



Pilot User Guide - Version RS262 - Confidential

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1. Introduction

RopeDriver – Spin&Stow™

The RopeDriver is a powered rope management system that enables the simultaneous hoisting and storage of climbing rope in one continuous process.

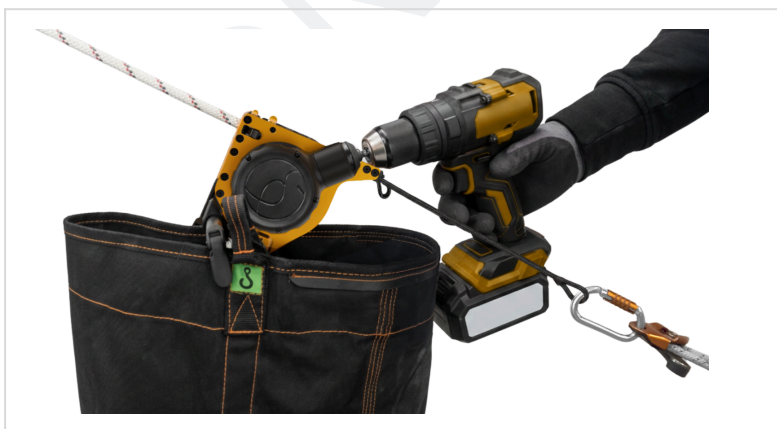
Traditionally, rope handling consists of two separate tasks: first hoisting the rope and then manually storing it. The RopeDriver combines both into a single controlled workflow, referred to as **Spin&Stow™**.

Powered by a standard electric drill, the RopeDriver guides the rope into a rope bag while hoisting, eliminating the need for manual coiling or secondary rope handling. This reduces physical effort, improves control and increases efficiency when handling long climbing ropes.

The RopeDriver has been developed primarily for professional rope access applications, including wind turbine maintenance, where long ropes must be deployed and retrieved safely and efficiently. It may also be used in other industrial environments where climbing ropes are routinely handled.

This User Guide explains the safe configuration, operation and maintenance of the RopeDriver. Read and understand this manual before using the equipment.

Throughout this manual, the term **Spin&Stow™** refers to the RopeDriver method of simultaneously hoisting and storing rope.



2. Intended Use

Intended Use

The RopeDriver is intended exclusively for the controlled hoisting and simultaneous storage of approved climbing ropes using the Spin&Stow™ method.

The RopeDriver is designed for use by trained rope access professionals familiar with working at height, rope access techniques and the safe operation of power tools.

The RopeDriver shall only be used:

- with approved rope types specified in this User Guide;
- with a compatible electric drill meeting the specified requirements;
- while securely anchored to either a suitable structural anchor point or the user's harness;
- in accordance with the procedures described in this User Guide.

Prohibited Use

The RopeDriver shall not be used:

- for lifting or lowering persons;
- as personal fall protection equipment;
- for lifting loads other than approved climbing ropes;
- with damaged or incompatible ropes;
- in explosive or potentially explosive atmospheres;
- if the equipment is damaged, modified or incomplete.

Any use outside the intended purpose is considered misuse and may result in unsafe operation, equipment damage or personal injury.

3. Product Overview

3.1 The RopeSpinner System

The RopeSpinner system is a modular rope management system consisting of a RopeDriver and a BagFrame.

Together with a rope bag and a compatible drill it enables the Spin&Stow™ method, allowing climbing rope to be hoisted and stored simultaneously in one continuous operation.

The RopeDriver may also be used independently as a powered rope hoisting device. When combined with the BagFrame and Rope Bag, the complete system is referred to as the RopeSpinner system.



3.2 Main Components

RopeDriver

The RopeDriver provides the driving force required to hoist the rope. It guides the rope through the system, regulates rope grip and transfers power from the drill to the rotating coil. Its form is determined by the flow of rope.



BagFrame

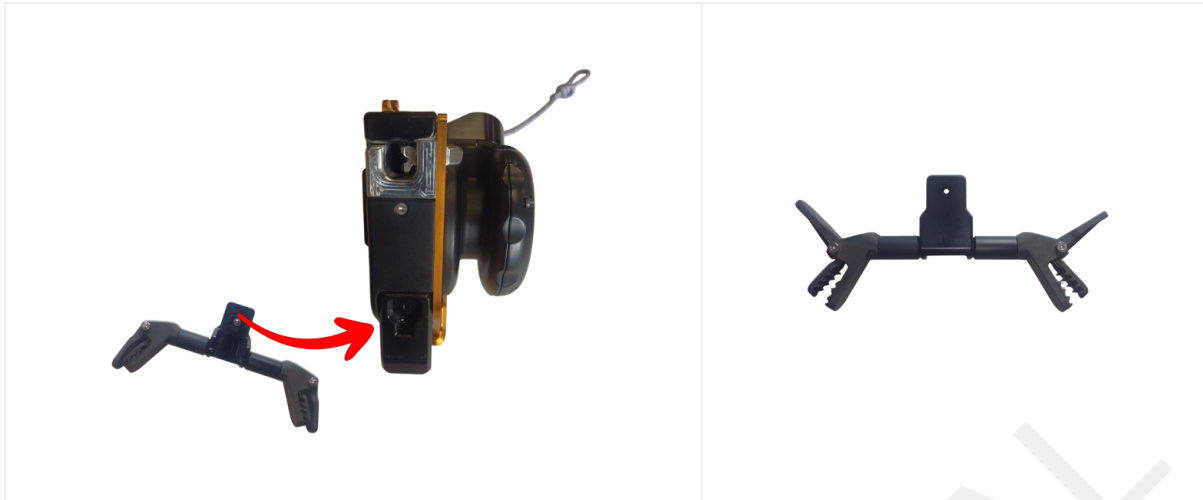
The BagFrame positions a suitable rope bag directly below the RopeDriver and holds the bag opening open during Spin&Stow™.

The bag wall or reinforced rim shall not exceed 5 mm thickness at the tarp-clip attachment points.

The BagFrame and tarp clips are not intended to be used as carrying handles or lifting points. Do not lift, carry, pull or shake the rope bag by the BagFrame or tarp clips. When moving or repositioning the bag, use the bag's own handles or designated attachment points.

The BagFrame is particularly suitable in case of rope bags that won't stay open. In case of storage volumes that remain open, e.g. rope buckets, use of the BagFrame can be dispensed.

The BagFrame has two tarp clips which halfway open have maximum space to clasp practically any rope bag.



Rope Bag

Rope is automatically stored in the rope bag during the Spin&Stow™ process. The BagFrame is equipped with two tarp clips for attaching suitable rope bags with a wall or rim thickness of no more than 5 mm at the attachment points.

Electric Drill

The RopeDriver is powered by a compatible electric drill. Drill requirements are specified in Chapter 5.

3.3 Operating Principle – Spin&Stow™

The following images show the main components of the RopeDriver.



Basically the Ropedriver

- is held in the left hand with the grip 1,
- driven by a drill mounted to socket 2,
- limits drill reaction torque with torque reaction line 3,
- guides and holds rope with entry port 5,
- drives rope with coil 6,
- protects against overload with slipclutch 7,

- ejects rope with rope ejector 8,
- provides rope pressure with rope pressure block 9,
- protects and enables rope pressure with cover 10,
- protects against wrong drive direction with rope exit slit 11.

Additional parts for following functionalities are

- Button 5.1 to open the cover. When the cover is closed, the rope pressure block pushes the rope inside the coil with the rope pressure block.
- A latch 5.1 as part of the rope entry port, with a button for opening. When the latch is closed the rope entry port assures exact guidance of the rope toward the coil.
- A rope clamp 5.2 as part of the rope entry port. The rope clamp holds the rope in case of no driving force.
- A rope exit slit 11 through which rope can exit when the drill drives in the wrong direction.
- Loops 3.1 (loop-0) and 3.2 (loop-1) as part of the torque reaction line, for anchoring the RopeDriver to the external structure (loop-0) or to the operator (loop-1).

The RopeDriver hoists (regular primary rope handling) and stores (regular secondary rope handling) simultaneously (combined rope handling, Spin&Stow), an additional activity after retrieving is eliminated.

This simultaneous hoisting and storage process is referred to as **Spin&Stow™**.



3.4 Main Features

The RopeDriver has been developed to improve the efficiency, comfort and control of rope handling.

Key features include:

- Simultaneous hoisting and storage (Spin&Stow™)
- Powered by a standard electric drill
- Suitable for long climbing ropes
- Adjustable Rope Pressure Setting
- Integrated Slip Clutch for overload protection
- Modular system consisting of RopeDriver, BagFrame, standard drill rope bag
- Supports structure-anchored and harness-anchored working methods

4. Working Methods

The RopeDriver supports two approved working methods.

The choice of working method depends on the **load** and on the working environment; the availability of structural anchor points and the desired balance between user comfort and rope friction.

Load is determined by the length of rope, the rope path, i.e. friction, and conditions like age of rope, moisture,...

Both working methods provide safe and efficient rope handling when used in accordance with this User Guide.

4.1 Structure-Anchored Working Method

The Structure-Anchored Working Method is the preferred method whenever a suitable structural anchor point is available.

The RopeDriver is attached to the structure rather than to the user's harness. As a result, the structure carries the operational rope load and the additional forces caused by rope friction.

● The maximum permitted operational line load for the Structure-Anchored Working Method is **45 kg gross line load**.

The technician remains outside the load path and experiences virtually no hoisting load. This allows a comfortable working position, typically from within the nacelle of a wind turbine.

This method offers:

- Maximum user comfort
- Minimal physical effort
- Controlled rope handling
- Higher allowable rope lengths due to the system carrying the operational loads
- Improved ergonomics by working inside the nacelle



4.2 Harness-Anchored Working Method

The Harness-Anchored Working Method is intended for situations where no suitable structural anchor point is available, and load is limited.

Because the user is directly exposed to the operational line load, a lower Working Load Limit applies to the Harness-Anchored Working Method.

● The maximum permitted operational line load for the Harness-Anchored Working Method is **25 kg gross line load**.

This limit applies to the total operational line load, including rope weight and all additional resistance caused by friction in the rope path. It shall not be determined from rope length alone.

● Only use the Harness-Anchored Working Method in case of limited load

This working method is often used when working on top of a nacelle or close to an edge where direct rope routing is preferred.

Because the user is exposed to the operational loads, a work restraint system connected to a suitable structural anchor point shall always be used.

This method offers:

- Direct rope routing
- Lower rope friction
- Good accessibility near edges

However, compared with the Structure-Anchored Working Method, it results in:

- Reduced user comfort
- Higher physical load
- Greater reliance on correct work positioning



4.3 Choosing the Appropriate Working Method

Whenever possible, the Structure-Anchored Working Method should be preferred.

Use the Structure-Anchored Working Method when:

- a suitable structural anchor point is available;
- maximum user comfort is desired;
- long rope lengths are handled.

Use the Harness-Anchored Working Method when:

- no suitable structural anchor point is available;
- work is performed near an edge;
- direct rope routing is required.

Both working methods are approved when performed in accordance with this User Guide.

	Structure-Anchored	Harness-Anchored
User in load path	No	Yes
User comfort	Excellent	Moderate
Rope friction	Generally higher	Generally lower
Maximum rope length	Lower	Higher
Maximum gross line load	45 kg	25 kg
Typical location	Inside nacelle	Near edge

Recommended	Preferred	Alternative
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5. Safety

Safe operation of the RopeDriver depends on proper preparation, correct equipment configuration and adherence to approved rope access procedures.

The RopeDriver is intended exclusively for professional users trained in rope access techniques and the safe operation of power tools.

Failure to follow the instructions in this User Guide may result in equipment damage, loss of control, serious injury or death.

Read and understand this User Guide before operating the RopeDriver.

5.1 General Safety Principles

● Always:

- Perform all preparation and adjustments at a safe location.
- Inspect the RopeDriver before each use.
- Verify that the selected Rope Pressure Setting matches the rope being used.
- Secure all equipment against falling.
- Use the BagFrame only to position the rope bag and hold its opening open. Never lift, carry or shake a rope bag by the BagFrame or tarp clips.
- Verify that the expected gross line load remains within the Working Load Limit specified for the selected working method
- Never use Slip Clutch activation to determine whether an operational load is acceptable.
- Maintain a stable working position.
- Operate the RopeDriver with both hands.
- Keep the rope under continuous observation during operation.
- Start and stop the drill at low speed.
- If abnormal operation, rope slip, excessive resistance or unexpected drill torque occurs, immediately release the drill trigger and keep hands clear of all moving parts until all movement has stopped.

5.2 Personal Protective Equipment

Wear appropriate personal protective equipment suitable for the work being performed.

This includes, where applicable:

- Certified rope access harness

- Helmet
- Safety gloves
- Safety glasses
- Suitable footwear

When using the Harness-Anchored Working Method, a correctly installed work restraint system connected to a suitable structural anchor point is mandatory.

5.3 Drill Requirements

Only use a compatible electric drill that:

- is in good working condition;
- provides variable speed control;
- operates in drilling mode (hammer function disabled);
- Is brushless
- does not exceed 1800 rpm;
- Has sufficient torque
- is set to reverse rotation;
- has the drill clutch, if fitted, disabled or adjusted to its highest torque setting.

Battery condition and battery capacity may affect the performance of the RopeDriver. Always use adequately charged batteries in good condition.

5.4 Residual Risks

Despite the safety features incorporated into the RopeDriver, residual risks remain.

Examples include:

- Moving rope.
- Rotating components.
- Dynamic rope loads.
- Friction-induced heating.
- Incorrect rope installation.
- Falling tools or equipment.

Remain attentive throughout the entire operation and stop immediately if abnormal conditions occur.

5.5 Emergency Procedure

If abnormal operation occurs:

1. Release the drill trigger immediately.
2. Keep hands clear of all moving parts until all movement has stopped.
3. Secure your own position.

4. Secure the rope if necessary.
5. Determine and eliminate the cause before resuming operation.

Never continue operating the RopeDriver if the cause of the abnormal behaviour is unknown.

6. Compatible Ropes

The RopeDriver has been developed for use with approved low-stretch kernmantle climbing ropes.

Correct rope selection and the corresponding Rope Pressure Setting are essential for safe operation, reliable hoisting performance and controlled Slip Clutch behaviour.

● Only use ropes listed or approved by RopeDriver B.V.

6.1 Approved Rope Types

The following rope characteristics shall be verified before use:

- Manufacturer
- Rope type
- Diameter
- Rope condition
- Rope Pressure Setting

A list of approved ropes and their recommended Rope Pressure Settings is provided in Appendix A.

6.2 Rope Pressure Setting

The Rope Pressure Setting determines the contact pressure between the Rope Pressure Block and the rope.

Selecting the correct setting ensures:

- reliable rope grip;
- controlled hoisting;
- proper Slip Clutch operation;
- minimum rope wear.

An incorrect Rope Pressure Setting may result in:

- rope slip;
- excessive rope compression;
- increased rope wear;
- reduced hoisting performance.

The rope pressure required depends on the type of rope and conditions like rope age, wear, and weather. It can be set with an adjustable bolt on the back of the rope pressure block.



When cover 10 is opened, the adjustment knob (9.1) of the rope pressure block (9) becomes visible. The knob is marked with indicator stripes: the more stripes visible, the greater the pressure applied to the rope. The pressure can be adjusted by turning the pressure adjustment bolt (9.2), located on the rear of the rope pressure block, using an Allen key. Refer to Appendix 15.1, **Approved Ropes**, for the required setting.

● **Pilot units:** Do not adjust the Rope Pressure Setting or Slip Clutch unless expressly instructed by RopeSpinner B.V. Report rope slip, excessive resistance or Slip Clutch activation to RopeSpinner B.V.

6.3 Environmental Influences

Rope grip may vary depending on rope condition and environmental influences.

Examples include:

- rope wear;
- moisture;
- dirt or contamination;
- temperature;
- rope age;
- surface finish.

Rope grip determines the required rope pressure setting. Always verify the Rope Pressure Setting before use.

If rope slip or excessive resistance occurs, adjust the Rope Pressure Setting as described in Chapter 9 – Troubleshooting.

● **Pilot units:** Do not adjust the Rope Pressure Setting or Slip Clutch unless expressly instructed by RopeSpinner B.V. Report rope slip, excessive resistance or Slip Clutch activation to RopeSpinner B.V.

6.4 Method-Specific Working Load Limits

Two different Working Load Limits apply, depending on the selected working method:

Working method	Maximum permitted gross line load
Structure-Anchored Working Method	45 kg
Harness-Anchored Working Method	25 kg

Gross line load is the total tensile load acting on the RopeDriver. It includes the suspended rope weight and the additional resistance caused by friction at redirects, edge protection, rope guides and other contact points.

Rope length alone shall not be used to determine whether the Working Load Limit is exceeded.

Before operation, consider:

- the mass per metre of the rope;
- the suspended rope length;
- the number and angle of redirects;
- friction at edges and rope protectors;
- rope condition and environmental conditions.

If the expected gross line load cannot be assessed with sufficient confidence, reduce the rope length or friction, use the Structure-Anchored Working Method, or do not proceed.

The Slip Clutch is an overload protection device. It shall not be used as an operational load indicator or as a method of determining the allowable load.

If the Slip Clutch activates, release the drill trigger immediately and reduce the operational load before continuing. Repeated Slip Clutch activation is not permitted during normal operation.

The table below provides indicative maximum rope lengths for a total friction factor of **2.0**.

Average rope mass	Structure-Anchored Method	Structure-Anchored Method
80 g/m	280 m	155 m
85 g/m	265 m	150 m

90 g/m	250 m	140 m
95 g/m	235 m	130 m

● Approximate values based on a total friction factor of **2.0**. Actual maximum rope length depends on rope type, rope condition, rope routing and environmental conditions.

The integrated Slip Clutch is designed to protect the RopeDriver against excessive loads. Repeated Slip Clutch activation indicates that the operational line load has exceeded the Working Load Limit.

Reduce the operational load before continuing.

7. Operation

The RopeDriver has been designed to support a simple and consistent workflow.

● For safe and efficient operation, perform the following phases in sequence:

1. PREPARE the operation
2. CONNECT the RopeDriver
3. OPERATE Spin&Stow
4. FINISH safely

● Do not skip any steps.

7.1 PREPARE

Before approaching the hoisting location, verify the following:

Rope

- Correct rope type.
- Rope inspected for damage.
- Rope free from knots and twists.
- ● Rope Pressure Setting verified.

Drill

- Compatible drill selected.
- Battery adequately charged.
- ● Drill configured according to Chapter 5.

Rope Bag

- Rope bag wall or rim thickness at the tarp-clip attachment points does not exceed 5 mm.
- Rope bag is undamaged and suitable for attachment to the BagFrame.

RopeDriver

- No visible damage.
- Rope Pressure Block correctly adjusted.
- BagFrame securely attached.

Workplace

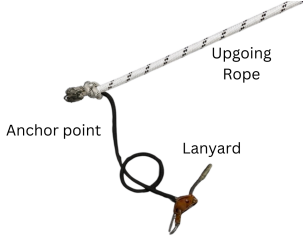
- Expected gross line load verified against the applicable method-specific Working Load Limit.
- Rope length and rope route suitable for the selected working method.
- Suitable anchor point available.
- Rope path free from sharp edges.
- Required PPE worn.

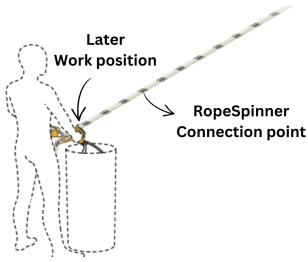
● Only proceed when all checks have been completed.

7.2 Connect

Follow the successive connection steps for an efficient and smooth workflow.

7.2.1 Connect - Structure-Anchored Working Method

1. Connect an adjustable work positioning lanyard to a suitable structural anchor point.	 The diagram illustrates the first step of the connection process. It shows a thick rope labeled 'Upgoing Rope' extending upwards. A metal hook or carabiner is attached to the rope and is labeled 'Anchor point'. A black lanyard is connected to this anchor point and hangs down, ending in a carabiner.
2. Take the RopeDriver in your left hand	 The image shows a close-up of a person's left hand wearing a black and yellow work glove. The hand is holding a black, rectangular device with a handle and a strap, which is the RopeDriver.

3. Connect the BagFrame if suitable	
4. Open the Coil Cover and Rope Entry Port.	
5. Attach the RopeDriver onto the rope (●) by guiding the rope through the Rope Entry Gate and into the Rope Clamp.	
● Thereby select an attachment position for the RopeDriver onto the rope such, that later, after creating slight slack in the lanyard, it is suspended just above the rope bag. This will provide an ergonomic working position for Spin&Stow™.	
6. Close the Rope Entry Gate, and lean the RopeDriver onto the rope with the Anchor Ring. The Rope Clamp temporarily holds the RopeDriver in position on the rope.	
	

7. Anchor the RopeDriver with the Lanyard	
8. Create slight slack in the rope by tensioning the lanyard. ● Adjust the RopeDriver position on the rope, if necessary, so that after tensioning the lanyard it is suspended just above the rope bag. This provides the most ergonomic working position for Spin&Stow™.	
9. Wrap the rope around the rotating Coil and pass it through the Rope Pressure Block.	 wrap rope tight around the coil.. ..and along Rope Pressure Block
10. Verify correct rope routing and close the Coil Cover.	
11. Insert rope end in the rope bag	 Insert rope end in bag

12. Attach the rope bag



The RopeDriver is now ready for structure-anchored operation.

7.2.2 Connect - Harness-Anchored Working Method

1. Attach the RopeDriver to your harness D-ring
2. Pick up the rope and continue step 9 of the Structure Anchored Method



The RopeDriver is now ready for harness-anchored operation.

7.3 OPERATE

The RopeSpinner system is installed. Follow the instructions carefully to guarantee a smooth operation.

1. Stand on the left side of the rope, hold the RopeDriver with your left hand and the drill with your right hand.
2. Mount the drill.
3. ● Start the drill at low speed and beware of the drill rotation toward the reaction line.
4. Allow the rope to settle into the coil, only then gradually increase speed if desirable
5. ● Always change speed gradually
6. Keep the rope within sight throughout the operation.



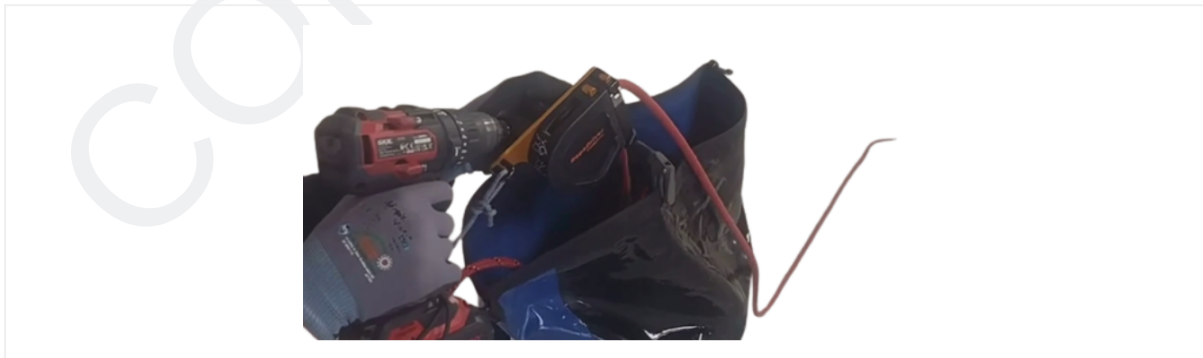
- Start the hoisting operation at low speed. This allows the rope to seat correctly in the Coil (build up grip), prevents excessive startup loads (from inertia and high startup torques) and ensures smooth engagement before increasing the hoisting speed.

If rope slip or excessive resistance occurs, stop immediately and restart slowly

- Avoid sudden changes in speed. Rapid acceleration or deceleration can generate excessive torque, causing the clutch to slip and potentially damaging the equipment. It also makes it difficult to monitor the rope flow. Operate the drill smoothly and maintain control at all times.

7.4 FINISH

1. ● Reduce drill speed before stopping.
2. ● Stop approximately 2 metres before rope ends, sewn terminations, rope labels or protective sleeves reach the Rope Entry Port.
3. Disconnect the drill above the rope bag.
If the socket adapter disengages from the drill, it will fall safely into the rope bag.
4. After use
 - Inspect the equipment for damage.
 - Clean the RopeDriver if required.
 - Store the RopeDriver in a clean and dry location.



8. Troubleshooting

- If the RopeDriver does not operate as expected, stop the operation and determine the cause before continuing.

Never continue operating the RopeDriver if abnormal behaviour cannot be explained or corrected safely.

The table below lists the most common situations, possible causes and recommended corrective actions.

Observation	Possible cause	Corrective action
Rope slips	Rope Pressure Setting too low	Increase the Rope Pressure Setting by one step and perform a low-speed test.
Rope slips repeatedly	Rope unsuitable, excessively worn, or contaminated	Verify that the rope is approved, inspect its condition, and adjust the Rope Pressure Setting if necessary.
Excessive rope resistance	Rope Pressure Setting too high	Reduce the Rope Pressure Setting by one step and perform a low-speed test.
Slip Clutch activates at startup	At excessive start-up speed or torque, the Slip Clutch may repeatedly disengage and re-engage before the rope has seated in the Coil. This causes clutch chatter.	Release the drill trigger immediately. Restart at low speed and allow the rope to settle into the Coil before increasing speed.
Slip Clutch activates During operation	Operational line load or transient load is too high	Reduce rope length, reduce friction in the rope path, or use the Structure-Anchored Working Method if possible.
Slip Clutch activates repeatedly within load limits	The disc spring may have become fatigued or may have taken a permanent set, resulting	Stop using the RopeDriver and contact the RopeSpinner Team

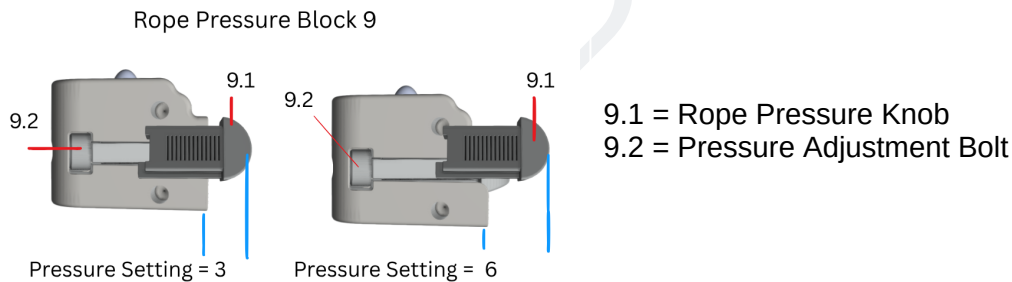
	in reduced preload and unreliable clutch re-engagement	
Rope does not feed smoothly	Rope incorrectly installed	Reinstall the rope according to the installation procedure.
Rope twists or tangles	Rope not prepared correctly	Remove twists and knots before reinstalling the rope.
Rope does not enter the RopeDriver easily	Insufficient slack during installation	Create slight slack in the rope before installing it into the RopeDriver.
Drill stops unexpectedly	Battery discharged or drill protection activated	Recharge or replace the battery and verify the drill settings.
Excessive vibration or abnormal noise	Damaged, loose or contaminated component	Stop operation immediately and inspect the RopeDriver before further use.
Rope ends approach the RopeDriver	Hoisting continued too long	Stop the operation approximately 2 m before rope ends, labels, loops or protective sleeves reach the Rope Entry Port.
Rope exits the RopeDriver through the Rope Exit Slit	Drill is not in reverse mode.	Set drill in reverse and drive the rope back controlled and very slowly,
Rope bag is not held by the BagFrame	Rope bag lifted or shaken or bag wall exceed 5 mm thickness	The bag wall or reinforced rim shall not exceed 5 mm thickness at the tarp-clip attachment points.

Do not lift, carry, pull or shake the rope bag by the BagFrame or tarp clips. When moving or repositioning the bag, use the bag's own handles or designated attachment points.

8.1 Adjusting the Rope Pressure Setting

The rope pressure is adjusted using the pressure adjustment bolt (9.2), which is accessible when the RopeDriver cover is open. Turning the bolt moves the rope pressure knob (9.1) further in or out. The setting is indicated by the number of stripes visible from the outside: more visible stripes indicate higher rope pressure. If the RopeDriver does not perform as expected, adjust the pressure by one stripe at a time.

● **Pilot units:** Do not adjust the Rope Pressure Setting or Slip Clutch unless expressly instructed by RopeSpinner B.V. Report rope slip, excessive resistance or Slip Clutch activation to RopeSpinner B.V.



After each adjustment:

1. Reinstall the rope
2. Perform a short low-speed test.
3. Verify smooth rope travel without slip or excessive resistance.
4. Continue only when satisfactory performance has been achieved.

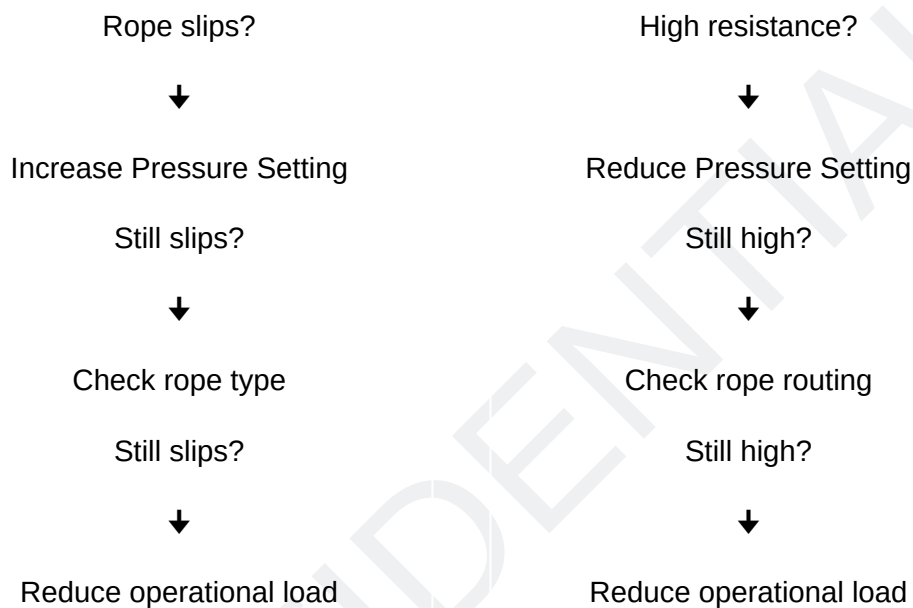
Never change more than one setting at a time.

8.2 Environmental Conditions

Rope behaviour may change due to:

- rope wear;
- moisture;
- dirt or contamination;
- low temperatures;
- rope age;
- manufacturing differences between rope types.

Always verify Rope Pressure Setting whenever a different rope or significantly different operating conditions are encountered.



9. Maintenance

Regular inspection and proper maintenance are essential for safe and reliable operation.

Inspect the RopeDriver before and after each use.

Do not use the RopeDriver if damage or abnormal wear is observed.

9.1 Before each use

The table below lists the most common situations, possible causes and recommended corrective actions.

Component	Inspection
-----------	------------

RopeDriver	Check for damage, cracks and loose parts.
Coil Cover	Check for damage and proper closing
Rope Entry Latch	Check for damage and proper closing
Rope Pressure Block	Verify correct operation and setting
BagFrame	Check for damage and proper fastening
Tarp Clips	Check for damage and proper closing

Do not use the RopeDriver if damage, excessive wear or abnormal operation is observed.

9.2 Cleaning

Keep the RopeDriver clean and dry.

After use in wet, dusty, sandy or marine environments:

- Remove dirt and debris using a soft brush.
- Wipe all surfaces with a clean, dry or slightly damp cloth.
- Remove salt deposits after use in marine environments.
- Allow the RopeDriver to dry completely before storage.

Do **not** use:

- Aggressive cleaning agents
- Solvents
- Lubricants
- High-pressure water or compressed air

Contamination of moving parts may reduce performance and increase wear.

9.3 Storage

Store the RopeDriver in a clean, dry location.

Ensure that the RopeDriver is:

- Protected from dust and dirt.
- Protected from direct sunlight.
- Protected from corrosive substances.
- Protected from excessive heat and moisture.
- Protected against mechanical impact and deformation.

Before storage:

- Ensure the RopeDriver is clean and completely dry.
- Close and secure the Coil Cover.
- Do not store or transport the RopeDriver under load.

Proper storage helps maintain the performance and service life of the RopeDriver.

9.4 Inspection Schedule

Regular inspection is essential for the safe and reliable operation of the RopeDriver.

Inspect the RopeDriver at the intervals specified below. If damage, excessive wear or abnormal operation is observed during any inspection, remove the RopeDriver from service until the cause has been identified and corrected.

Interval	Inspection
Before each use	Visual inspection
After each use	Cleaning and inspection
Every 12 months	Inspection by a competent person
After overload or impact	Immediate inspection

9.4 Corrective Actions

If an inspection reveals damage, excessive wear or abnormal operation:

- Stop using the RopeDriver immediately.

- Determine the cause of the defect.
- Replace damaged components before further use.
- Do not modify or repair the RopeDriver unless authorized by RopeDriver B.V.
- If in doubt, contact RopeDriver B.V. before returning the RopeDriver to service.

10. Technical Specifications

The specifications in this chapter describe the operational limits and technical characteristics of the RopeDriver RS262. Always operate the equipment within these specifications.

Item	Specification
Product	RopeDriver RS262
Operating method	Spin&Stow™
Structure-Anchored Working Load Limit	45 kg
Harness-Anchored Working Load Limit	25 kg
Compatible rope diameter	10.5–11 mm
Approved rope construction	Low-stretch kernmantle
Drive	Standard electric drill
Maximum drill speed	1800 rpm
Drill direction	Reverse

Hammer mode	Disabled
Recommended gear	High speed / Low torque
Operating temperature	Between -10°C and +40°C
Weight	1,2kg
Dimensions	16x16x9cm ³
Maximum rope bag wall/rim thickness	5 mm at tarp-clip attachment points
BagFrame function	Positioning the bag and holding the opening open; not intended for lifting or carrying the bag

10.3 Compatible Drill Requirements

The RopeDriver is designed for use with a compatible cordless electric drill. Correct drill selection is essential for safe operation and optimum Spin&Stow™ performance.

The drill shall meet the following requirements:

- Variable speed trigger.
- Reverse rotation.
- High-speed gear selected (Gear 2).
- Maximum no-load speed not exceeding 1800 rpm.
- Hammer function disabled.
- Drill clutch, if fitted, set to the highest torque setting.
- Battery in good condition.
- Battery with sufficient capacity (Ah) for the intended operation.

Battery age, condition and capacity may affect the performance of the RopeDriver. Always use a fully charged battery in good condition.

General Recommendation

For optimum performance and service life, RopeDriver Team recommends using a high-quality cordless drill designed for demanding professional applications.

Drills with a robust gearbox, adequate continuous power output and a high-capacity battery generally provide the most consistent Spin&Stow™ performance.

Whenever possible, select a drill model that has been verified by RopeDriver Team, see appendix B.

10.4 Environmental Conditions

The performance of the RopeDriver may be influenced by environmental conditions and the condition of the climbing rope.

Before use, verify that both the operating environment and the rope are suitable for safe operation. If environmental conditions may affect rope grip or RopeDriver performance, inspect the equipment carefully and adjust the Rope Pressure Setting if necessary.

The following environmental conditions should be considered:

Condition	Requirement
Dry environment	Suitable
Wet or damp	Suitable after Rope Pressure verification
Dust or sand	Clean the RopeDriver after use
Marine environment	Remove salt deposits after use
Low temperatures	Verify rope flexibility and Rope Pressure Setting
High temperatures	Verify rope flexibility and Rope Pressure Setting

10.5 Storage Conditions

To maintain the performance and service life of the RopeDriver, store the equipment under the following conditions:

- Clean and dry before storage.
- Store in a clean, dry location.
- Protect from direct sunlight.
- Protect from mechanical loads, impacts and deformation.
- Store within an ambient temperature range of -20 °C to +50 °C.

Long-term exposure to unsuitable storage conditions may reduce the performance and service life of the RopeDriver.

11. Definitions

This chapter defines the RopeDriver-specific terminology used throughout this User Guide.

Only terms that are unique to the RopeDriver system or have a specific meaning within the context of this User Guide are included. Common rope access terminology and generally accepted industry terms are not defined.

The definitions below are intended to promote consistent understanding of the RopeDriver system, its components and the Spin&Stow™ method.

Term	Definition
Spin&Stow™	RopeDriver's patented method of simultaneously hoisting and storing climbing rope in one continuous, controlled operation.
RopeSpinner system	Modular rope management system consisting of the RopeDriver, BagFrame, Rope Bag and a compatible electric drill, enabling the Spin&Stow™ method.
RopeDriver	Powered rope handling device that hoists climbing rope and guides it into the rope bag. It forms the main component of the RopeDriver system.
BagFrame	Frame used to support and attach a rope bag to the RopeDriver.
Rope Pressure Block	Adjustable component that applies pressure to the rope to achieve the required grip on the Coil.

Rope Pressure Setting	Adjustment of the Rope Pressure Block to match the characteristics and condition of the rope being used.
Compatible Rope	A rope that has been tested and approved by RopeDriver B.V. for use with the RopeDriver
Coil	Rotating component that grips and transports the rope through the RopeDriver.
Coil Cover	Hinged cover that provides access to the Coil for rope installation and protects the rotating components during operation.
Gross Load	Total tensile load acting on the RopeDriver, including rope weight and the effects of friction in the rope path.
Harness-Anchored Working Method	Working method in which the RopeDriver is attached to the user's harness, making the user part of the operational load path.
Lanyard	Adjustable work positioning line
Slip Clutch	Mechanical overload protection that limits the maximum operational load acting on the RopeDriver.
Structure-Anchored Working Method	Preferred working method in which the RopeDriver is attached to a structural anchor point, keeping the user outside the operational load path.
Working Load Limit	Maximum permitted operational load for safe use of the RopeDriver.

12. Disclaimer and Limitation of Liability

The RopeDriver is intended for use only as described in this User Guide and by trained rope access professionals.

Safe operation depends on proper installation, correct configuration, suitable equipment and compliance with all instructions and safety precautions contained in this User Guide.

Failure to follow the instructions in this User Guide, use of the RopeDriver outside its intended purpose, modification of the equipment, or use with incompatible components may result in equipment damage, serious injury or death.

To the maximum extent permitted by applicable law, RopeDriver B.V. shall not be liable for damage, injury or loss resulting from:

- Failure to follow the instructions in this User Guide.
- Use of the RopeDriver outside its intended purpose.
- Use with incompatible or damaged equipment.
- Unauthorized modification, repair or alteration of the RopeDriver.
- Improper inspection, maintenance or storage.

The user is responsible for ensuring that the RopeDriver is used safely, inspected before use and operated only within the limits specified in this User Guide.

13. Warranty

RopeSpinner B.V. warrants that the RopeDriver is free from defects in materials and workmanship under normal use and service for a period specified at the time of purchase.

This warranty applies only to the original purchaser and only when the RopeDriver has been used, maintained and stored in accordance with this User Guide.

The warranty does not cover damage or defects resulting from:

- Normal wear and tear.
- Improper use or misuse.
- Failure to follow this User Guide.
- Use outside the intended purpose.
- Use with incompatible equipment.
- Unauthorized modification, repair or disassembly.
- Accidents, impacts or overloading.
- Improper storage or maintenance.

If a defect covered by this warranty is identified, contact RopeDriver B.V. before attempting any repair or modification. Unauthorized repairs or modifications may void the warranty.

This warranty does not affect any statutory rights that may apply under applicable law.

14. Contact Information

Die kunnen grotendeels uit RS261 worden overgenomen en alleen worden geactualiseerd.

15. Appendices

15.1 Appendix A - Approved Ropes

Manufacturer	Rope	Diameter [mm]	Condition	Pressure Setting
Beal	Industrie	10,5	Used	tbd ¹
Beal	Industrie	11,0	Used	5
Beal	Industrie	11,5	Used	tbd ¹
Petzl	Axis	11,0	Used	5
Petzl	Parallel	11,0	Used	tbd ¹

¹ = to determined

15.2 Appendix B - Verified Drill Models

The compatibility classifications in this appendix are based solely on testing performed by RopeDriver B.V. using the specified drill models under representative operating conditions.

These classifications relate only to the suitability of the drills for operating the RopeDriver and do not represent an assessment of the overall quality, performance or safety of the drills for their intended purpose.

Status definitions

Verified

Successfully tested by RopeDriver B.V. and found suitable for operating the RopeDriver under the specified conditions.

Not yet verified

The drill may meet the specified technical requirements but has not yet been tested by RopeDriver B.V.

Not recommended

Testing has shown that the drill did not provide satisfactory performance or reliability when operating the RopeDriver under the test conditions.

Compatibility classifications may be revised as additional testing becomes available.

Brand	Type	Status
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Makita	DHP482Z	Not recommended
Milwaukee	M18 SPD-2	Verified
Skill	CD1E-3085-01	Verified

15.3 Appendix C - Revision History

Version	Date	Changes
RS261	20260513	Rope Pressure Block improved
Pre-pilot version		Tolerance improvements
		Material improvements
RS262	20260801	Replaced freewheel bearing by rope escape slit
Pilot version		Drill drive axis stronger material
		Rope Clamp improved
		Coil V-shape improved