



THE LANEX NAME IS A GUARANTEE OF TOP QUALITY ROPES FOR THE PAPER INDUSTRY AND A WIDE RANGE OF TECHNICAL, SPORTS AND LEISURE APPLICATIONS. AT LANEX WE HAVE BEEN MAKING ROPES AND FIBERS SINCE 1949, AND WE EXPORT OUR PRODUCTS TO CUSTOMERS IN OVER 90 COUNTRIES WORLDWIDE.

The Paper industry is specific since every paper mill paper machine is different. That is why technical knowledge and support is the key to efficient and profitable production. At LANEX we collect experience from hundreds paper mills to share and provide the best rope for our customers. Always trust an experienced LANEX agent or technical team member to help you select the best Paper Carrier Rope for your application.

# **Paper Carrier Ropes**



### **High Quality**

- High-quality raw material
- □ ISO certified production process
- ☐ In-house testing lab and R&D team

### **Competitive Price**

- ☐ High-efficiency production planning
- Continuous improvement for ongoing cost control

### **Short Delivery Time**

- Local agents or distributors
- Documentation support
- Production plan and inventory based on customer needs

#### **Excellent Service**

- Complete and professional rope run and rope service including audits with reports
- Splicing instruction and seminars

### **LANEX TECHNICAL SUPPORT**

#### **Machine Inspection**

- Inspection of rope stretchers
- Inspection of pulleys and equipment
- Can be done while machine is running

#### Rope Run Audit

- Rope tension measurements
- Inspection of transfer points
- Can be done while machine is running

#### Recommendation

 A detailed report offers threading improvements

#### **Used Rope Analysis**

- Analysis of used ropes by our R&D
- Used ropes can offer information on rope run problems

### **Splicing Instructions**

- Splicing instructions and splicing videos
- Splicing kit (splicing needle, Big Fish knife)

#### **Splicing Seminar & Training**

- On site training of machine operators
- On site or organized splicing seminars

#### **SALES SUPPORT**

Our agents and team members can help select the best rope according to rope run and machine parameters.

#### **ROPE TRIALS**

- Optional trial of LANEX rope
- Before having a trial, machine operators should have proper splicing training.

#### **LOCAL SUPPORT**

Stocking, order and technical support on the regular basis through your local agent or distributor.

## PRODUCT SUPPORT AND ROPE RUN AUDITS

■ LANEX is here to provide you with product support and rope run audits when you need it.

# **Paper Carrier Ropes**

	Predryer	Dryer	Postdryer	Pope Reel	Sizepress	Coater	Creping Unit	High speed machines	Paper grammage over 140 g/m²	Temperature	Extra grip
Powerline UNO	<b>~</b>	<b>✓</b>	<b>~</b>	<b>~</b>						up to 180 °C / 356 °F	
Powerline DUO	<b>~</b>	<b>✓</b>	<b>~</b>	<b>~</b>				<b>✓</b>	<b>✓</b>	up to 180 °C / 356 °F	
Directline UNO	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>						up to 180 °C / 356 °F	
Directline DUO	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>~</b>				<b>✓</b>	<b>✓</b>	up to 180 °C / 356 °F	
Superline UNO	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>			up to 180 °C / 356 °F	
Superline DUO	<b>~</b>	<b>✓</b>	<b>✓</b>	~	<b>~</b>	<b>~</b>	~	<b>✓</b>	<b>✓</b>	up to 180 °C / 356 °F	
Safegrip UNO	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>~</b>	<b>~</b>				up to 180 °C / 356 °F	Good
Gripline UNO	<b>✓</b>	<b>~</b>	<b>~</b>		<b>~</b>	<b>~</b>				up to 180 °C / 356 °F	Very good
Doubleline UNO	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>				up to 180 °C / 356 °F	
Doubleline DUO	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>✓</b>	<b>✓</b>	up to 180 °C / 356 °F	
Compact UNO	<b>~</b>	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>			up to 180 °C / 356 °F	
Compact R	<b>✓</b>	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	up to 180 °C / 356 °F	
Extraline UNO					<b>~</b>	<b>~</b>				up to 180 °C / 356 °F	Excellent
Extraline DUO					<b>~</b>	<b>~</b>		<b>✓</b>	<b>✓</b>	up to 180 °C / 356 °F	Excellent
Technoline UNO	<b>✓</b>	<b>~</b>	<b>~</b>		<b>~</b>	<b>~</b>				up to 180 °C / 356 °F	
Technoline DUO	<b>~</b>	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	<b>✓</b>	<b>✓</b>	up to 180 °C / 356 °F	

**/** 

optimal solution

UNO hollow rope without core

DUO rope with core, best solution for high speed machine and high grammage of paper hollow rope without core, extra round shape, alternative to ropes with core

Available colours: red, blue, green, yellow, white, purple

**Diameter range:** 8.5 – 16 mm, 21/64 – 5/8 inch

# WHY TO CHOOSE LANEX PAPER CARRIER ROPES?

- **O** Certified quality
- **O** In house research and development
- O Service and technical support
- Worldwide sales network

# How to choose the right rope

There is no universal key for choosing right rope, but please follow these basic instructions:

The two main rope types are hollow rope (UNO) and rope with an inner core (DUO). DUO ropes, with an inner core, provide a rounded shape that helps with the threading of heavier weight paper or threading of paper on high-speed machines.

Another important difference is the grip provided by the rope. In some machine sections, increased grip is required to catch the paper tail and effectively thread the machine. Higher grip ropes, in order of increasing grip, are Safegrip, Gripline or Extraline.

Friction and chemical resistance can also be important when selecting the best rope. Doubleline rope provides increased friction resistance, while Compact UNO and Compact R profide a higher level of chemical resistance vs other ropes.

Finally, the raw material of the rope is important in determining the maximum operating temperature. UHT (Ultra-High Temperature) rope is rated to 300 °C (572 °F), while all other ropes are rated to 180 °C (356 °F).

To choose the right rope and to get more knowledge about the construction, resistance and other information, please contact our sales team or your local sales agent or distributor.

## Directline UNO/DUO



Basic (all-purpose) rope for all sections of the machine. Low elongation.

# UNO



DUO



Coreless braided rope – for lower speeds and lighter weight paper.

Rope with inner core – for higher speeds and heavier weight paper. Provides basic grip – for better grip please see Superline, Safegrip, Gripline or Extraline. Provides standard rope life – for better rope life, please see Superline, Doubleline or Compact ropes and as the best Technoline rope.

## **Description**

- Raw material Polyamide 6 (Nylon 6) + PES
- Our standard technology without Supercoating (2nd layer of chemical protection and thermo-stabilization)
- Easy to splice (please follow splicing instructions)
- Optimal for working temperatures around 90 °C with a maximum 180 °C

#### **DIRECTLINE UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	30.6 / 0.329	52 / 0.559	66.8 / 0.78	75.3 / 0.81
length on a reel [m] / [ft]	600 / 1.968	600 / 1.968	500 / 1.640	400 / 1.312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

#### **DIRECTLINE DUO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	45.6 / 0.490	54.3 / 0.584	66.8 / 0.739	77.3 / 0.831
length on a reel [m] / [ft]	600 / 1.968	600 / 1.968	500 / 1.640	400 / 1.312
rope tension [kg]	30	35 - 40	45	50 - 55
rope tension [lb]	66.1	77.2 - 88.2	99.2	110.2 - 121.3

## **Powerline UNO/DUO**

Basic (all-purpose) rope for all sections of the machine.

## UNO



DUO



Coreless braided rope – for lower speeds and lighter weight paper.

Rope with inner core – for higher speeds and heavier weight paper. Provides basic grip – for better grip please see Superline, Safegrip, Gripline or Extraline. Provides standard rope life – for better rope life, please see Superline, Doubleline or Compact ropes and as the best Technoline rope.

## **Description**

- Raw material Polyamide 6 (Nylon 6)
- Our standard technology without Supercoating (2nd layer of chemical protection and thermo-stabilization)
- Easy to splice (please follow splicing instructions)
- Optimal for working temperatures around 90 °C with a maximum 180 °C

#### **POWERLINE UNO**

	diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
	weight [g/m] / [oz/ft]	29.1 / 0.313	37 / 0.398	54.5 / 0.586	67 / 0.72
	length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
	rope tension [kg]	30 - 40	40 - 50	50 - 60	60
ď	rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

#### **POWERLINE DUO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	43.5 / 0.468	52/0.559	66.8 / 0.718	75.3 / 0.81
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30	35 - 40	45	50 - 55
rope tension [lb]	66.1	77.2 - 88.2	99.2	110.2 - 121.3

## Superline UNO/DUO

Advanced (all-purpose) rope for all sections of the machine. Our Bestseller and the best choice for balancing high quality and economic price. Superline rope provides Supercoating Technology which increases rope life and supports less elongation.

## UNO



DUO



Coreless braided rope – for lower speeds and lighter weight paper.

Rope with inner core – for higher speeds and heavier weight paper. Provides advanced grip – for exceptional grip please see Safegrip, Gripline or Extraline. Provides advanced rope life – for higher rope life, please see Doubleline or Compact ropes and as the best, Technoline rope. Provides lower elongation when compared to Powerline rope.

## **Description**

- Raw material Polyamide 6 (Nylon 6)
- Advanced technology with Supercoationg (2nd layer of the chemical protection and thermo-stabilization)
- Easy to splice (please follow splicing instructions)
- Optimal for working temperatures around 100 °C with a maximum 180 °C

#### **SUPERLINE UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	28.7 / 0.309	36.6 / 0.394	54.5 / 0.586	67.8 / 0.723
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

For further info please contact your local distributor or LANEX experts (www.lanex.cz).

#### SUPERLINE DUO

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	43.2 / 0.464	51.6 / 0.555	66.2 / 0.712	75 / 0.806
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30	35 - 40	45	50 - 55
rope tension [lb]	66.1	77.2 - 88.2	99.2	110.2 - 121.3

## **Doubleline UNO/DUO**

Unique construction: using double the number of yarns in the rope strand – provides better abrasion resistance and increases the rope lifetime. A universal rope for all sections of the machine.

## UNO



DUO



Coreless braided rope – for lower speeds and lighter weight paper.

Rope with inner core – for higher speeds and heavier weight paper. Provides advanced grip – for exceptional grip please see Safegrip, Gripline or Extraline. Provides exceptional lifetime – other ropes (Compact) may be better for chemical or starch applications. Provides very low elongation.

### **Description**

- Raw material Polyamide 6 (Nylon 6)
- Advanced technology with Supercoationg (2nd layer of the chemical protection and thermo-stabilization)
- Easy to splice (please follow splicing instructions)
- Optimal for working temperatures around 100 °C with a maximum 180 °C

#### **DOUBLELINE UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	28.3 / 0.304	36.2 / 0.389	54 / 0.581	67.2 / 0.723
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

#### **DOUBLELINE DUO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	42.6 / 0.458	51.3 / 0.552	66.3 / 0.713	75.5 / 0.812
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30	35 - 40	45	50 - 55
rope tension [lb]	66.1	77.2 - 88.2	99.2	110.2 - 121.3

# Safegrip UNO/Gripline UNO

Without core but with a rounded shape for higher grip than standard UNO ropes. Safegrip and Gripline use a pair of durable braided cords for better rope grip. In the case of Gripline the cords are surrounded by tough monofilament that provides even better grip.

## **UNO** only



Always without core – rounded shape of the rope is due to the two durable braided cords.

#### Safegrip

Two braided cords replace two of the strands in our normal rope design.

#### Gripline

Two braided cords of rope are surrounded by monofilament to provide much higher grip. Provides exceptional grip; only Extraline rope provides better. Supports very low elongation. A universal rope but highly recommended to be used on sections with very high rope demands (size press, coating, etc.).

### **Description**

- Raw material Polyamide 6 (Nylon 6)
- Advanced technology with Supercoationg (2nd layer of the chemical protection and thermo-stabilization)
- Easy to splice (please follow splicing instructions)
- Optimal for working temperatures around 100 °C with a maximum 180 °C

#### **SAFEGRIP UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	40 / 0.43	49 / 0.529	67.5 / 0.726	71.8 / 0.772
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

For further info please contact your local distributor or LANEX experts (www.lanex.cz).

#### **GRIPLINE UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	35 / 0.376	45.5 / 0.489	63 / 0.677	69.3 / 0.745
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

## **Compact UNO/ R**

Unique rope with 16-strand (UNO) or 12-strand (R) construction. Strands are tightly braided to prevent chemical and starch penetration and impact. Ultra-low elongation.

UNO



P



Coreless braided rope – for lower speeds and lighter weight paper.

Rope without core – the rounded shape is due to the 12-strand construction and a higher mass of raw material. Provides ultra-low elongation. Slightly more difficult to splice – follow splicing instructions for best operation.

## **Description**

- Raw material Polyamide 6 (Nylon 6)
- Advanced coating technology with thermo-stabilization
- Splice needs to be done according to the splicing instructions
- Optimal for working temperatures around 100 °C with a maximum 180 °C

#### **COMPACT UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	32.7 / 0.352	37.7 / 0.405	55 / 0.591	57.8 / 0.621
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

#### COMPACT R

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	30/0.323	36.2 / 0.389	57/0.613	69 / 0.731
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

## **Extraline UNO/DUO**

Extraline rope provides the best grip for use on the most difficult machine applications. Every strand of the rope is surrounded by braided monofilament. This monofilament breaks apart with use creating a rough surface on the rope to provide the very best grip.

UNO



DUO



Coreless braided rope – for lower speeds and lighter weight paper.

Rope with inner core – for higher speeds and higher weight paper. Provides the very best grip for threading paper. Slightly more difficult to splice – follow splicing instructions for best operation.

### **Description**

- Raw material Polyamide 6 (Nylon 6)
- Advanced technology with Supercoationg (2nd layer of chemical protection and thermo-stabilization)
- Rough surface but still easy to splice (please follow splicing instructions)
- Optimal for working temperatures around 100 °C with a maximum 180 °C

#### **EXTRALINE UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	36.2 / 0.389	44.9 / 0.483	52 / 0.56	55 / 0.591
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

For further info please contact your local distributor or LANEX experts (www.lanex.cz).

#### **EXTRALINE DUO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	46.5 / 0.5	59.4 / 0.639	61 / 0.656	70 / 0.86
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30	35 - 40	45	50 - 55
rope tension [lb]	66.1	77.2 - 88.2	99.2	110.2 - 121.3

## **Technoline UNO/DUO**

Special rope for maximum lifetime on the worst sections of the machine. Technoline, a rope with unique construction, is made with built-in aramid fiber. This rope provides maximum lifetime.

UNC



DUO



Coreless rope without the core – for lower speeds and lighter weight paper.

Rope with inner core – for higher speeds and higher weight paper. Provides advanced grip – for ropes providing even better grip please see Safegrip, Gripline or Extraline.

## **Description**

- The aramid fiber contributes to exceptional resistance to paper coating chemicals and reliable, long-lasting resistance to moisture and temperature up to 180 °C
- The rope provides very high wear resistance
- Technoline is a universal rope, to be used in all machine sections where longer rope lifetime is required
- Can be provided as UNO or DUO version, both are very easy to splice

#### **TECHNOLINE UNO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	29.6 / 0.318	37.7 / 0.405	55.7 / 0.599	68 / 0.731
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30 - 40	40 - 50	50 - 60	60
rope tension [lb]	66.1 - 88.2	88.2 - 110.2	110.2 - 132.3	132.3

#### **TECHNOLINE DUO**

diameter [mm] / [inch]	8.5 / 0.33	10 / 0.39	11 / 0.43	12 / 0.47
weight [g/m] / [oz/ft]	44/0.473	51.9 / 0.558	67.5 / 0.726	76 / 0.817
length on a reel [m] / [ft]	600 / 1,968	600 / 1,968	500 / 1,640	400 / 1,312
rope tension [kg]	30	35 - 40	45	50 - 55
rope tension [lb]	66.1	77.2 - 88.2	99.2	110.2 - 121.3

# **Accessories for LANEX Paper Carrier Ropes**

### **Splicing needle**

Ensure the best splice and maximum rope life by using genuine LANEX splicing needles. It is essential to use the proper method and tools to achieve the best splice, every time.

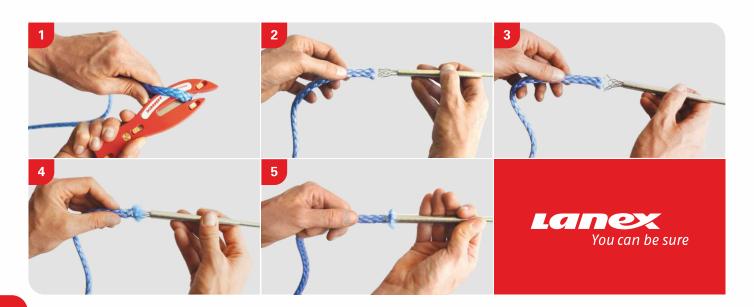
#### LANEX supplies splicing needles in two sizes

- narrow needles for splicing ropes with diameter up to 10 mm (including all diameters of Compact UNO/R ropes)
- thick needles for splicing ropes with diameter from 11 mm upwards

LANEX splicing needles are specially designed for use in the highly demanding operating conditions of paper machines. Splicing baskets (which can wear out before than needles) can be purchased separately.









### Rope tensioner for splicing

Take the pressure off with a LANEX tensioning device. This tool simplifies the splicing process for paper carrier ropes.

## Safety rope knife

LANEX's special rope knife – nicknamed the BIG FISH because of its shape – is a simple, popular and very safe tool for cutting ropes.

- extremely safe operation minimizes risk of injury
- ideal for safe splicing in conjunction with a LANEX splicing needle





### Rope cart

When feeding ropes into the rope run it is essential that the ropes are unspooled in a horizontal direction. Vertical unspooling can cause the rope to twist, which reduces its service lifetime. To ensure correct unspooling, LANEX supplies a specially designed cart holding 3 spools of paper carrier rope.

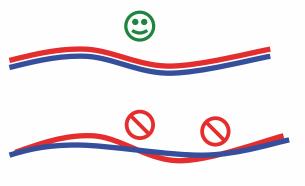
- easy, problem-free horizontal unspooling
- easier handling of rope spools
- stores up to 3 spools at once
- keeps the rope clean and dry

## **Common Causes of Carrier Rope Failure**

- 1. Incorrect type or diameter of rope.
- 2. Misalignment of one or more sheaves.
- 3. Incorrect sheave groove profiles.
- 4. Rope running outside of sheave grooves.
- 5. Worn sheave grooves often with sharp edges, typical of plastic and aluminum sheaves.
- 6. Sheave grooves soiled by broke or size/coating deposits.
- 7. Sheaves too small in diameter causing excessive rope flexing.
- 8. Sheaves with blocked or partially blocked bearings.
- 9. Obstructions in rope path.
- 10. Rope path allowing rope to be soaked in size or coating chemicals.
- 11. Felts rubbing on rope.
- 12. Ropes crossed.
- 13. Ropes twisted.
- 14. Incorrect splicing technique and/or short splices.
- 15. Incorrect tension.

### **Main principles**

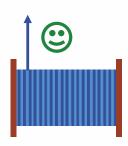
Using two (or more) rope colors will prevent incorrect rope instalation into the rope track.



Vertical unspooling may cause rope twisting leading to faster abrasion in the rope track due to non-uniform rope shape.

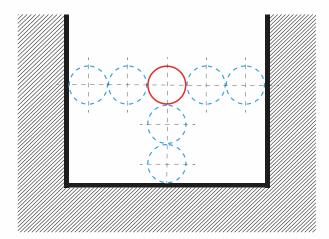


Rope must be unwound from spool horizontally.



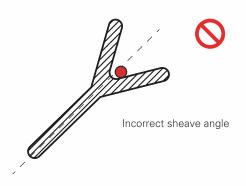
### **Proximity of rope to other parts of the machine**

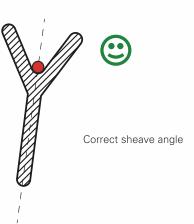
The following figure demonstrates our recommendation regarding the distance between rope and other parts of machine. This distance should be a minimum of two rope diameters to prevent against potential abrasion and damaging the rope.



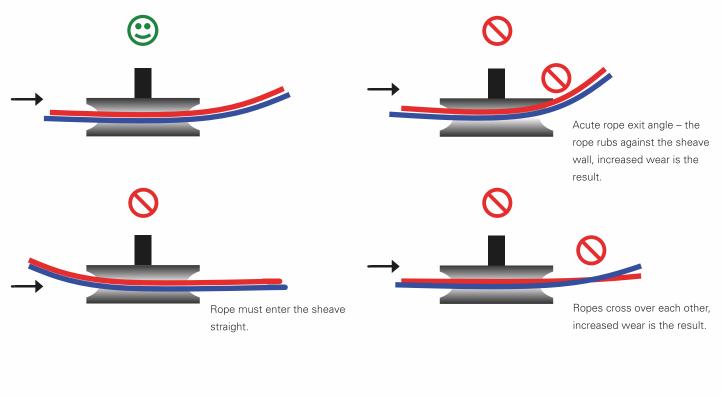
## **Sheave angle**

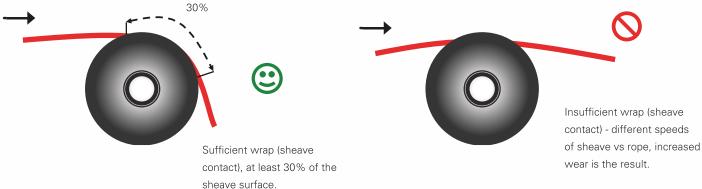
The following figures demonstrate the influence of improper sheave angle on the lifetime of rope. If the sheave is leaning too much from a vertical position the rope will run on the sheave wall resulting in excess wear on one side of the rope and decreased life. When the sheave is close to vertical, the rope runs properly inside the groove distributing any wear more evenly, increasing rope life.



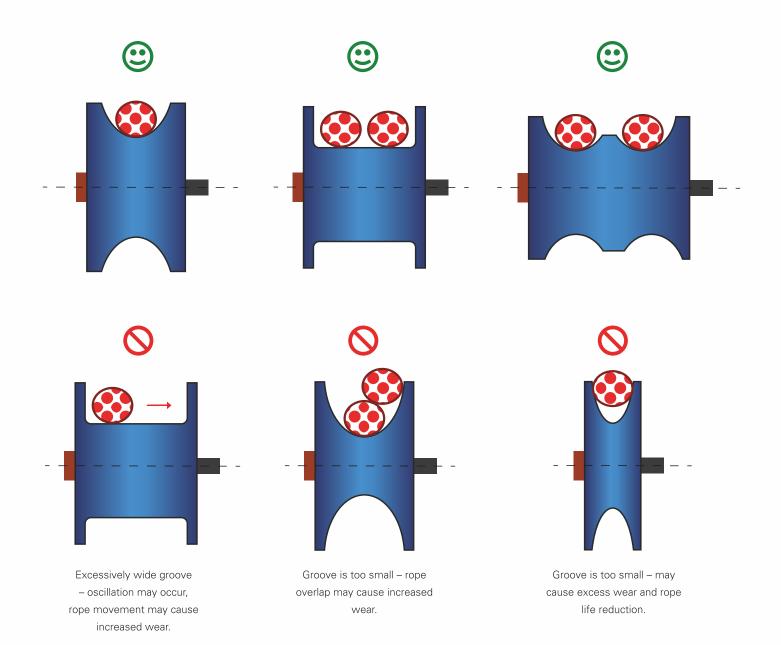


## **Proper rope/sheave alignment**



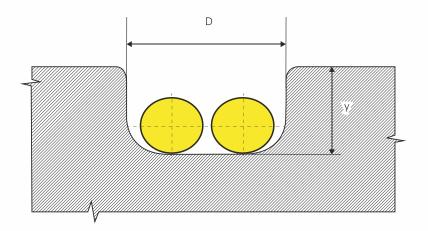


## **Proper sheave selection**



## Diameter of groove in cylinder

Following figure describes the situation of groove in drying cylinder. If the ropes haven't enough space it can rub each other and they are damaged more fasten, especially in the splicing point. Another possibility is that the rope can jump out from the groove. On the other hand if the groove is too wide the rope oscillates and do not grip the paper tail well.

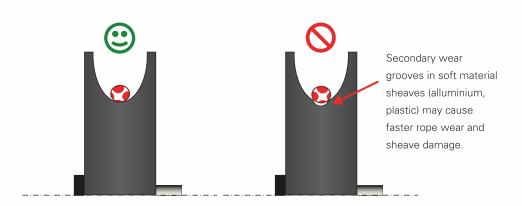


#### D = d + d + 1/2xd

D = diameter of groove d = diameter of rope min. y = 12 mm

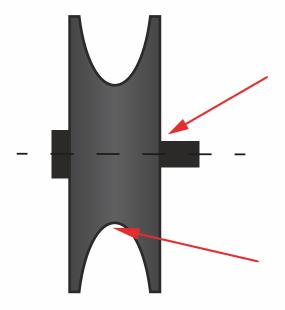
## Secondary (wear) grooves & sheave material

The following figures show influence of secondary wear grooves of pulleys on lifetime of rope.





### **Sheave maintenance**



Check the bearings of sheaves regularly. Oscillation may cause the rope to drop out. Blocked sheaves may cause excess wear and significant lifetime reduction.

Check and clean the sheave surface regularly. Rust or dirt may cause excess wear and lifetime reduction.

### **Tensioners/stretchers**

- The length of the stretcher should be approximately 8% of total rope length
- Set for low tension during running time and maintenance stops (less rope abrasion and tension)
- Set for higher tension during paper feeding (ropes under higher tension will have a improved grip on the tail)
- Gravity stretchers for machines operating under 300 m/m (1,000 ft/min) with limited range of paper grades. Less expensive, more difficult to modify the rope tension.
- Pneumatic stretchers for machines operating over 300 m/min (1,000 ft/min) with more paper grade changes.
  Faster reaction time for tension changes, especially in the size press or coaters when wash water can be splashed on the ropes during cleaning causing sudden changes in rope length.

## Also available from Lanex

### **Splicing instructions**

Around 30% of the performance of paper carrier rope depends on correct splicing. Incorrect splicing can severely reduce the service lifetime of paper carrier rope (to as little as 10% of its standard lifetime). To help operators splice paper carrier ropes correctly, LANEX has produced an instruction video giving step-by-step instructions for the correct splicing technique.

#### The video is available

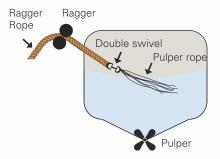
- at http://www.lanex.cz/en/splicing-instructions
- on Flash disk ask your local LANEX distributor
- Contact your local LANEX distributor to arrange an on-site training session at your factory

## **Packaging**

□ 360 x 360 x 500 mm



### Ragger/Pulper Rope assembly



Pulper Rope



Based on the groove shapes we offer 3 main types of rope pulleys

Ragger Rope





Return Transfer Separator

### **Montage Simple**



## Reference list















































