform 6x19 is a compacted strand rope. Offering increased abrasion resistance and smooth strand profile for longer smoother rides.

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
		(kN)	(TONNES)
9.5	0.40	62.3	6.35
12	0.62	100.3	10.19
13	0.70	120.3	12.20
16	1.10	178.0	18.15
18	1.40	243.0	24.80

ROAD BARRIER

3X7

Available in heavy Galvanised or Zinc Aluminium finish

ROPE DIAMETER (MM)	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE 1370		MINIMUM BREAK FORCE 1570	
		(kN)	(TONNES)	(kN)	(TONNES)
19	1.20	175	17.8	227	23.1

Small Cords + Strands

7x7 | 7x19 | 1x19 | 1x7 | 7x7 PVC

* ALL ROPES AVAILABLE IN DIFFERENT LAYS
* OTHER GRADES AVAILABLE ON REQUEST
* CUSTOM ROPE CAN BE MADE AVAILABLE UPON REQUEST

Product Selection
cords & strand

Irrigator Ropes

7x7

Galvanised + Stainless Small Cord

7x7

7x7

1x19

7x7 PVC

7x19 PVC

Galvanised Strand

1x7

1x19

IRRIGATOR ROPES

Galvanised wire ropes for travelling irrigators and effluent spreaders. (For improved corrosion protection refer to stainless small cords section).

GALVANISED SMALL CORDS & STRAND

General purpose cables with galvanised finish for your engineering and industrial applications.

Irrigator Ropes

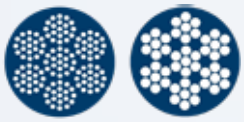
ROPE DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
3	7x7	0.03	5.7	0.58
4	7x7	0.06	11.7	1.20
4	4x19	0.07	12.6	1.28
5	7x7	0.09	18.5	1.88
6	7x7	0.14	25.8	2.63
7	7x7	0.18	35.7	3.64
9	7x7	0.31	58.8	5.99
11	7x7	0.46	76.9	7.84
11	3x19	0.43	79.69	8.12
13	3x19	0.57	97.47	9.94

Galvanised small Cords & Strand

ROPE DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
1.3	1x19	0.01	1.66	0.17
1.5	1x19	0.01	2.44	0.25
2.2	1x19	0.02	4.21	0.43
3	7x19	0.03	5.77	0.59
4	7x19	0.06	10.3	1.05
5	7x19	0.10	16.0	1.63
6	7x19	0.14	23.1	2.35
8	7x19	0.26	37.3	3.80

316 STAINLESS WIRE ROPE & STRAND

General purpose cables where optimum corrosion resistance is required. Marine and architectural applications (AISI 316).



PVC COATED GALVANISED

General purpose cables with various PVC colour options. Security, barrier cable, Gym Equipment.

STAINLESS WIRE ROPE

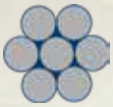
ROPE DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
1.5	7x7	0.01	1.37	0.139
2	7x7	0.02	2.44	0.249
2.5	7x7	0.02	3.81	0.388
3	7x7	0.03	5.48	0.558
4	7x7	0.06	9.75	0.994
5	7x7	0.09	15.2	1.550
6	7x7	0.13	21.4	2.100
8	7x7	0.25	36.1	3.700
2	7x19	0.02	2.27	0.231
3	7x19	0.04	5.12	0.522
4	7x19	0.06	9.00	0.917
5	7x19	0.09	14.2	1.440
6	7x19	0.13	20.5	2.000

STAINLESS CORD & STRAND

ROPE DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
8	7x19	0.23	36.4	3.710
10	7x19	0.37	56.8	5.780
12	7x19	0.53	81.8	8.340
16	7x19	0.95	145.5	14.800
2	1x19	0.02	3.3	0.336
2.5	1x19	0.03	4.89	0.499
3	1x19	0.04	7.42	0.756
4	1x19	0.07	13.2	1.340
5	1x19	0.12	20.7	2.100
6	1x19	0.17	30.0	3.060
8	1x19	0.34	54.5	5.500
10	1x19	0.49	82.5	8.400

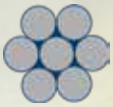
PVC COATED GALVANISED

ROPE DIAMETER (MM)	PVC DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE		PVC COATING COLOUR
				(kN)	(TONNES)	
2	3	7x7	0.03	2.54	0.259	Clear
2	4	7x7	0.04	2.54	0.259	Clear
2	4	7x7	0.04	2.5	0.259	Red
3	5	7x7	0.05	6.18	0.630	Clear
4	6	7x7	0.09	11.0	1.120	Clear
4	6	7x7	0.09	11.0	1.120	Red
4	6	7x19	0.09	10.3	1.050	Black
5	7	7x7	0.14	17.2	1.750	Clear
6	8	7x19	0.18	23.1	2.350	Clear



HORTICULTURAL STRAND

Crop protection and Kiwi fruit support strand.



CLOTHES LINE STRAND

GUYING STRAND

General guying and support applications, cross-laid construction for reduced elongation. Heavy galvanised coating.

Larger diameters of spiral strand available on indent refer Bridon-Bekaert The Rope Group structures catalogue.

Horticulture Strand

STRAND DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
4.8	7/1.6	0.11	17.60	1.80
6	7/2.0	0.17	30.39	3.10
7.5	7/2.5	0.27	47.45	4.84
9.45	7/3.15	0.44	65.95	6.75

Clothes Line Strand

STRAND DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
3.5	1x7	0.05	5.91	0.60

Guying Strand

STRAND DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
6	1x19	0.19	30.6	3.10
8	1x19	0.32	57.2	5.80
9.5	1x19	0.42	72.4	7.38
12	1x19	0.76	126.0	12.84
16	1x37	1.29	238.0	24.260

STRAND DIAMETER (MM)	CONSTRUCTION	NOMINAL LENGTH MASS (KG/M)	MINIMUM BREAK FORCE	
			(kN)	(TONNES)
6	7/2.0	0.17	15.4	1.57
7.5	7/2.5	0.27	23.53	2.39
9.45	7/3.15	0.44	38.2	3.89
12	7/4.0	0.69	56.7	5.78


BRILUBE®
Advanced lubricant solutions
for wire rope applications.

service dressings.

3 INDUSTRY CHALLENGES CAUSE **LOSS OF LUBRICANT**

Deep waters

High pressure in deep waters break down the rope lubricants components and cause permanent loss or degradation.

High temperatures

When using "active heave compensating system" and "cyclic bending over sheaves", a lot of heat is generated, which softens wax-based lubricants and results in a loss of lubricant.

Hot climate

Working the lubricant around 60°C (against 110°C drop point) causes wax to become fluid.

Service dressing lubricants are applied to the rope in service at regular intervals similar to topping up your engine oil. The intended purpose is to replace lost lubricant to promote longer life through protecting against wear and corrosion.

Lubricant compatibility with the manufacturing lubricant is critical to ensure effectiveness and performance. Bridon-Bekaert uses the same advanced additive package for corrosion protection in both the Ultra manufacturing lubricants and service dressings to ensure no dilution of the properties takes place.

The considerations required for specifying suitable service dressings include:

- Compatibility with manufacturing lubricant
- Ease of application for various delivery means to suit the application
- Wear protection
- Corrosion protection
- High temperature resistance
- Wash off resistance
- Deployment in subsea and ultra deep waters
- Environmental, H&S and regulation requirements

product line.

BRILUBE® ULTRA

- A wide operating temperature range suitable for active heave compensation systems and warmer tropical climates.
- Corrosion protection system with a high 'water wash off' performance ensures long lasting protection.
- Provides continued protection to the wire rope at extreme pressures enabling ultra-deep water deployment.
- Environmentally Acceptable Lubricant (EAL) conforming to Vessel General Permit (VGP) 2013 through EU Ecolabel Certification. Bio-degradable, non-toxic and non-bio accumulative wire rope service dressing.

BRILUBE® ULTRA 2

A unique hybrid grease, suitable for operation in ultra deep waters. A wide operating temperature range suitable for active heave compensation systems and warmer tropical climates. Along with a three stage corrosion protection system with a unique 'water wash off' performance for frequent subsea operation.

EU Ecolabel : UK/027/016

BRILUBE® FIT

- Traditional wire rope lubricants suitable for a wide range of offshore applications
- Corrosion protection
- Wear resistant

BRILUBE® 30

A semi-dry thin film lubricant with excellent penetration and corrosion resisting properties for surface cranes.

BRILUBE® 40

A synthetic lubricant which deposits a slip-resistant film on the wire surfaces for friction driven rope installations.

BRILUBE® 70

A medium thixotropic gel lubricant with stable properties over a wide temperature range offering long lasting corrosion protection.

GENERAL PROTECTION
HIGH TEMPERATURE
ULTRA DEEP WATER

rope dressing application.

Ropes are like any other machine and to achieve maximum operating life in service lubrication must be applied. The type of service lubricant and frequency of application varies with the rope construction the operating conditions and its functional application.

Bridon-Bekaert's unequalled experience in the world of wire rope manufacture and many years spent in the development of specialist in service lubricants have been used in the formulation of the Brilube range of products. Brilube's advanced formulation with proven performance helps to get the best from your rope.

Brilube 30 and 40 should be applied by portable sprayer but if this is not feasible it can be applied manually by brush or drip.

Brilube 70 and ULTRA 2 dressing should be pressure applied using in-line application systems which are available to suit a wide range of rope sizes and constructions. These systems operate by forcing the lubricant into the rope under high pressure.

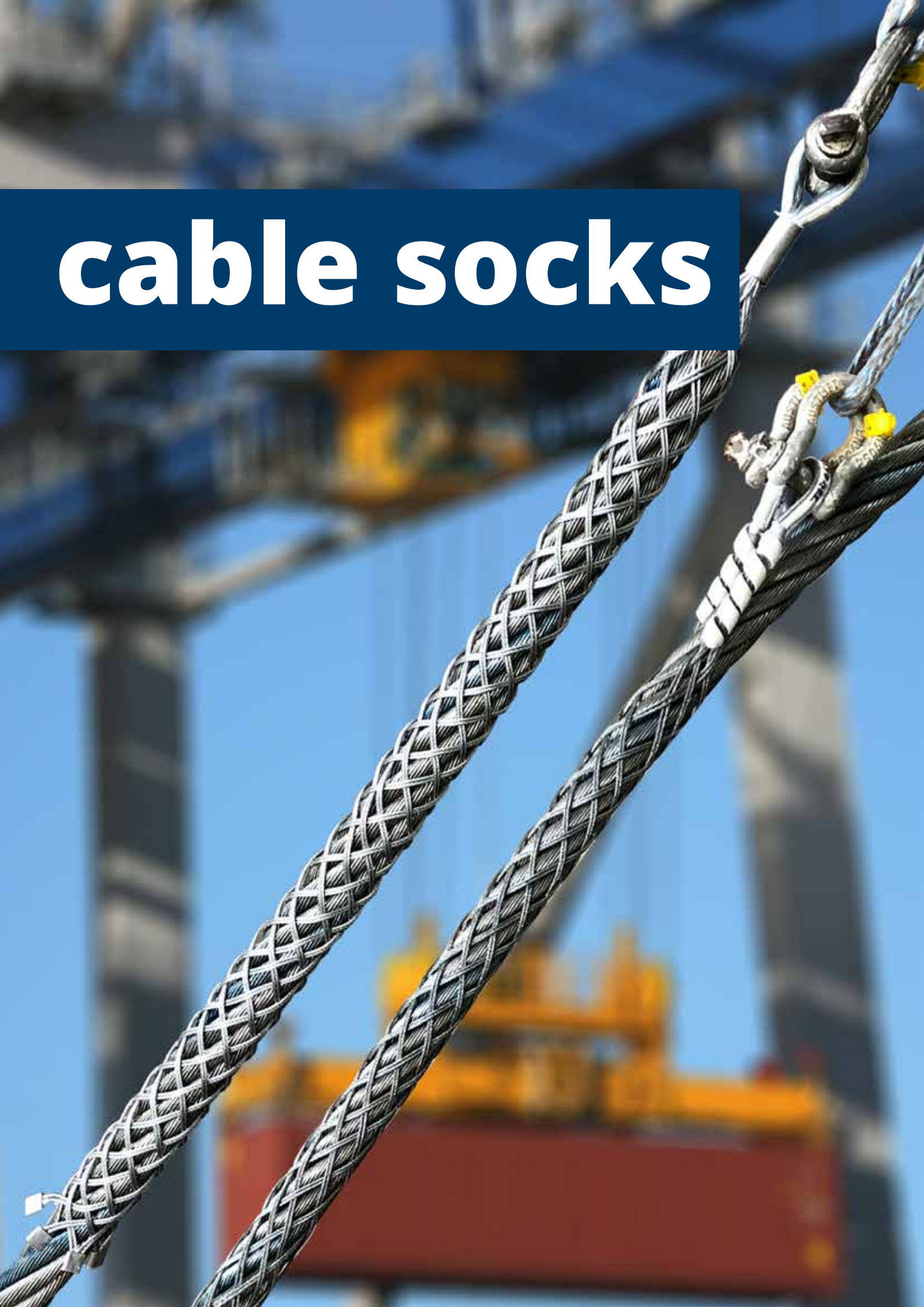
Our COOKES360 team can apply our service dressings on-site and can offer advice to suit your needs.

selection & application.

BRILUBE®

	FIT 30	FIT 40	FIT 70	ULTRA 2
Colour / Consistency	Brown Opaque Fluid	White Water Liquid	Glossy Black Gel	Matte Black Grease
NLGI Grade	Solvent Liquid	Solvent Liquid	0	2
Effective Operating Temperature	-30°C to +60°C	-55°C to +40°C	-40°C to +70°C	-40°C to 120°C
Corrosion Protection (Hot Salt Spray)	-	-	Pass (720 hours)	Pass (2880 hours)
Water Spray Off	-	-	1% Retention	< 60% Retention
4 Ball Weld Load	-	-	> 180 kgf	> 400 kgf
Penetration (1/10mm)	-	-	330-380	265-295
Certification	-	-	-	EU Ecolabel www.ecolabel.eu EU Ecolabel : UK/027/016
Container Volumes	400ml Aerosol	400ml Aerosol	12.5 kg	12.5 kg
	5 Litre	-	50 kg	-
	20 Litre	20 Litre	180 kg	180 kg
Application Methods	Aerosol, Sprayer, Brush		Hand, Pneumatic Pressure Sprayer, Pressure Lubricator	

cable socks



CABLE SOCKS

TWIN EYE WHIPSOCK

A single ended cable sock suitable for pulling medium to heavy loads. Cable can be passed through sock enabling cable pulling to be made at various points

SINGLE EYE LACE UP CABLE STOCKING

This cable sock has a woven covering with one open end while the other end is closed with a single eye. Can be placed anywhere on the cable and laced up, it is designed to pull the cable directly. Used for pulling underground lines as well as construction.

SINGLE EYE CAP END CABLE STOCKING

This cable sock has a woven covering with one open end while the other end is closed with a single eye. It is designed to pull the cable directly. Used for pulling underground lines as well as construction.

SINGLE EYE OFFSET CABLE STOCKING

This cable sock has a woven tubular covering with an offset eye at one end and an open end at the other. The sock style can be fitted to any distance from the end of the cable. They are designed so the cable can be passed straight through. It is mainly used to support electrical cable, hoses and trailing lines.

OPEN ENDED CABLE STOCKING

This cable sock has a woven covering and is open at both ends. Mainly used by electrical cable pulling contractors when an old cable is being replaced with new.

GENERAL GUIDANCE:

Cable Sock – WL and FOS

The Working Load (WL) of a cable sock depends on the Factor of Safety (FOS) applied to the minimum break load. This needs to be determined by the user of the cable sock.

EG: Where risk is considered to be normal it is recommended a FOS of 5 be applied, for applications where the risk is considered high a FOS of at least 10 should be considered.

The approximate break loads stated in this catalogue and recommended factor of safety are only applicable when the cable sock is as new and unused.

If installing a new rope with the aid of an old one, it is recommended that the end of each rope is fitted with a single eye cable sock. The two eyes of these cable socks should then be lashed together with either fibre rope or wire of suitable strength to avoid the possibility of transferring any turn that may be present in the old rope into the new. Do not use a swivel during the installation of the rope.

FITTING INSTRUCTIONS

Step 1. Select the correct cable socks for the outside sheath diameter of the cable.

Step 2. Widen the lattice at end of cable sock - press end of sock against hard surface to induce expansion on the open end.

Step 3. Place the cable sock over the exposed end of the cable.

Step 4. Push sock over the cable.

Step 5. The cable sock needs to be pushed along the cable length so that all the woven lattice is in contact with the cable sheath.

Step 6. Once the sock is in place and gripping the cable, 2 clamps should be fitted to the end of the sock. Recommended between 1 1/4" (30mm) and 2 1/4" (55mm) from the end of the sock.

Step 7. Tape should then be wound around the end of the sock furtherest away from the eye ends. This will prevent the cable sock from snagging when pulled in.

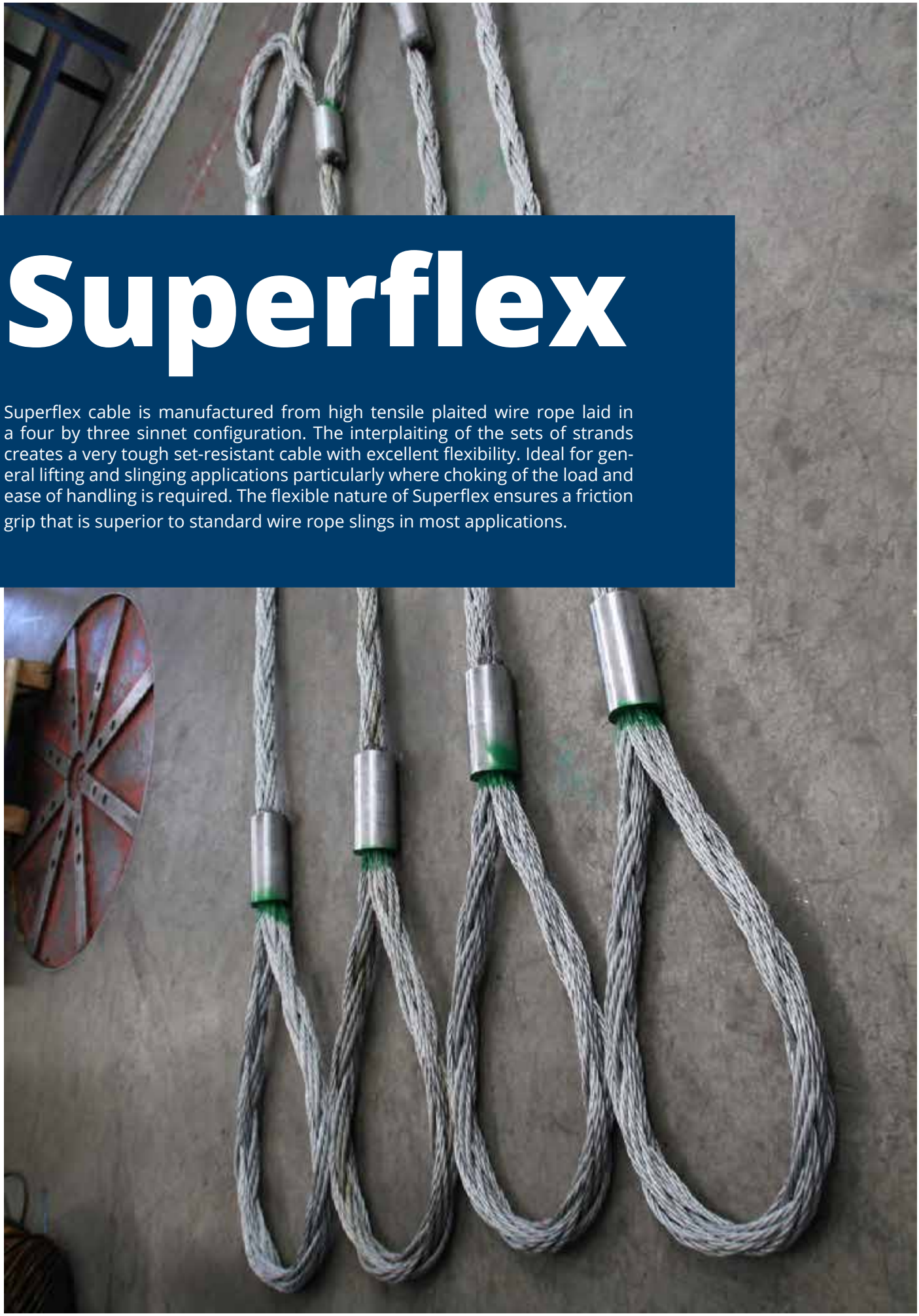
PRODUCT SPECS

HOSW OD (MM)	WIRE DIAM (MM)	NO. OF PLIES	AGG BREAK STRENGTH	GRIP LENGTH (MM)	EYE LENGTH (MM)	TOTAL LENGTH (MM)	1.1APPROX WEIGHT (KG)
14-20	1.2	8X3	1300kg	450	100	550	0.115
20-30	1.5	12x2	2800kg	500	140	640	0.35
30-40	2	12x2	5500kg	700	170	870	0.4
40-50	2	12x2	5500kg	800	170	970	0.5
50-60	2.5	12x2	9300kg	1000	250	1250	1
60-70	2.5	12x2	9300kg	1050	250	1300	1.1
70-85	2.5	12x2	9300kg	1100	270	1350	1.2
85-100	3	12x2	12300kg	1400	340	1840	2.4
100-120	3	12x2	12300kg	1450	380	1830	2.5
120-140	3	16x2	16000kg	1800	400	2200	3.4
140-180	3	16x2	16000kg	1950	420	2370	3.6

ALL OF THE ABVE STOCKINGS ARE MANUFACTURED WITH GALVANISED WIRE / STAINLESS STEEL WIRE OPTIONAL.

Superflex

Superflex cable is manufactured from high tensile plaited wire rope laid in a four by three sinnet configuration. The interplaiting of the sets of strands creates a very tough set-resistant cable with excellent flexibility. Ideal for general lifting and slinging applications particularly where choking of the load and ease of handling is required. The flexible nature of Superflex ensures a friction grip that is superior to standard wire rope slings in most applications.



SUPERFELX SLINGS & STROPS

Superflex slings are made from a high tensile plaited wire rope laid in a four by three sinnet configuration. Superflex slings are extremely flexible and have excellent applications in general lifting and slinging particularly where choking of the load is required. The flexible nature of Superflex ensures a friction grip that is superior to standard wire rope slings in most applications.

- ✓ Robust, flexible design
- ✓ Superior gripping capability
- ✓ Non-kinking
- ✓ Torque resistant

Method of loading	Direct Loaded	Choke Hitch		Basket Hitch	Endless Strop			
		Round Load	Square load		Direct Loaded	Cradle Strop	Choked strop on round load	Choked strop on square load
Cable Size								
Two - 5	1.0	0.7	0.5	1.9	1.5	2.8	1.1	0.8
Three - 0	1.4	1.1	0.7	2.7	2.2	4.3	1.6	1.1
Three - 5	1.8	1.4	0.9	3.5	2.7	5.2	2.0	1.4
Four - 0	2.4	1.8	1.2	4.6	3.6	6.9	2.7	1.8
Four - 5	3.0	2.3	1.5	5.8	4.5	8.7	3.4	2.3
Five - 0	4.0	3.1	2.0	7.7	6.0	11.7	4.5	3.0
six - 5	6.7	5.0	3.4	13.0	10.0	19.0	7.6	5.1
Eight - 0	10.3	7.8	5.2	20.0	15.6	29.6	11.8	7.8
Ten - 0	15.3	11.5	7.6	29.8	22.9	43.5	17.5	11.6

flat woven wire slings.

Flat woven wire slings are used where reduced contact pressure is required in slinging delicate but heavy materials such as machined surfaces, soft metal rods, and metal tubes which require a firm and flat grip.

TYPE 1 – Cradle lift applications

1-A

The 1-A style sling has a U termination each end providing a low profile flat woven sling that can be easily slid under loads. It is made from machine woven flat cables and is ideal for general purpose slinging in a cradle configuration.

1-B

The 1-B style sling has a U termination one end and a lapped eye with ferrules on the other end. Economical sling with slim ends to slide under loads. Made from machine woven flat cable and used for general work. End with ferrules remains on the crane during rigging.

1-C

The 1-C style sling has a lapped eye with ferrules each end and is the most economical flat woven sling option. For general lifting where clearances under loads are adequate. Machine woven flat cable.

WLL Tonnes - Standard Type 1-A, 1-B, 1-C				
Flat Woven Wire Sling Size		Basket Hitch Included Angle 		
Width mm	Thickness mm	<30°	60°	120°
50	5	1.9	1.7	1.0
64	7	3.0	2.7	1.6
76	8	4.5	4.0	2.3
88	10	6.0	5.3	3.1
100	11	8.1	7.1	4.1
112	12	10.0	9.0	5.2
125	14	13.0	12.0	7.2
160	17	21.0	19.0	11.0
200	20	32.0	28.0	17.0
250	25	48.0	43.0	25.0

- ✓ Reduced contact pressure by distributing load over wider area
- ✓ Robust resilient design to withstand tough lifting conditions
- ✓ Safe and easy inspection

TYPE 1 - Cradle Lift applications

1-D

The 1-D style sling has links in both ends attached with thimbles and ferrules. This bulky assembly needs more clearance under loads but the links reduce wear at the hook. Machine woven flat cable.

TYPE 2 - for choker lift applications

2-R

U Termination in reeving end and semi trapezoidal link in other end. Link fitted with thimbles and ferrules. Made from machine made flat cable. Provides a think working end for sliding easily under loads. Used for general lifting where a choker lift is needed.

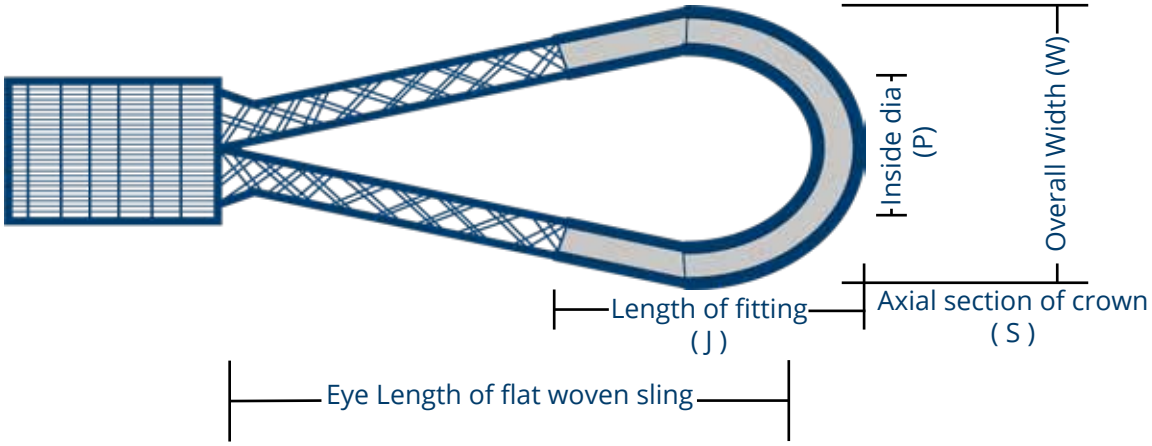
2-S

Lapped eye with ferrules one end, and semi-trapezoidal link on the other end fitted with thimbles and ferrules. Made from machine made flat cable. Needs more clearance under loads. The most economical sling for general usage where a choke hitch is needed.

WLL Tonnes - Standard Type 2R & 2S				
Flat Woven Wire Sling Size		Slings 		
Width mm	Thickness mm	Choked on round load	Choked on square load	Straight pull in single fall
50	5	0.7	0.5	20.4
64	7	1.2	0.8	32.0
76	8	1.7	1.1	47.6
88	10	2.3	1.5	63.2
100	11	3.1	2.0	85.0
112	12	3.8	2.6	107
125	14	5.1	3.4	143
160	17	8.2	5.5	228
200	20	12	8.2	340
250	25	18	12	510

U TERMINATIONS

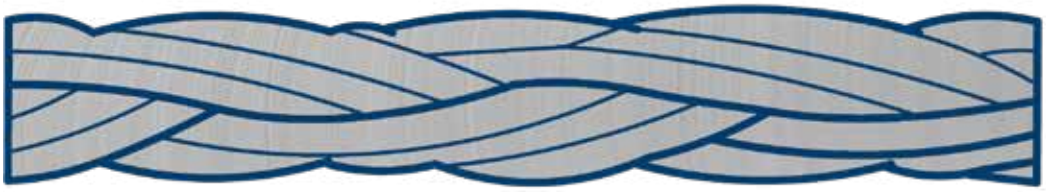
U terminations are low deformation swaging fittings designed and manufactured by Andromeda. They are used to provide a thin and durable termination for flat woven slings. The fitting is no thicker than the cable that it is attached to and provides a very easily handled end to slide easily under loads. They have been designed to replace the handmade soft eyes of Type 1 Special slings, enabling faster delivery and higher WLL. They are described and dimensioned in the drawings and in the table below.



Size of flat woven sling	Inside diameter (P)	Overall width (W)	Axial section of crown (S)	Thickness of fitting (T)	Length of fitting (J)	Mass of fitting (kg)
50	43	68	16	11	104	0.15
64	54	90	20	13	128	0.34
76	65	100	23	16	156	0.55
88	76	123	28	19	178	0.82
100	86	135	32	22	210	1.3
112	97	153	35	24	234	1.9
125	108	170	39	27	260	2.4

SUPERFLEX ROPE

Made from high tensile 2070mpa strands the unique construction of the Superflex cable consisting of six right laid and six left laid strands means the cable exhibits a state of torsional balance under load, ideal for use as a Pulling In rope in for overhead and underground electrical conductors.



- ✓ High flexibility and abrasion resistance
- ✓ Torque resistant (non-spin)
- ✓ Easily repaired
- ✓ Non-kinking

Andromeada Plaited Wire Rope 2070 MPa					
Nominal diameter (mm)	Number and diameter of strands	Mass per one hundered meters (Kg)	Standard maximum length (m)	Listed strength kN	kgf
10	12 x 2.3	31	3500	61.6	6284
13	18 x 2.7 4 x 3.0	51	2500	88.6	9040
16	8 x 3.3 4 x 3.8	78	1500	136	13900
18	8 x 3.7 4 x 4.7	97	1200	169	17200
20	8 x 4.1 4 x 4.7	120	1000	209	21300
24	8 x 4.9 4 x 5.4	167	800	290	29600

NOTE: We can make these wire ropes in any size required up to 26mm diam. The above list is a standard size range.

Slings & fittings

Cookes offers and assembles a range of wire rope slings & end terminations.

WIRE ROPE SLINGS & END TERMINATIONS

Cookes manufacture and supply a comprehensive range of high quality wire rope slings and assemblies in diameters ranging from 1.5mm to 52mm in accordance with EN13414. Single and multi leg slings custom made in either galvanized, bright or stainless finish to cover all lifting applications.

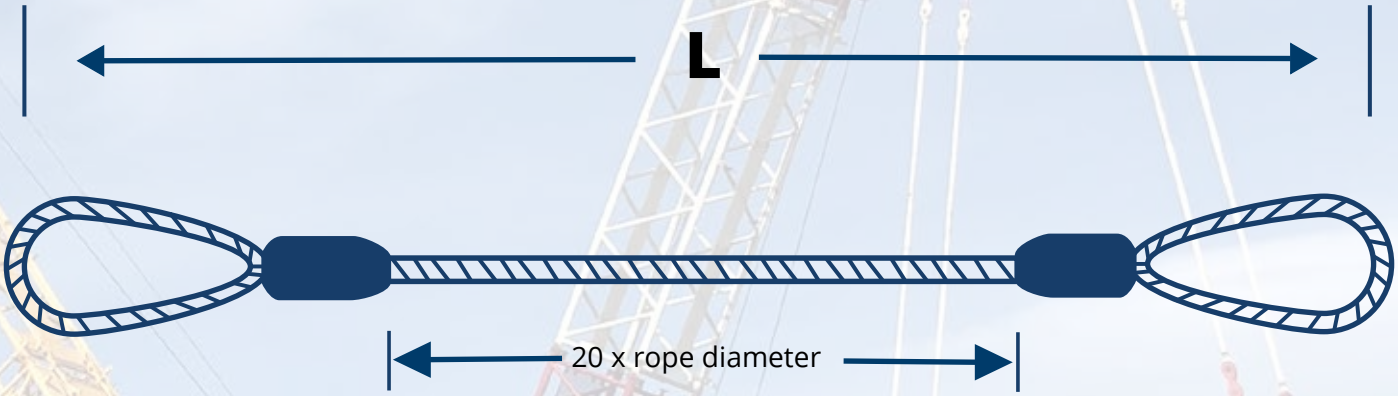
Ordering Wire Rope Slings

When ordering wire rope slings please supply the following information:

- ✓ Effective length (L)
- ✓ Diameter and /or capacity
- ✓ Construction of wire rope
- ✓ Type of eye/end fittings
- ✓ Quantity

Sling Specifications:

Effective Length (L) = inside bearing point to inside bearing point



- ✓ The minimum length of plain rope between the inside ends of the ferrules shall be 20 times the nominal rope diameter.
- ✓ The minimum length of plain rope between the tails of hand splices shall be at least 15 times the nominal rope diameter.

Termination Efficiency:

The efficiency ratings for wire rope end terminations are based upon the minimum breaking force of the wire rope. The following pages depict some of the more common termination types and their efficiencies.

To determine the actual working load limit for slings the required design factor must then be applied to this reduced breaking strength EG. Normal wire rope lifting safety factor 5 to 1.

Single Leg Sling WLL = $\frac{F_{min} \times K_T}{Z_p \times g}$

Where

F_{min} is the minimum breaking force of the rope, in kilonewtons;

K_T is a factor which allows for the efficiency of the termination;

Z_p is the working coefficient and has the value = 5

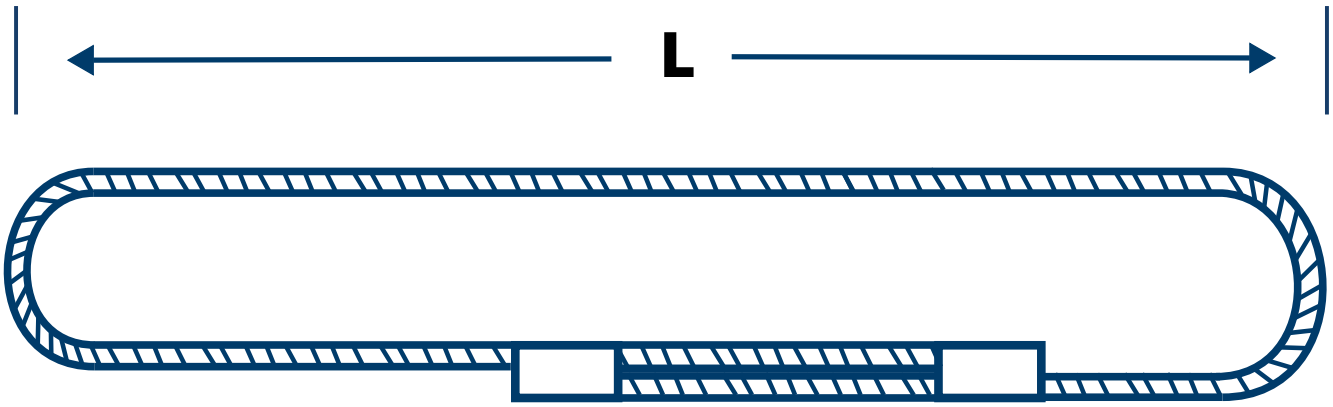
NOTE: The term working coefficient is also known as the coefficient of utilisation.

g is the factor relating mass to force and has the value = 9,80665.

For ferrule secured terminations K_T shall be 0,9 and for spliced terminations K_T shall be 0,8.

(Reference EN 13414-1)

Ferrule secured endless slings



✓ The adjacent ends of the ferrules shall not be less than three times the length of the ferrule apart after pressing.

$$\text{Endless Sling WLL} = \frac{F_{min} \times 2 \times 0,8}{Z_p \times g}$$

Where

F_{min} is the minimum breaking force of the rope, in kilonewtons;

Z_p is the working coefficient and has the value = 5

g is the factor relating mass to force and has the value = 9,80665.

NOTE: This calculation assumes that endless slings will normally be used in choke hitch (2x 0,8). The effect of choke hitch is the dominant factor and thus takes precedence over the termination efficiency since the factors are not cumulative.

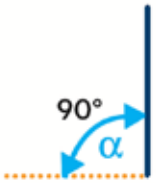
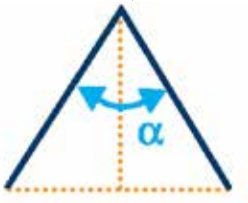
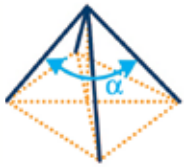
Ferrule Secured Eye Terminations:

Soft Eye with Ferrule to EN13411-3 (Din 3093) Termination Efficiency rating 90%.

Thimble Eye with Ferrule to EN13411-3 (Din 3093) Termination Efficiency rating 90%

WIRE ROPE SLING CHART

WLL for slings using steel cored rope classes 6x19. 6x36, & 8x36 in grade 1770 and having ferrule secured eye terminations.

	One leg sling	Two leg sling		Three and four leg sling		Endless sling
Angle to the vertical	0°	0°-90°	Over 90°-120°	0°-90°	Over 90°-120°	0°
				 		
	Direct	Direct	Direct	Direct	Direct	Choke hitch
Nominal Rope Diameter (mm)	Working load limits					
8	0,750	1,05	0,750	1,55	1,10	1,20
9	0,950	1,30	0,950	2,00	1,40	1,50
10	1,15	1,60	1,15	2,40	1,70	1,85
11	1,40	2,00	1,40	3,00	2,12	2,25
12	1,70	2,30	1,70	3,55	2,50	2,70
13	2,00	2,80	2,00	4,15	3,00	3,15
14	2,25	3,15	2,25	4,80	3,40	3,70
16	3,00	4,20	3,00	6,30	4,50	4,80
18	3,70	5,20	3,70	7,80	5,65	6,00
20	4,60	6,50	4,60	9,80	6,90	7,35
22	5,65	7,80	5,65	11,8	8,40	9,00
24	6,70	9,40	6,70	14,0	10,0	10,6
26	7,80	11,0	7,80	16,5	11,5	12,5
28	9,00	12,5	9,00	19,0	13,5	14,5
32	11,8	16,5	11,8	25,0	17,5	19,0
36	15,0	21,0	15,0	31,5	22,5	23,5
40	18,5	26,0	18,5	39,0	28,0	30,0
44	22,5	31,5	22,5	47,0	33,5	36,0
48	26,0	37,0	26,0	55,0	40,0	42,0
52	31,5	44,0	31,5	66,0	47,0	50,0
56	36,0	50,0	36,0	76,0	54,0	58,0
60	42,0	58,0	42,0	88,0	63,0	67,0
Leg factor K_L	1	1,4	1	2,1	1,5	1,6

EN 13414-1

* Note: The working load limits given in the above chart are based on the assumption that soft eyes of single leg slings are used over bearing points having diameters not less than twice the nominal diameter of the rope.

S-412 Solid Wire Rope Thimbles

A high quality Crosby manufactured solid thimble pre-drilled to suit open wire rope socket, boom pendant clevis, wedge socket, shackle, etc

- ✓ Cast ductile iron
- ✓ Manufactured in the USA

Hot Dip Galvanised Thimbles

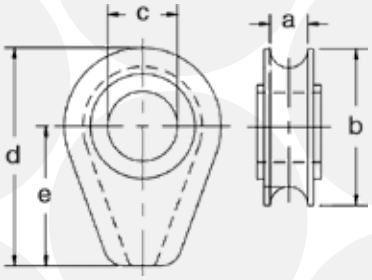
Generally comply to AS1138 or BS464

- ✓ Suitable for lifting applications
- ✓ Hot dip galvanised finish
- ✓ Manufactured in China

Open pattern allows thimble to be assembled directly onto another component.

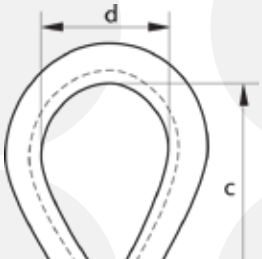
S-412 Solid Wire Rope Thimbles

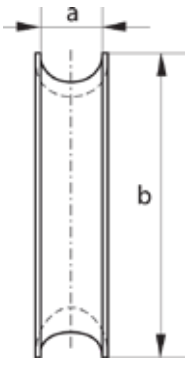
Product Code	Crosby Item No.	Suit Rope	Dimensions (mm)					Weight
		Ømm	a	b	c	d	e	kg
02113013C	1037121	13	14.2	54.0	26.9	71.5	44.5	0.28
02113016C	1037149	16	20.6	86.0	33.3	119	76.0	1.00
02113019C	1037167	18 – 20	20.6	86.0	38.1	119	76.0	1.05
02113022C	1037185	22	26.9	114	44.5	154	97.0	2.47
02113026C	1037201	24 – 26	26.9	114	54.0	154	97.0	2.38
02113028C	1037229	28 – 30	33.3	137	60.5	184	116	4.21
02113032C	1037247	32 – 35	38.9	137	67.0	184	116	4.45



Hot Dip Galvanised Thimbles

Product Code	Suit Rope	Dimensions (mm)			
	Ømm	a	b	c	d
02106006	6	6	48	30	20
02106008	8	8	54	33	22
02106009	10	10	64	38	25
02106011	11	13	73	41	29
02106013	13	14	80	44	32
02106014	14	15	80	44	32
02106016	16	17	98	59	41
02106019	19	20	124	73	51
02106022	22	23	133	83	57
02106026	26	27	162	108	70
02106028	29	29	178	111	76
02106032	32	33	197	133	95
02106035	35	38	229	152	105
02106038	38	41	254	165	114
02106042	42	46	254	165	114
02106044	45	51	286	178	127
02106048	48	60	318	191	133
02106051	51	64	330	203	140
02106064	64	70	413	241	159





Open Pattern Galvanised Thimbles						Gap (mm)
02106012O	13	14	80	44	32	17
02106016O	16	17	98	59	41	21

Forged Closed & Open Spelter Sockets

Forged Closed Spelter Wire Rope Sockets. Meet performance requirements of Federal Specification RR-S-550E, Type B. Galvanised Finish.

- ✓ Forged from hardness controlled bar quality carbon steel
- ✓ Closed spelter sockets correctly applied have an efficiency rating of 100% based on the catalogue strength of steel wire rope
- ✓ Manufactured in Taiwan.

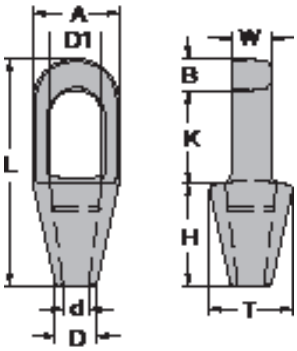
Forged Open Spelter Wire Rope Sockets. Meet performance requirement of Federal Specification RR-S-550D, Type A. Galvanised finish.

- ✓ Forged from hardness controlled bar quality carbon steel
- ✓ Open spelter sockets correctly applied have an efficiency rating of 100% based on the catalogue strength of steel wire rope
- ✓ Manufactured in Taiwan

*Termination efficiency rating 100%

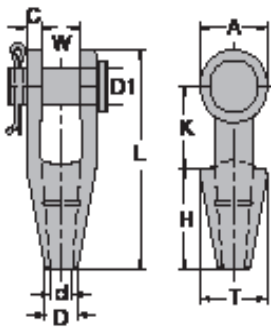
Forged Open Spelter Socket

Product Code	Yoke Item No.	Rope	Dimensions (mm)										Weight
		Ømm	A	C	D	D1	d	H	K	L	T	W	kg
02128113	8-734-13G	11-13	48	13	25	25	15	63	54	142	50	25	1.1
02128116	8-734-16G	14-16	58	14	29	30	18	76	64	172	57	32	1.8
02128119	8-734-19G	18-20	67	16	32	35	22	92	76	202	67	38	2.6
02128122	8-734-22G	22-23	80	20	38	41	24	102	89	235	85	45	4.7
02128126	8-734-26G	24-26	96	23	44	51	29	114	102	268	95	52	7.4
02128128	8-734-28G	28-30	105	25	51	56	32	127	117	300	105	57	10.1
02128135	8-734-36G	32-35	121	29	57	62	38	140	127	335	120	64	14.9
02128138	8-734-38G	36-39	137	30	70	70	41	152	152	384	133	76	20.7



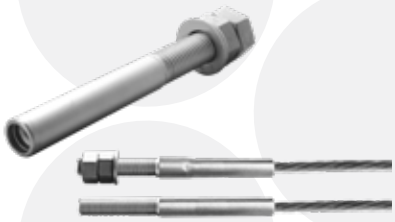
Forged Closed Spelter Socket

Product Code	Yoke Item No.	Rope	Dimensions (mm)									Weight
		Ømm	A	B	D	D1	d	H	K	L	T	W	kg
02127113	8-735-13G	11-13	51	18	25	30	14	64	57	138	50	22	0.7
02127116	8-735-16G	14-16	67	21	28	36	18	76	64	160	63	25	1.2
02127119	8-735-19G	18-20	76	27	32	41	21	89	76	192	70	32	2
02127122	8-735-22G	22-23	92	32	38	48	24	101	89	222	88	38	3.6
02127126	8-735-26G	24-26	104	35	45	58	29	114	102	251	96	45	4.9
02127128	8-735-28G	28-30	114	38	51	65	32	127	114	279	105	50	7.2
02127135	8-735-36G	32-35	135	41	57	71	38	140	127	308	121	57	10.5
02127138	8-735-38G	36-39	135	49	70	81	41	152	152	354	133	64	14.3



FORGED SWAGE THREAD STUDS W908

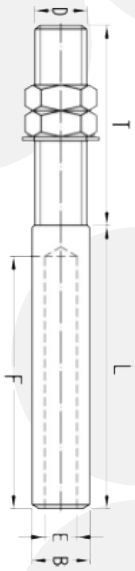
Manufactured from heat treated alloy steel with a galvanised finish.



*Termination efficiency rating 100%

Forged Swage Thread Studs

Art No.	Rope size (inch)	B (inch)	E (inch)	F (Inch)	L (inch)	T* (inch)	D*	Max. O.D after swage
W908-006	1/4	0.50	0.27	2.13	2.48	1.97	M12	0.46
W908-008	5/16	0.77	0.34	3.19	3.54	2.36	M16 x 2.0	0.71
W908-010	3/8	0.77	0.41	3.19	3.54	2.36	M20 x 2.5	0.71
W908-011	7/16	0.98	0.48	4.25	4.69	3.15	M20 x 2.5	0.91
W908-013	1/2	0.98	0.55	4.25	4.69	3.15	M24 X 3.0	0.91
W908-014	9/16	1.25	0.61	5.28	5.87	3.94	M24 X 3.0	1.16
W908-016	5/8	1.25	0.67	5.28	5.87	3.94	M27 x 3.0	1.16
W908-019	3/4	1.55	0.80	6.38	7.24	5.91	M30 x 3.5	1.42
W908-022	7/8	1.70	0.94	7.44	8.35	5.91	M39 x 4.0	1.55
W908-026	1	1.98	1.06	8.46	9.61	6.30	M42 x 4.5	1.80
W908-028	1-1/8	2.25	1.19	9.53	10.75	7.09	M48 x 5.0	2.05
W908-032	1-1/4	2.53	1.33	10.63	11.73	7.09	M56 x 5.5	2.30
W908-036	1-3/8	2.80	1.45	11.63	12.87	7.87	M60 x 5.5	2.56
W908-038	1-1/2	3.08	1.58	12.72	13.98	9.06	M64 X 6.0	2.81
W908-045	1-3/4	3.39	1.86	14.88	16.22	9.84	M70 X 6.0	3.06
W908-050	2	3.94	2.13	16.97	18.86	11.81	M80 x 6.0	3.56
W9080-057	2-1/4	4.45	2.36	19.29	20.98	11.81	M90 x 6.0	4.02

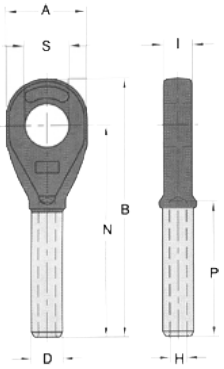


1. T* The thread length can be altered upon request.
2. D* The N.C.N.F. and the left hand metric thread of swage thread stud ends are available upon request.
3. Stainless steel swage thread stud ends are available upon request.

FORGED CLOSED SWAGE SOCKET

Swage sockets are forged from special bar, quality carbon steel with its hardness controlled by spheroidized finest annealing.

- ✓ spheroidized annealed for cold swaging
- ✓ Recommended for use with 6x19, 6x36 IWRC rope and galvanised bridge rope
- ✓ Not recommended for fibre cores or langs lay ropes



*Termination efficiency rating 100%

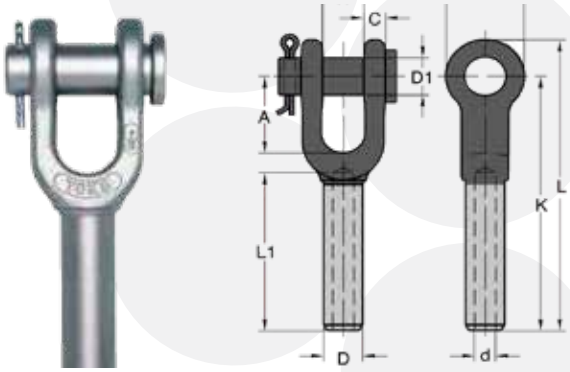
Item No.		Rope Size	Before swage dimensions (mm)								Max. after Swage Dim	N.W
S.C*	Galvanised	mm	B	D	D1	d	H	K	L	L1	mm	kg
8-732-06	8-732-06G	6-7	35	13	19	7	13	89	110	54	12	0.2
8-732-08	8-732-08G	8	41	20	22	9	17	114	140	80	18	0.3
8-732-10	8-732-10G	9-10	41	20	22	11	17	114	140	80	18	0.3
8-732-11	8-732-11G	11-12	51	25	27	12	22	146	176	108	23	0.7
8-732-13	8-732-13G	13	51	25	27	14	22	146	176	108	23	0.6
8-732-14	8-732-14G	14-15	61	32	32	16	29	185	221	135	30	1.4
8-732-16	8-732-16G	16	61	32	32	17	29	185	221	135	30	1.3
8-732-19	8-732-19G	18-20	73	39	36	21	33	217	259	162	36	2.3
8-732-22	8-732-32G	22-23	79	43	43	24	38	258	304	10189	39	3.1
8-732-26	8-732-26G	24-25	92	50	52	27	45	293	342	216	46	4.7
8-732-28	8-732-28G	28	102	57	59	30	51	323	382	243	52	6.7
8-732-32	8-732-32G	32	114	64	65	34	57	364	431	270	58	9.8
8-732-36	8-7325-36G	35-36	127	71	65	37	57	402	475	297	65	13.0
8-732-38	8-732-38G	38	140	78	71	41	64	432	511	323	71	17.3
8-732-45	8-732-45G	44-45	159	86	90	47	76	508	598	378	78	24.0
8-732-50	8-732-50G	48-51	184	100	97	54	83	584	702	432	90	40.5

FORGED OPEN SWAGE SOCKET

Swage sockets are forged from special bar, quality carbon steel with its hardness controlled by spheroidized finest annealing.

- ✓ spheroidized annealed for cold swageing
- ✓ Recommended for use with 6x19, 6x36 IWRC rope and galvanised bridge rope
- ✓ Not recommended for fibre cores or langs lay ropes

*Termination efficiency rating 100%

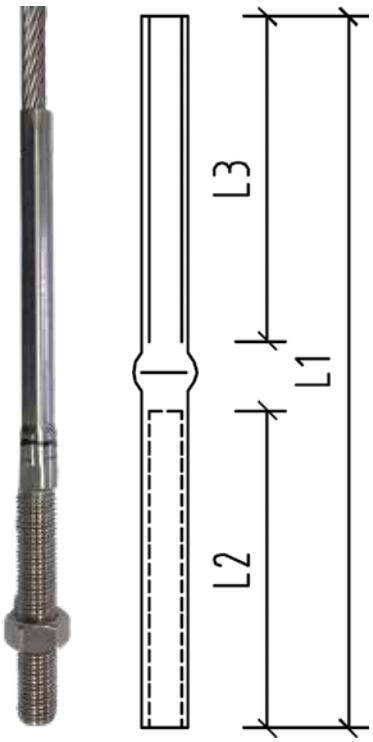


Item No.		Rope Size	Before swage dimensions (mm)										Max. after Swage Dim	N.W
S.C*	Galvanised	mm	A	B	D	D1	d	H	K	L	L1	W	mm	kg
8-731-06	8-731-06G	6-7	38	35	9	13	18	7	102	122	55	17	12	0.3
8-731-08	8-731-08G	8	45	42	12	20	21	9	135	159	80	20	18	0.7
8-731-10	8-731-10G	9-10	45	42	12	20	21	10	135	159	80	20	18	0.6
8-731-11	8-731-11G	11-12	50	50	14	25	25	12	174	199	110	25	23	1.2
8-731-13	8-731-13G	13	50	50	15	25	25	14	174	199	110	15	23	1.1
8-731-14	8-731-14G	14-15	70	60	17	32	30	16	210	240	135	31	30	2.1
8-731-16	8-731-16G	16	57	60	17	32	30	17	210	240	135	31	30	2.1
8-731-19	8-731-19G	18-20	70	70	20	39	35	21	256	295	161	38	36	3.8
8-731-22	8-731-32G	22-23	82	80	24	43	41	24	300	340	189	45	40	5.4
8-731-26	8-731-26G	24-25	98	100	26	50	51	27	345	395	216	50	46	8.1
8-731-28	8-731-28G	28	108	103	30	57	57	30	383	442	238	57	57	12.5
8-731-32	8-731-32G	32	120	113	34	64	64	34	419	484	269	63	59	17.5
8-731-36	8-7321-36G	35-36	132	127	35	71	64	37	463	534	297	64	65	20.9
8-731-38	8-731-38G	38	146	140	43	78	70	41	502	581	315	76	72	30
8-731-45	8-731-45G	44-45	171	170	54	86	89	47	584	674	378	89	78	40.3
8-731-50	8-731-50G	48-51	203	203	60	100	95	54	682	798	431	101	91	66.4

STAINLESS STEEL SWAGE STUD

Cookes have access to a broad range of quality stainless steel wire rope fittings manufactured from grade 316 stainless. With an in house roll swaging capability up to 16mm diameter Cookes can offer you a wide range of bespoke wire rope assemblies for marine, architectural and various other applications.

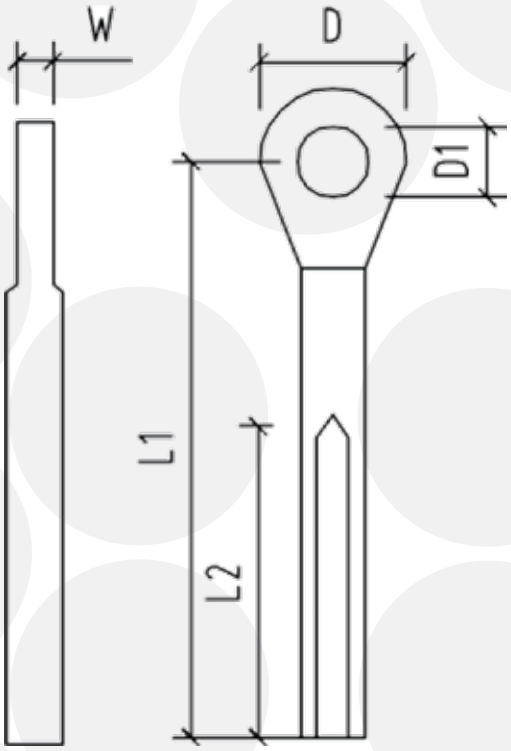
Swage Stud (Threaded Terminal)				
Wire Diameter (mm)	Thread	L1	L2	L3 Thread
2.4	M5	81	30	40
2.4	M5 Left	81	30	40
2.4	M6	86	32	40
3	M6	97	40	40
3	M6 Long	118	40	75
3	M5	58.7	34	22.5
3	M5	91	40	40
4	M8 Left	118	43	57
4	M8	120	47	90
4	M8 Long	143	47	90
4	M6	116	46	50
4	M6 Left	116	46	50
6	M10	164	67	85
6	M12	162	67	78
6	M12	162	67	78
8	M12	180	85	83
8	M16	215	80	112
10	M20	215	91	106
12	M20	245	120	118
14	M24	335	165	125



Wire Size (mm)	D	D1
	0.2	-0.05
3	3.3	6.35
5	5.3	9
6	6.5	12.5
10	10.5	17.8
12	12.5	21.4
14	14.8	25
16	16.5	28

STAINLESS STEEL EYE TERMINALS

Eye Terminals					
Wire Diameter (mm)	L1	L2	D1	D	W
2.5	49	32	5.5	12.5	2.5
3	54.5	40	6-5	14	4
4	68	48	8.5	17	4.5
5	74.25	54	10.5	22	5.7
6	94	64	13.2	25	8
8	118	85	14.7	32	10
10	140	93	16.3	36	10.5
12	182	110	19.3	41	15



Other stainless terminals available on request. Fork Terminals, Toggle terminals, Bottle screw + Swage studs.

END STOPS

END STOPS FOR ROTATION RESISTANT WIRE ROPE - TYPE ESP & ES

ES End Stops are manufactured from mild carbon steel, designed for full proof applications of rotation resistant wire rope.

Chamfered surface around the cylinder to match different fitting devices.

Slightly conical bore allows the distribution of stress over a larger area.

Applicable rope type and grade

The system is tested for rotation resistant wire rope, class 35 (W) x 7, fill factor 0,71. The rope grade is to be 1960. The system with this rope has been validated according to EN 13411-3.

TALURIT™ End Stops Type EPS

End stop no.	Wire Rope diameter f=0,61-0,76		Press dies marked	Press dies type	Diameter after swageing (mm)	Tolerence	Length, L after swageing approx (mm)	Required pressure approx (kN)
	min	max						
ESP 23 D52	23,0	23,9	ES D52	D. Eor E1	52	+0,4 0	178	7 000-9 000
ESP 24 D52	24,0	24,9						
ESP 25 D52	25.0	25,9						
ESP 26 D52	26,0	26,9						
ESP 27 D58	27,0	27,9	ES D58	D, E OR E1	58	+0,5 0	203	8 000-12 000
ESP 28 D58	28,0	28,9						
ESP 29 D58	29,0	29,9						
ESP 30 D64	30,0	30,9	ES D64	D, E or E1	64	+0,6 0	219	12 000-15 000
ESP 31 D64	31,0	31,9						
ESP 32 D64	32,0	32,9						

TALURIT™ End Stops Type ES

End stop no.	Wire rope diameter f=0,61-0,76 (mm)		Press dies marked	Press dies Type	Diameter after swageing (mm)	Tolerence	Length , L after swageing approx. (mm)	Required pressure approx. (kN)
	min	max						
ES 13 D30	13,0	13,9	ES D30	D	30	+0,3 0	90	3 000
ES 14 D30	14,0	14,9						
ES 15 D30	15,0	15,9						
ES 16 D36	16,0	16,9	ES D36	D	36	+0,4 0	108	4 000
ES 17 D36	17,0	17,9						
ES 18 D36	18,0	18,9						
ES 19 D44	19,0	19,9	ES D44	D	44	+0,4 0	126	5 000-6 000
Es 20 D44	20,0	20,9						
ES 21 D44	21,0	21,9						
ES 22 D44	22,0	22,9						
ES 23 D52	23,0	23,9	ES D52	D, E or E1	52	+0,4 0	144	7 000-9 000
ES 24 D52	24,0	24,9						
ES 25 D52	25,0	25,9						
ES 26 D52	26,0	26,9						
ES 26 D58	26,0	26,9	ES D58	D, E or E1	58	+0,5 0	161	8 000-12 000
ES 27 D58	27,0	27,9						
ES 28 D58	28,0	28,9					174	
ES 29 D58	29,0	29,9						
ES 30 D64	30,0	30,9	ES D64	D, E or E!	64	+0,6 0	192	12 000-15 000
ES 31 D64	31,0	30,9						
ES 32 D64	32,0	32,9						

WIRELOCK

Wirelock is the original cold socketing compound for use with wire ropes. With a track record spanning over 50 years it is the best socketing solution for safety, dependability and unparalleled fatigue performance.

Wire rope size		WIRELOCK required (cc)	Wire rope size		WIRELOCK required (cc)
(mm)	(in.)		(mm)	(in.)	
6-7	1/4	9	44	1-3/4	700
8	5/16	17	48	1-7/8	700
9-10	3/8	17	51	2	1265
11	7/16	35	54	2-1/8	1265
13	1/2	35	56	2-1/4	1410
14	9/16	52	60	2-3/8	1410
16	5/8	52	64	2-1/2	1830
20	3/4	86	67	2-5/8	1830
22	7/8	125	70	2-3/4	2250
26	1	160	76	3	3160
28	1-1/8	210	82	3-1/4	2250
32	1-1/4	350	88	3-1/2	4920
36	1-3/8	350	94	3-3/4	5980
40	1-1/2	420	102	4	7730
42	1-5/8	495	-	-	-

W416-7 Kits				Booster pack stock no.
Kit size	Kit per case	Stock no.	Weight each (kg)	
100	20	1039602	.28	1039603
250	12	1039604	.57	1039605
500	12	1039606	1.15	1039607
1000	12	1039608	2.08	1039609
2000	12	1039610	4.10	139611

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