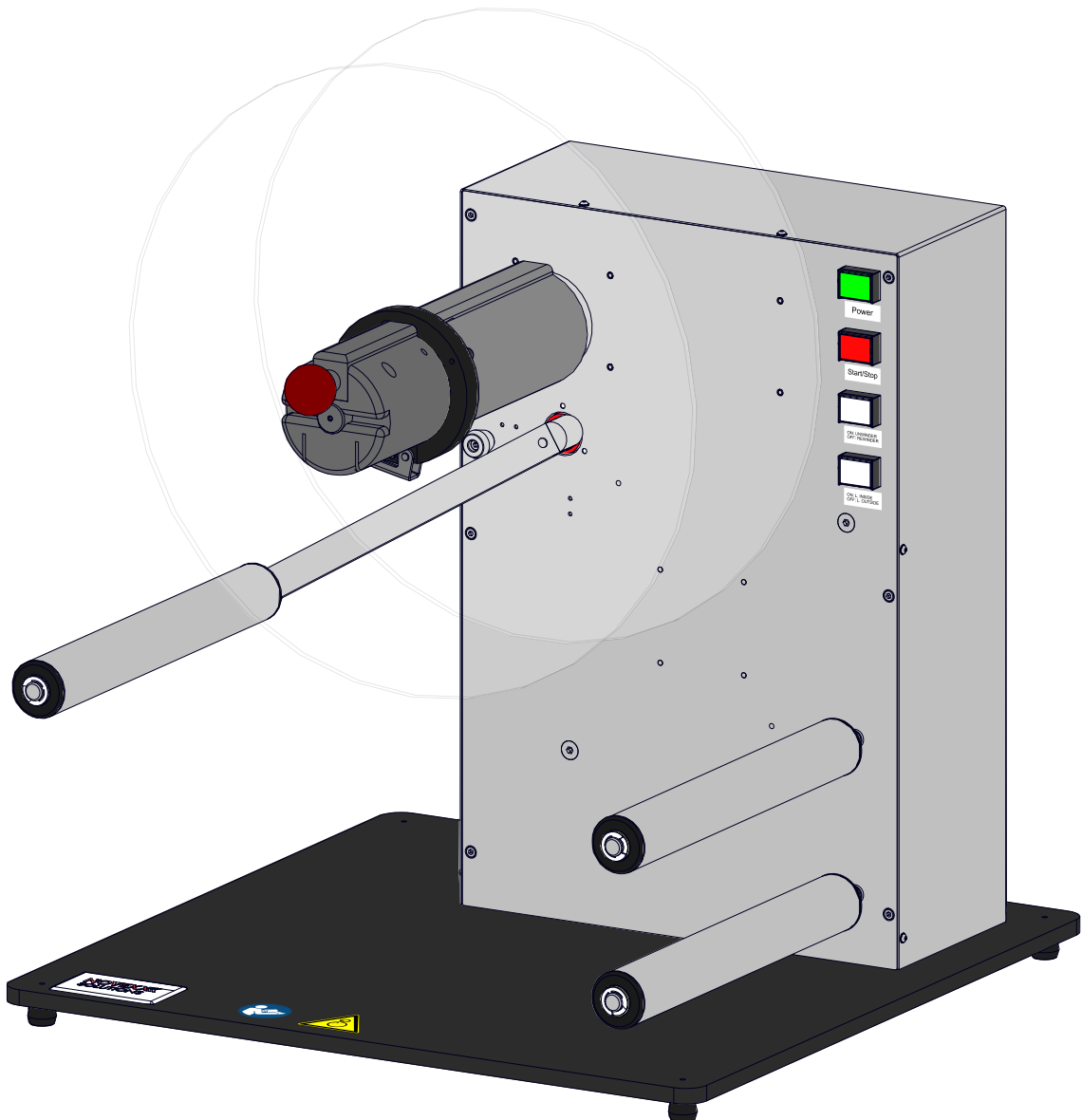


# USER MANUAL

## U-RX

Label Re-/Unwinder



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# Please note!

## GENERAL NOTES

### Validity of this manual and required compliance

#### Contents

The complete operating manual for the external label re-/unwinder U-RX consists of the following parts:

Manual	Target group	Medium	Availability
User manual	Operating personnel	PDF file	NOVEXX Solutions web page <a href="http://www.novexx.com">www.novexx.com</a>
Service manual	Service personnel		NOVEXX Solutions Partner Portal <a href="http://www.partner.novexx.com">www.partner.novexx.com</a>
Spare parts catalog			

This *user manual* is used for the correct installation and operation of the U-RX.

For technical questions not covered in this user manual:

- ▶ Follow the instructions of the U-RX service manual or
- ▶ Request a service technician from our sales partner.

Our sales partner's customer service department is available especially for configuration settings and malfunctions.

#### Liability

Novexx Solutions reserves the right:

- to make changes in design, parts and software and to use equivalent parts instead of those specified for the purpose of technological progress.
- to change information in this manual.

Any obligation to extend these changes to machines previously delivered is excluded.

#### Copyright

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## How information is represented

### Explanation of symbols


To enhance readability and make information easier to find, different types of information are identified:

▶ Instruction with no order of tasks assigned

1. Numbered instructions introduced by preceding text
2. The specified order must be followed!

|| Note.

- Enumeration of features
- Other feature

 The Experts symbol identifies activities that are reserved exclusively for qualified and specially trained personnel.

### Warning Notes

Warning notes are specially highlighted:



**WARNING!**

Warning notes with the signal word **WARNING** refer to risks that can result in severe or fatal injuries! The note contains safety measures to protect affected persons.

- ▶ Instructions must be followed without exception.

**CAUTION!**

Warning notes with the signal word **CAUTION** refer to risks that can result in property damage or personal injury (minor injuries). The note contains instructions for preventing damage.

- ▶ Instructions must be followed without exception.

### Illustrations

Illustrations appear in the text where required. References to the illustrations are shown in brackets, if necessary (see table).

Reference to illustration	Application
none	<ul style="list-style-type: none"> <li>• Only one illustration</li> <li>• Reference to the illustration is obvious</li> <li>• No position number in the illustration</li> </ul>
(A)	<ul style="list-style-type: none"> <li>• Only one illustration</li> <li>• Reference to the illustration is obvious</li> <li>• Position number in the illustration</li> </ul>
(see fig. above)	<ul style="list-style-type: none"> <li>• Several illustrations</li> <li>• No position number in the illustration</li> </ul>
(see fig. above, pos. A)	<ul style="list-style-type: none"> <li>• Several illustrations</li> <li>• Position number(s) in the illustration</li> </ul>

Table 1: Different references to illustrations.

Normally the machine is shown as the *left version*.

### Parameters

Parameters in the parameter menu are represented in the format `Menu name > Parameter name` in grey type.

## FOR YOUR SAFETY

### Intended use

The U-RX is a device for winding or unwinding label material in roll form. The material web is guided around a spring-loaded dancer arm, which controls the rotational speed of the material mandrel via the degree of its deflection.

Typical applications:

- *Rewinding* label material that has been printed by a label printer (fig. below). To do this, the device is placed in front of the printer and connected to the printer with a cable. The cable is used to stop the printer if the U-RX comes to a standstill for any reason (print stop function)

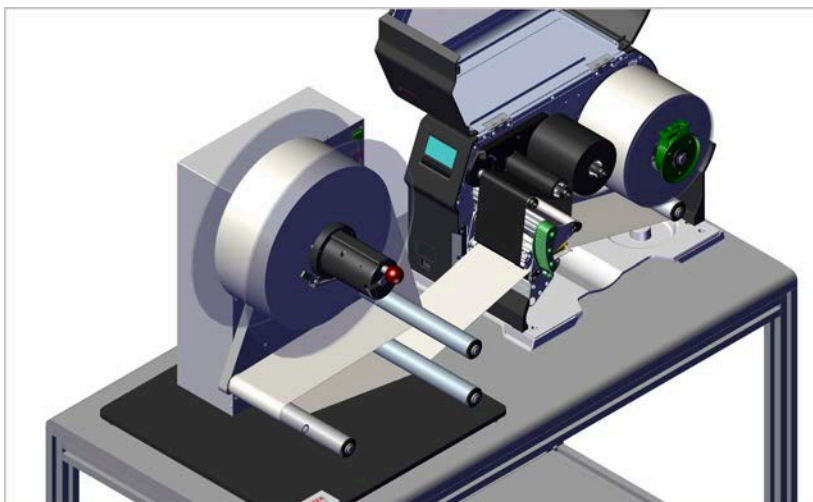


Fig. 1: U-RX as a rewinder on an XLP 604.

- *Unwinding* of unprinted label material and feeding into a label printer (expansion of the printer's roll capacity).

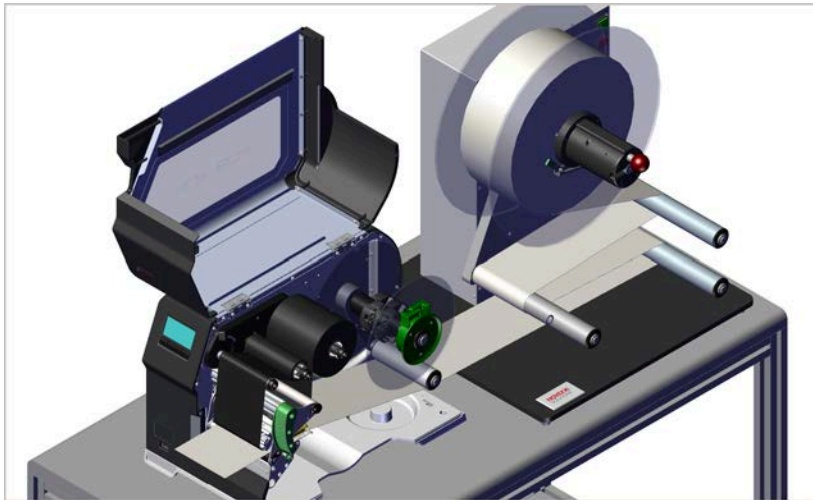


Fig. 2: U-RX as a unwinder on an XLP 604.

- *Rewinding* from one device to another, for example to change the winding direction.

*Position of use:* The intended position of use is as shown above, standing on a flat, firm, horizontal and sufficiently large surface.

Any use that is not within the scope of the technical specifications is considered improper use. NOVEXX Solutions accepts no liability for damage caused by improper use of the device.

### Related reference

**Technical Data** on page 10

## Safety notes

### Informationen beachten

Safe and efficient operation of the U-RX (hereinafter also referred to as “device”) can only be guaranteed if you observe all necessary information.

- Before operating the printer, read the operating instructions and all other notes carefully.
- Observe the additional safety and warning notes on the printer.

### Qualifications required

- Trained staff is required for inserting and changing foils and material.
- Users need to be instructed in the use of the printer and of the U-RX so they can work safely and independently.
- Users should be able to resolve minor operational issues and faults by themselves.
- At least two users should be instructed.

### Requirements for safe operation

- Only use the printer in enclosed areas with environmental conditions matching the values given in the technical specifications!
- Only operate the printer on a plane, solid support.

- Only trained and authorized personnel should operate the printer!
- Do not make any modifications or any additional casing for the printer!
- Do not allow any liquids to enter into the printer!
- Repairs to the printer may only be performed by authorized specialists who are aware of the risks involved!
- Make sure that the power supply socket for the printer is readily accessible!
- Lay the power supply cable, data cables and compressed air hoses (if applicable) in a way that nobody can stumble over it.
- Only use original accessories!

#### **Protection against injuries by electrical current**

- Only operate the device with the mains voltage set on the fuse insert
- Only connect the printer to a grounded power socket fitted to authorized standards!
- Keep the on/off switch of the device accessible
- Connect only devices to the interfaces at the printer that fulfil ES1 circuit requirements according to EN 62368-1!
- In case of danger, switch off the appliance and disconnect the mains cable

#### **Protection against injuries by mechanical action**

- Don't wear loose long hair (if necessary, wear a hairnet).
- Keep loose jewellery, long sleeves, etc. away from rotating parts of the device!
- The dancer arm is spring-loaded and can spring back, so always keep the dancer arm's range of motion clear

## Warning notes on the machine

### VORSICHT!

Warning notes on the machine provide important information for the operating personnel.

- ▶ Do not remove warning notes.
- ▶ Replace missing or illegible warning notes.

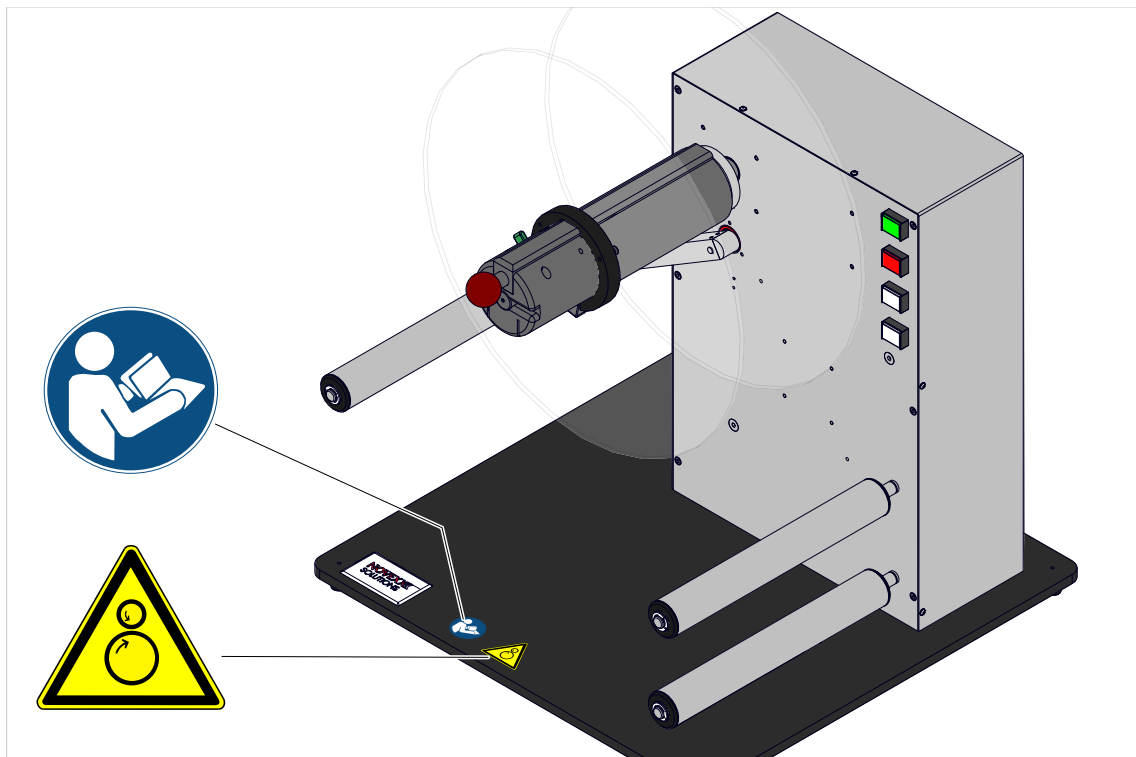




Bild 3: Warning notes on the U-RX.

Warning note	Meaning	Article no.
	The "Pinch point" warning note warns of the danger posed by the machine's rotating parts; they can trap items and draw them in.	A5346
	The blue label "Read manual" demands that operators read the user manual.	A5331

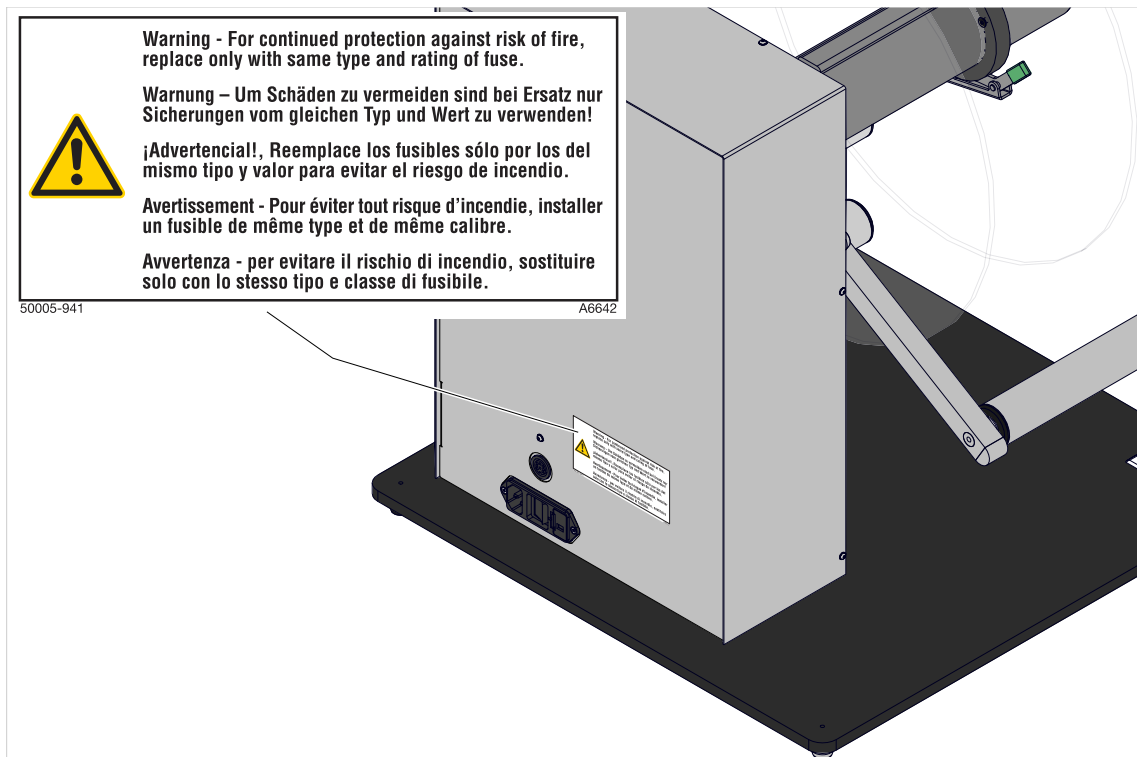


Bild 4: The warning sticker shown warns against replacing the fuses on the mains connection with a fuse type with different characteristics (article no. A6642)

# Product Description

## TECHNICAL DATA

### Device Dimensions

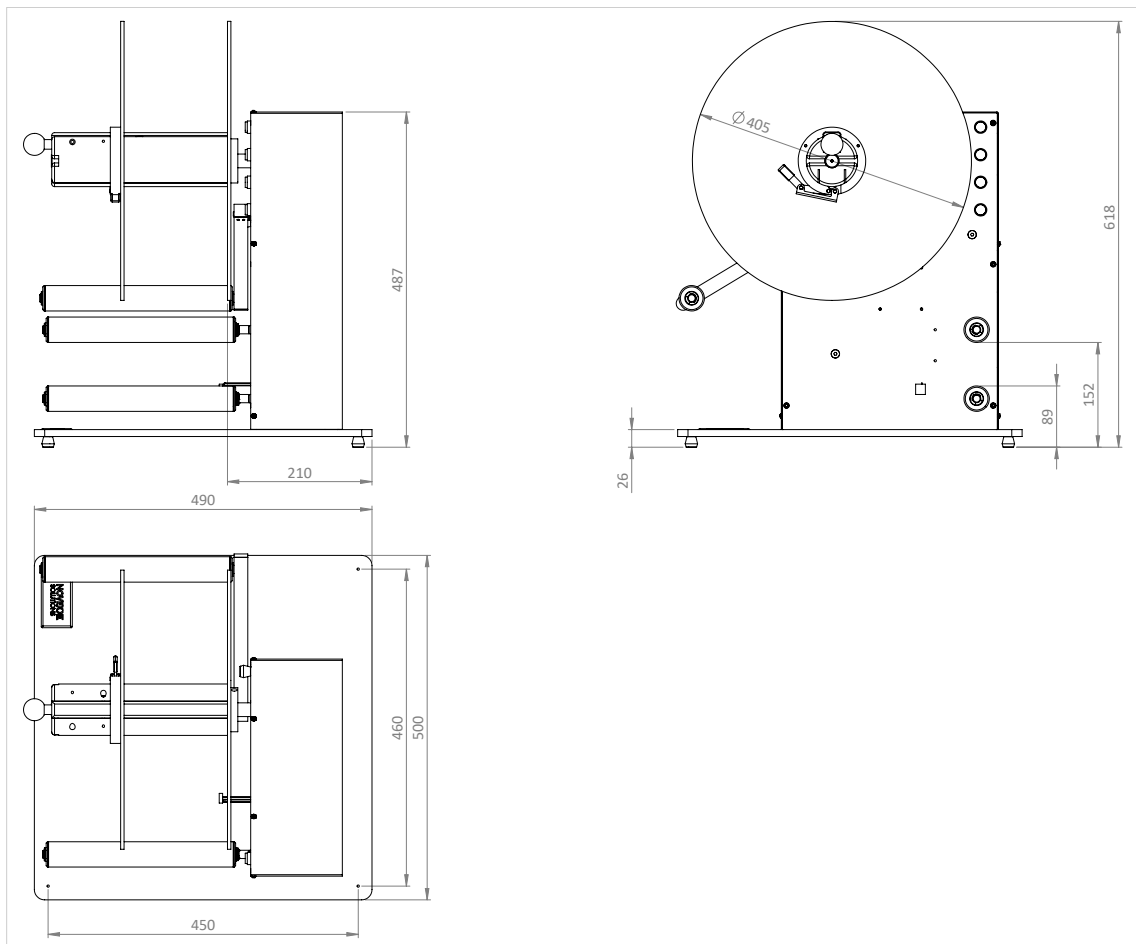


Fig. 5: Dimensions of the U-RX.

Weight: 36,4 kg

### Label Roll Dimensions

<b>Core inner Ø</b>	76.2 mm (3")
<b>Outer Ø</b>	max. 400 mm
<b>Width of the material web</b>	25-254 mm
<b>Weight</b>	max. 28 kg

**Connections, Interfaces**

<b>Mains voltage</b>	115 V (AC) at 60 Hz mains frequency 230/240 V (AC) at 50 Hz mains frequency
<b>Power consumption</b>	max. 115 W
<b>Input current</b>	max. 1.2 A
<b>Interface</b>	2-wire output with open collector to stop the material supply if an error occurs

**Ambient Conditions**

<b>Operating temperature</b>	5 to 40°C
<b>Storage temperature</b>	-20 to 70°C
<b>Relative humidity</b>	30 to 85% (not condensing)
<b>Noise</b>	< 65 dB(A)
<b>Protection class</b>	1

**Performance Data**

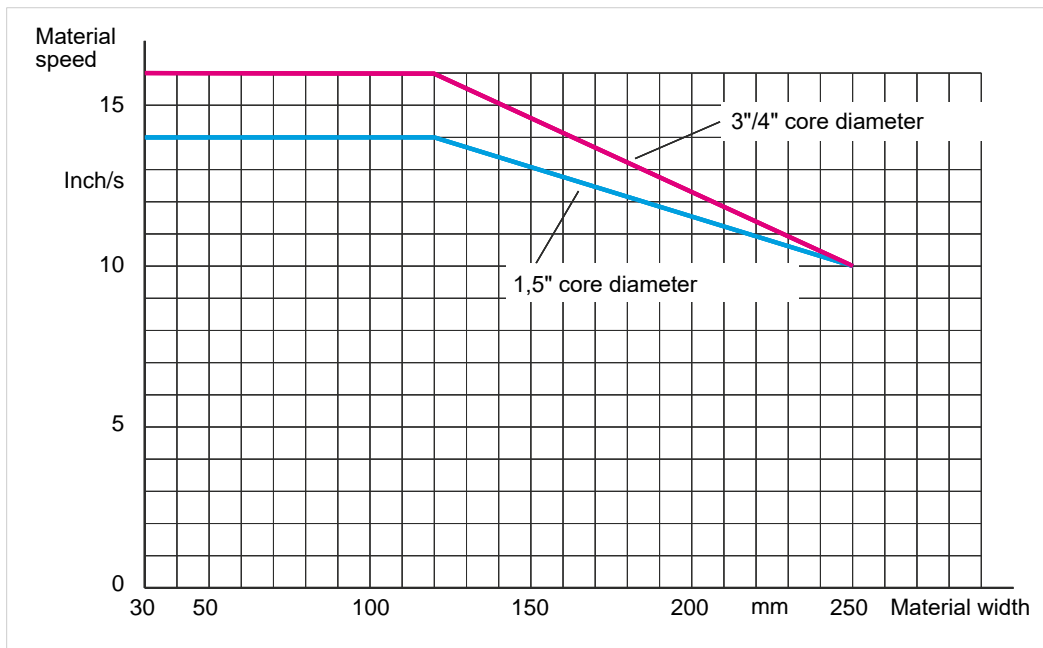
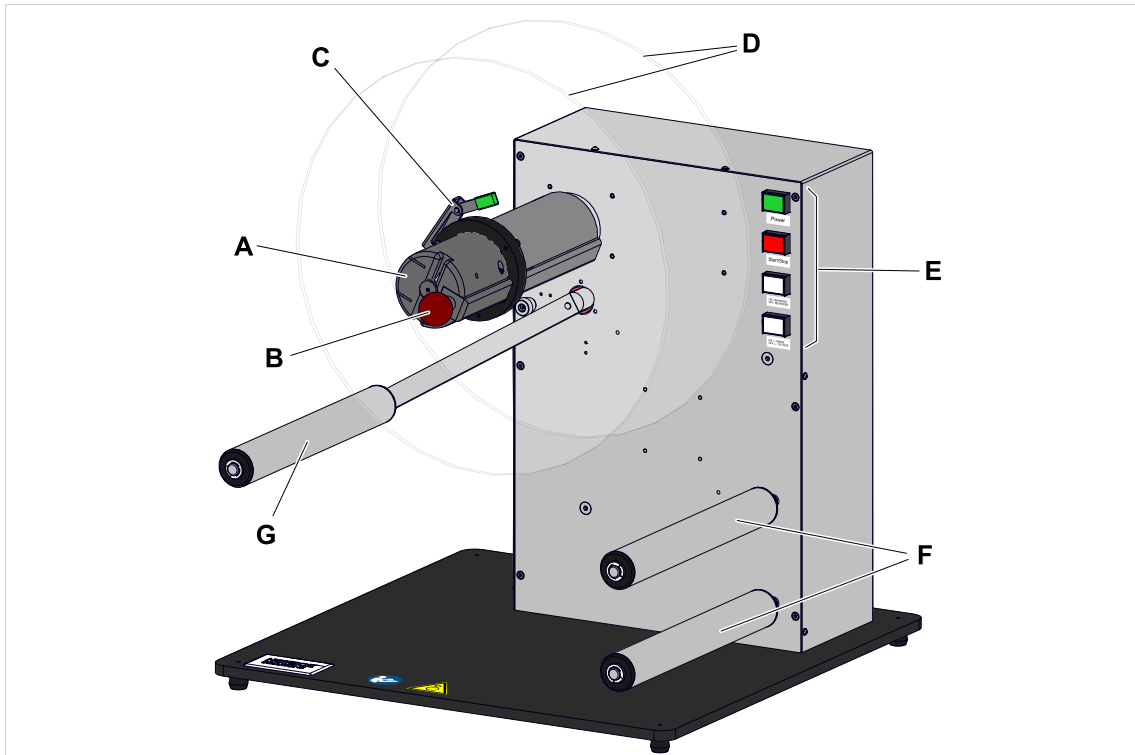


Fig. 6: The maximum material speed depends on the core diameter and of the material width.

## OPERATING CONTROLS



Pos.	Description
<b>A</b>	<i>Rewinding mandrel:</i> Holds the material roll; has to fit the internal diameter of the material roll.
<b>B</b>	<i>Clamping wedge:</i> Fixes the material roll on the winding/unwinding mandrel
<b>C</b>	<i>Snap lock:</i> Fixes the guide disk on the winding/unwinding mandrel
<b>D</b>	<i>Guide disks:</i> Ensures the material roll is un-/rewound straight
<b>E</b>	<i>Operating buttons:</i> Sets the unit functions; Displays the rotating direction; Start/stop button
<b>F</b>	<i>Deflection rollers:</i> Ensure a wide winding angle onto the dancer arm, thereby regulating the rewinding speed
<b>G</b>	<i>Dancer arm:</i> Evens out fluctuating- speed -of the material being fed

### Related reference

[Operating Buttons](#) on page 13

## OPERATING BUTTONS

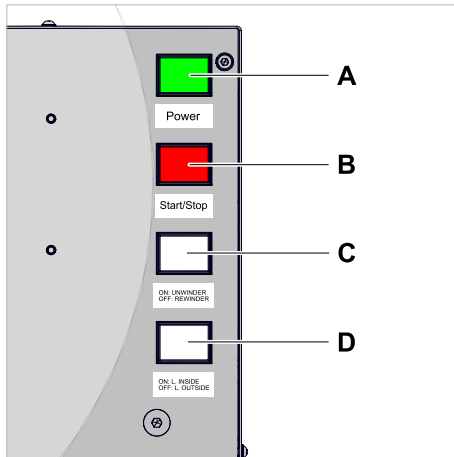


Fig. 7: Operating buttons on the U-RX.

Pos.	Description
<b>A</b>	<i>Power indicator:</i> Lights up when the device is ready for use, in other words when the power cord is plugged in and the on/off switch is at “0”.
<b>B</b>	<p><i>Start/Stop button/light:</i></p> <p>The start/stop light indicates the operational status:</p> <ul style="list-style-type: none"> <li>• <i>On:</i> “Stopped” mode: Unit is ready for use, but stopped</li> <li>• <i>Off:</i> “Ready” mode: Unit is ready for use</li> <li>• <i>Flashing:</i> <ul style="list-style-type: none"> <li>– As <i>Rewinder:</i> Unit is currently rewinding material and moving the dancer arm to the start-position (material initialisation)</li> <li>– As “Unwinder”: Unit is currently unwinding material and moving the dancer arm to the rest position (material initialisation)</li> <li>– <i>Error message:</i> Internal error (e.g. overheating)</li> </ul> </li> </ul> <p>The start/stop button does the following:</p> <ul style="list-style-type: none"> <li>• <i>Rewinder:</i> Starts/stops the rewinding process</li> <li>• <i>Unwinder:</i> Starts/stops the unwinding process</li> </ul>
<b>C</b>	<p><i>Unwinder/rewinder button/lamp:</i> Toggle between unwinding and rewinding mode</p> <ul style="list-style-type: none"> <li>• Light on: Unwinder</li> <li>• Light off: Rewinder</li> </ul>
<b>D</b>	<p><i>Inside/outside winding button/lamp:</i> Toggle between inside and outside winding</p> <ul style="list-style-type: none"> <li>• Light on: Inside winding (label on the inside)</li> <li>• Light off: Outside winding (label on the outside)</li> </ul>

## OPERATING PRINCIPLE

### Speed control

During winding, the speed is controlled by the deflection of the dancer arm from its rest position (rest position = left in the picture). The greater the deflection (to the right), the lower the speed. If the label material sags - the dancer arm is then only slightly deflected - the rewinder increases the speed to catch up. In this way, the label material is wound up evenly and tightly.

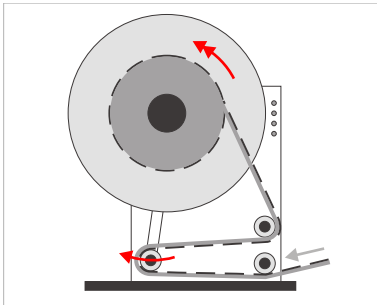


Bild 8: Speed control on the *rewinder*: When the dancer arm moves to the *left*, the speed of the rewinder increases.

The opposite is true for the unwinder: If the dancer arm is moved to the right from its rest position, the speed of the unwinder increases.

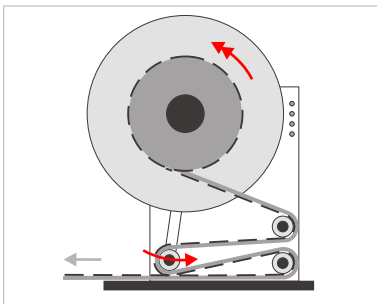


Bild 9: Speed control on the *unwinder*: When the dancer arm moves to the *right*, the speed of the unwinder increases.

### Rotation direction

By reversing the direction of rotation, the label material can be wound or unwound either with the label side facing outwards (left image) or inwards (right image):

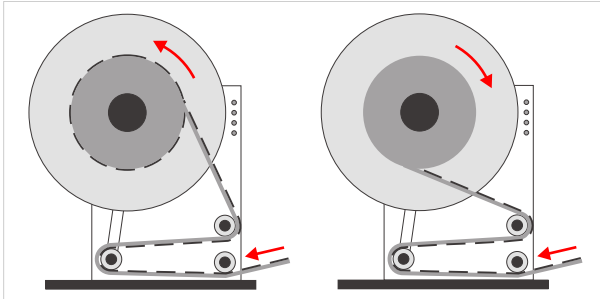


Bild 10: Direction of rotation during winding with labels facing outside (left) and labels facing inside (right).

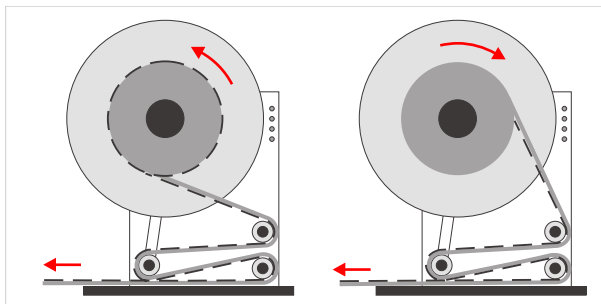


Bild 11: Direction of rotation during unwinding with labels facing outside (left) and labels facing inside (right).

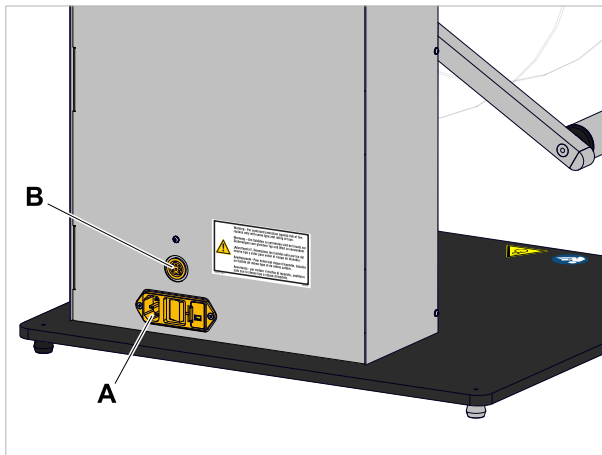
## CONNECTIONS



**WARNING!**

This device operates using mains voltage! Touching live electrical parts may expose you to hazardous electrical currents and may lead to burns.

- ▶ Make sure that the device is switched off before connecting the power cable.
- ▶ Only connect the machine to a grounded power socket fitted to authorised standards.
- ▶ Only link the device to other devices that fulfil the ES1 circuit requirements specified in EN 62368-1.



Pos.	Connection	Application
<b>A</b>	Connection to the mains powersupply	Power supply
<b>B</b>	Signal interface	Connection to the signal interface of the printer (BasicIO board)

# Commissioning

## SETTING UP AND CONNECTING THE U-RX

### Setting up

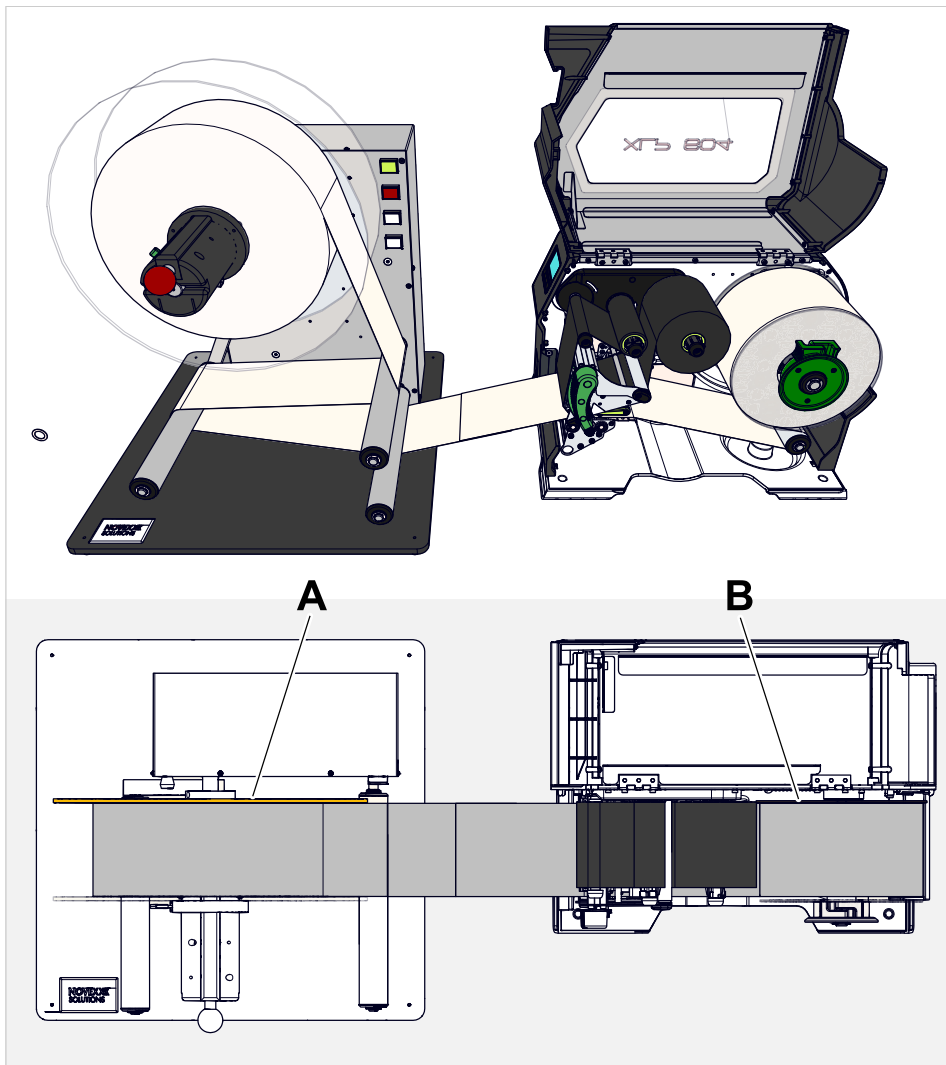
**WARNING!**

The U-RX may weight up to 38 kg. Lifting it improperly can cause back- injury.

- ▶ Two persons are required to lift it.
- ▶ Observe the rules for health-friendly lifting.

|| Observe the intended position of use: Standing on the base plate on a flat, firm, horizontal and sufficiently large surface. ||

- ▶ Position the U-RX in front of (or behind when unwinding) the printer so that the inner guide disks (A, B) of both devices are in the same plane:



### Connecting to the mains supply



**WARNING!**

The unit operates using mains voltage! Touching electrically live parts may expose you to hazardous electrical currents and may lead to burns.

- ▶ Ensure that the unit is set to the mains voltage supplied by your electricity provider.
- ▶ Only connect the unit to a grounded power socket fitted to authorised standards.

1. Switch off the device (switch position “0”).
2. Check whether the mains voltage set on the device matches the voltage of the local power supply network.

The number in the small window next to the mains switch corresponds to the required mains voltage in volts (Fig.: 230 V):



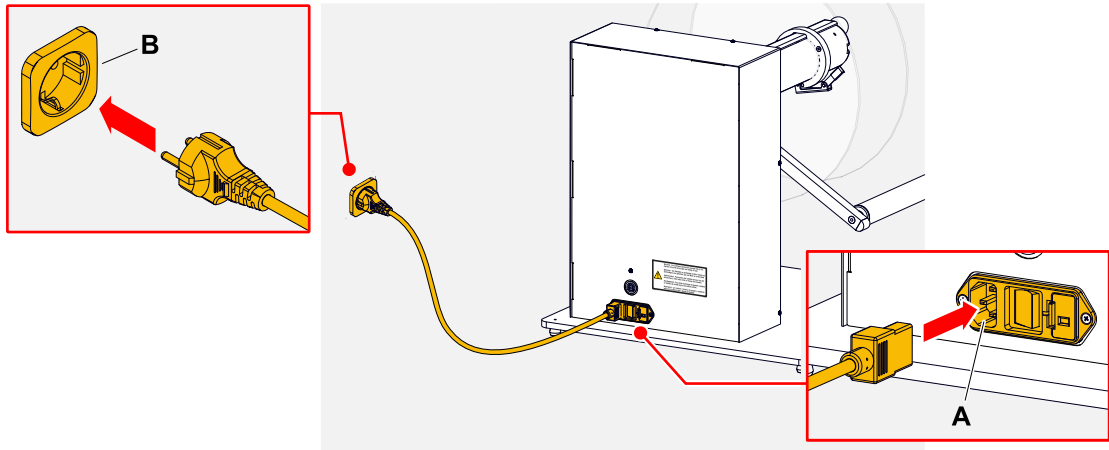
3. If necessary, change the mains voltage setting on the device.

|| For details refer to the service manual. ||

4. Connect the mains connection cable supplied to the device connection (A) and to a mains socket (B).

When doing so, note the following:

- Only connect the device to a properly installed socket outlet with a protective earth contact.
- If a mains connection cable other than the one supplied is used: Note that the cable must not be longer than 3 m.
- The device can only be completely disconnected from the mains by unplugging the mains connection cable. Therefore, keep the mains socket outlet freely accessible.



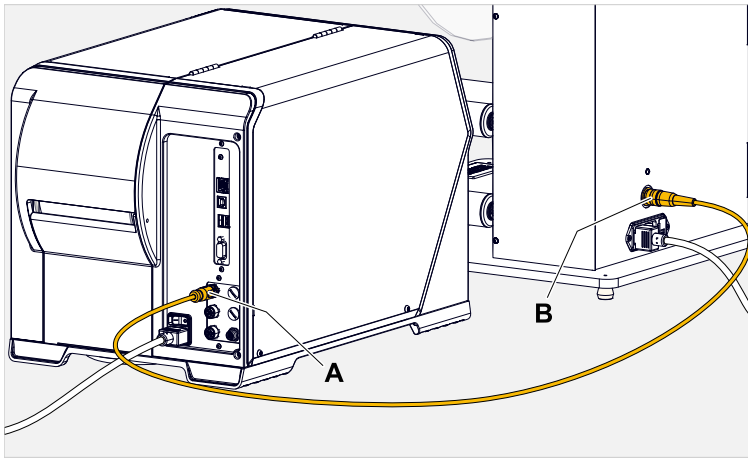
### Connecting the print stopp signal cable

The print stop function prevents a paper jam between the printer and U-RX if the rewinder fails. In this case, printing is stopped.

Prerequisite: The printer must be equipped with one of the following signal interfaces:

- BasicIO (requires cable N103476)
- Basic-USI<sup>[1]</sup> (requires cable A7264)

1. Switch off printer and U-RX.
2. Connect the signal cable with the 4-pin plug (A) to the printer and with the 3-pin plug (B) to the U-RX:



3. Switch on both devices.
4. Set on the printer:
  - BasicIO: Options > BasicIO > Start Sensor > Start print mode = “Level low active”.
  - Basic-USI: Options > Basic USI > Start Sensor > Start print mode = “Level low active”.
  - USI (older machines): DP INTERFACE > Start print mode = “Level low active”

<sup>1</sup> An älteren Maschinen: USI (5V oder 24 V)

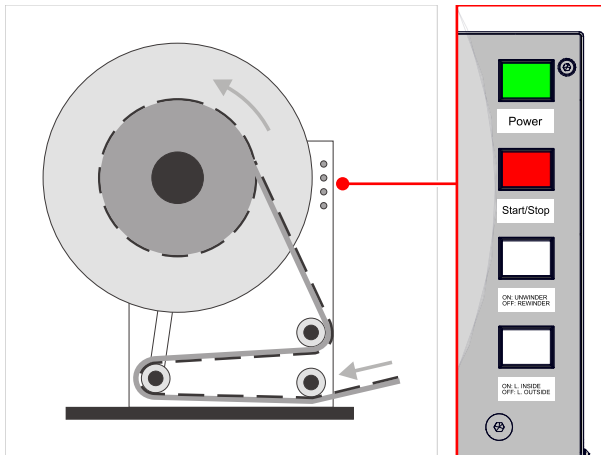
## SET WINDING/UNWINDING OPERATION

### Setting for rewinding operation

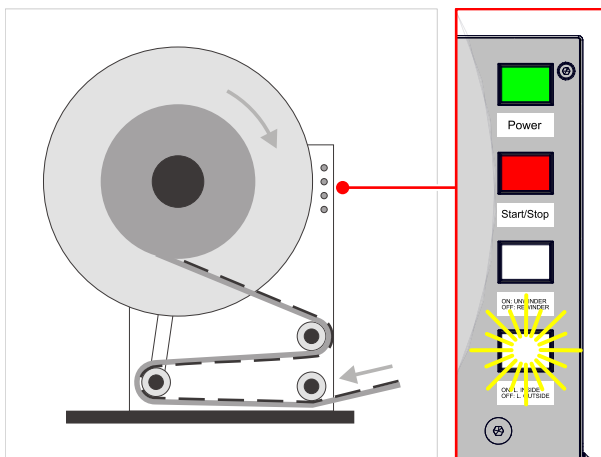
► Press the buttons as shown in the illustrations.

When the button is pressed, it lights up.

- Winding direction “labels facing outwards”: Neither of the two white buttons lights up:



- Rewinding direction “labels facing inwards”: The lower white button lights up, the upper one does not:

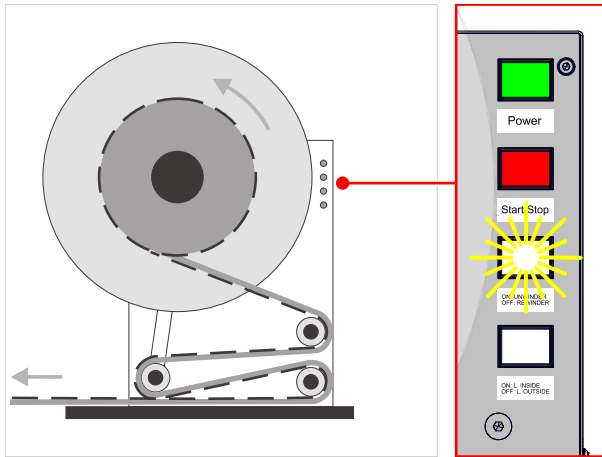


### Setting for unwinding operation

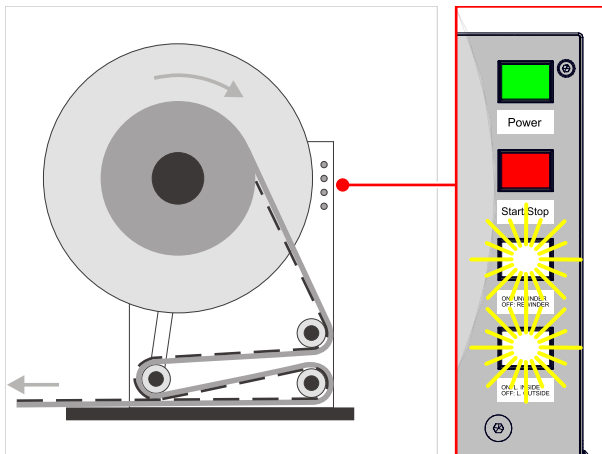
► Press the buttons as shown in the illustrations.

When the button is pressed, it lights up.

- Unwinding direction “labels facing outwards”: The upper white button lights up:

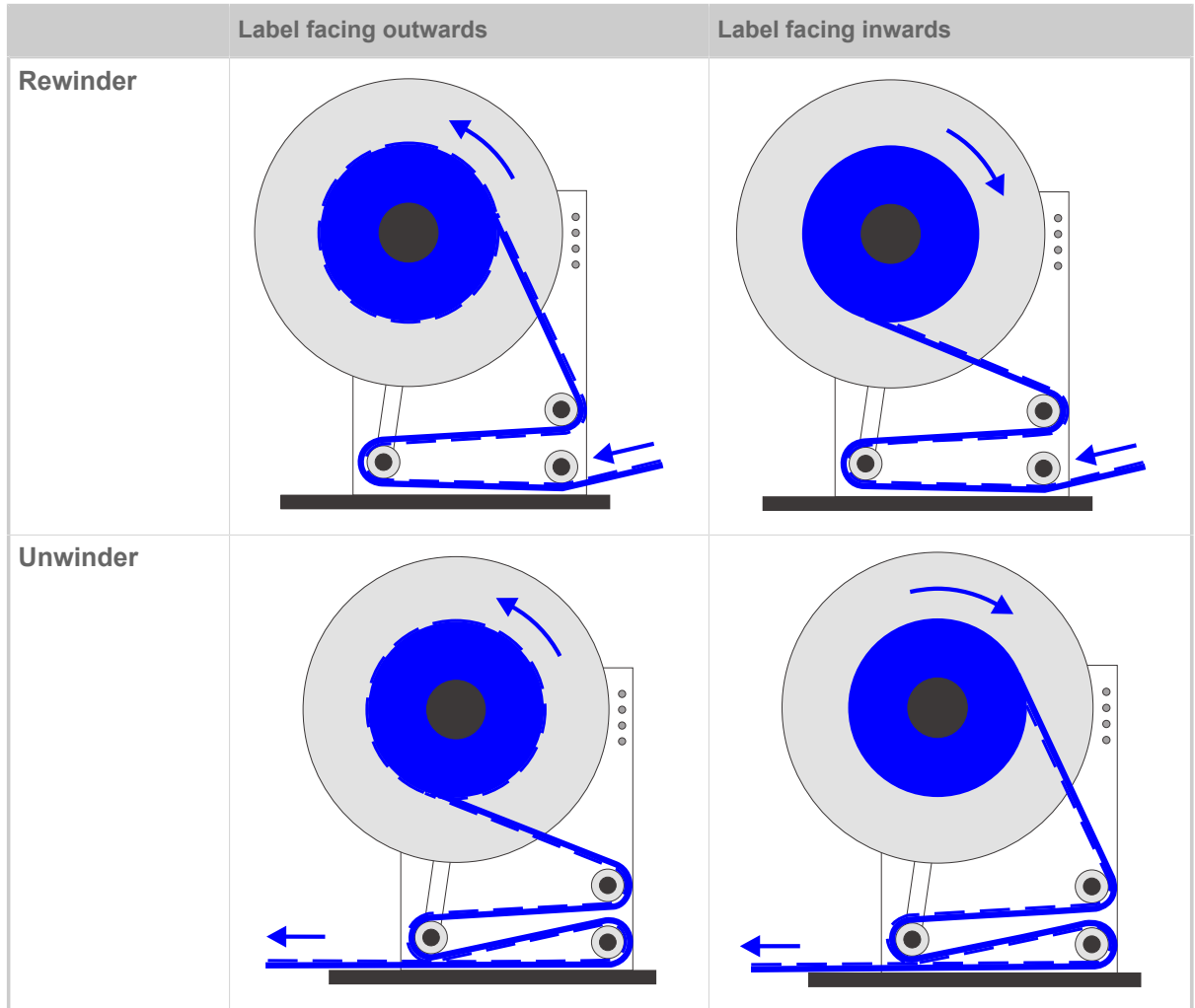


- Unwinding direction “labels facing inwards”: Both white buttons light up:



# Operation / Cleaning

## WINDING DIAGRAMS



## INSERTING MATERIAL

**WARNING!**

Rotating parts can trap -items and draw them in!

- ▶ When working on the machine, do not wear loose jewellery, long sleeves, long hair, and similar.

**WARNING!**

The U-RX can process material rolls up to about 28 kg. Using an improper lifting technique when changing the rolls can lead to back injury. Rolls that are dropped can lead to foot injury.

- ▶ Lift in a safe way (by bending the knees, and by keeping the back straight).
- ▶ Wear safety shoes.

### U-RX as rewinder (without cardboard core)

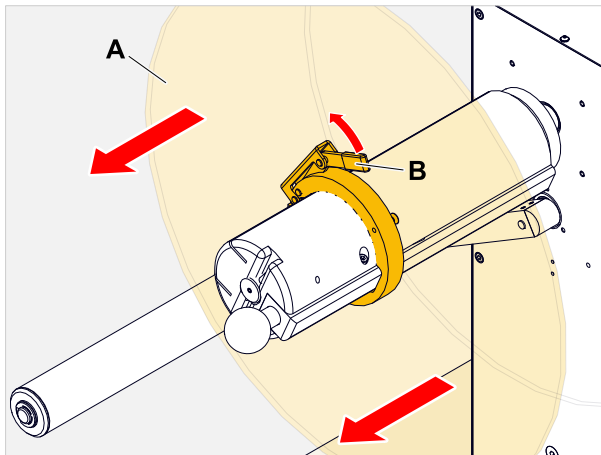
#### Before you begin

Prerequisites:

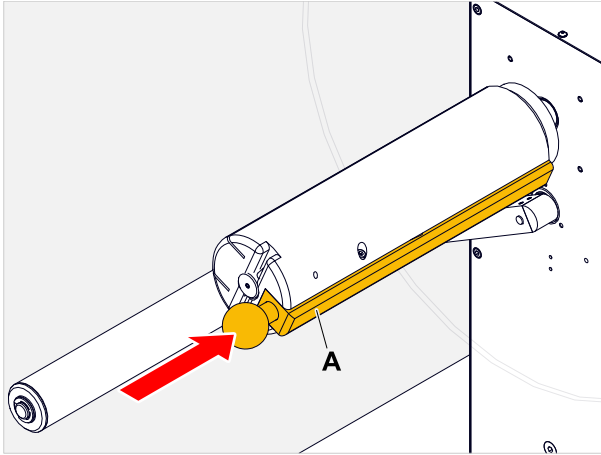
- The U-RX is switched on and ready for operation (red start/stop button lights up)
- Operating mode and winding direction are defined and set on the device

#### Procedure

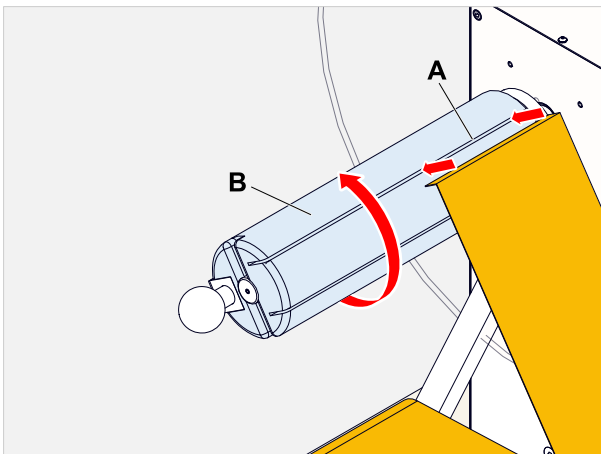
1. Remove the outer guide disk (2). To do this, open the clamping lever (1).



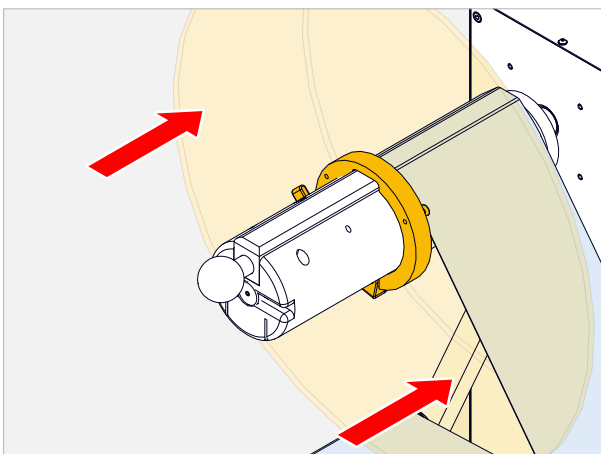
2. Push the clamping wedge (A) in as far as it will go:



3. Lay the material web around the deflection rollers and the dancer arm according to the winding diagram.
4. Fix the end of the material web to the rewinding mandrel. To do this, insert the end of the material web into the slot (A) on the rewinding mandrel and fix it in place by turning the rewinding mandrel (B).



5. Place the outer guide disk back on the rewinding mandrel and push it up to the edge of the material without pinching the material web. Close the clamping lever.



6. Press the Start/Stop button.  
The U-RX now winds up the material until the dancer arm is in the middle position. During winding, the signal lamp on the start/stop button flashes. As soon as the desired position is reached, the lamp goes out.

|| During this time, no material may be transported from the printer to the U-RX!  
|| If the red light does not go out, an error has occurred. In this case, repeat step 3. ||

## U-RX as rewinder (with cardboard core)

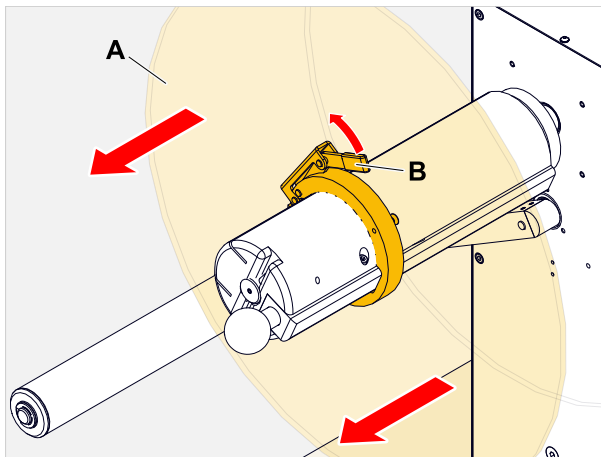
### Before you begin

Prerequisites:

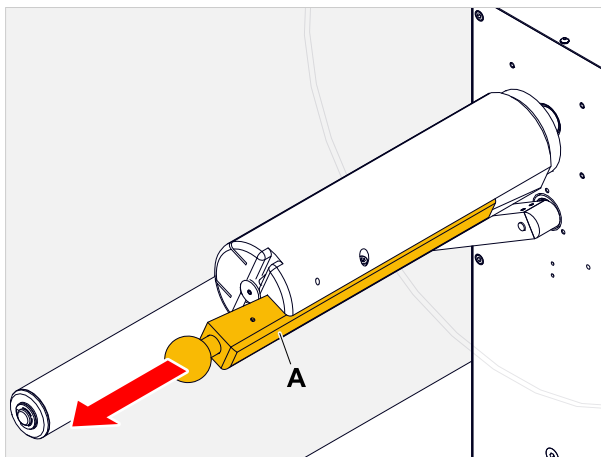
- The U-RX is switched on and ready for operation (red start/stop button lights up)
- Operating mode and winding direction are defined and set on the device

### Procedure

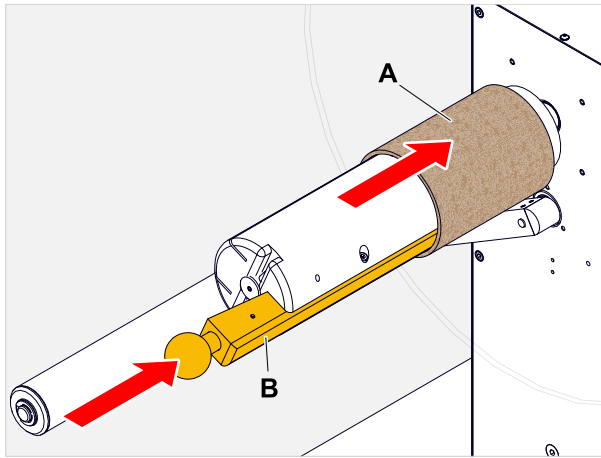
1. Remove the outer guide disk (2). To do this, open the clamping lever (1).



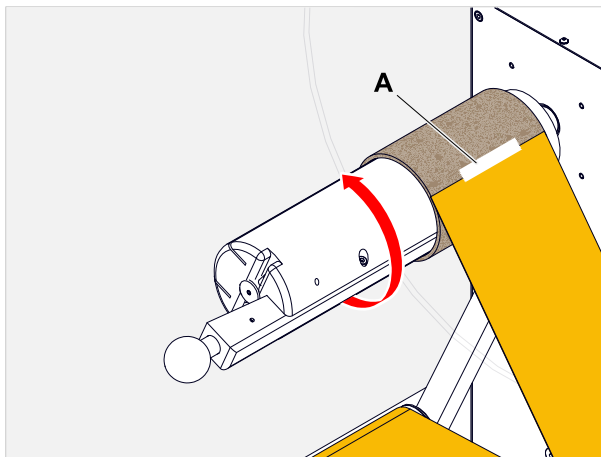
2. Pull the clamping wedge out as far as it will go:



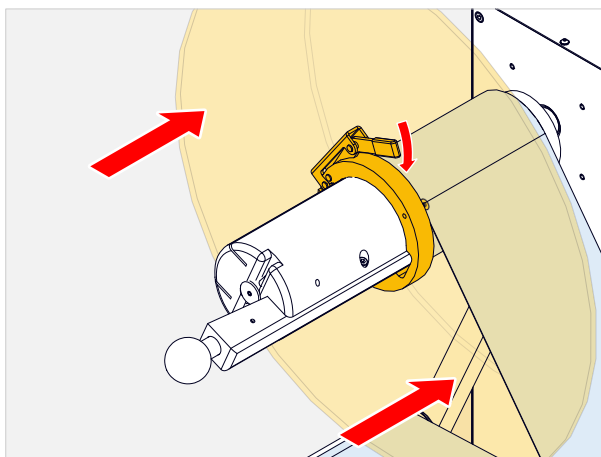
3. Push the cardboard core (A) onto the winding mandrel as far as it will go. Push in the clamping wedge (B) until the cardboard core is firmly clamped.



4. Lay the material web around the deflection rollers and the dancer arm according to the winding diagram.
5. Fix the end of the material to the cardboard core with adhesive tape (A):



6. Place the outer guide disk back onto the rewinding mandrel and push it up to the edge of the material without pinching the material web. Close the clamping lever.



7. Press the Start/Stop button.  
The U-RX now winds up the material until the dancer arm is in the middle position. During winding, the signal lamp on the start/stop button flashes. As soon as the desired position is reached, the lamp goes out.

|| During this time, no material may be transported from the printer to the U-RX!  
|| If the red light does not go out, an error has occurred. In this case, repeat step 3. ||

## Removing the wound roll

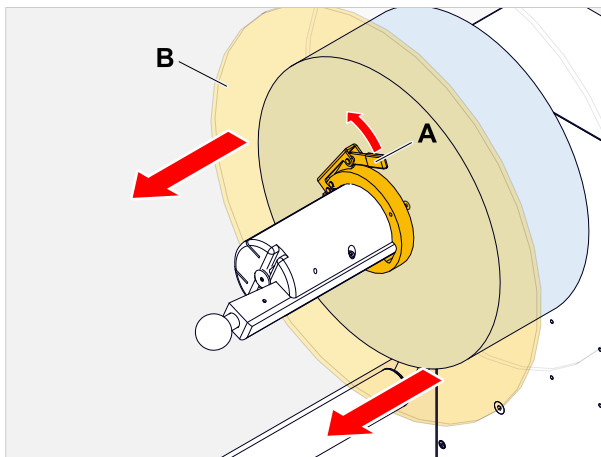
### Before you begin

Prerequisite:

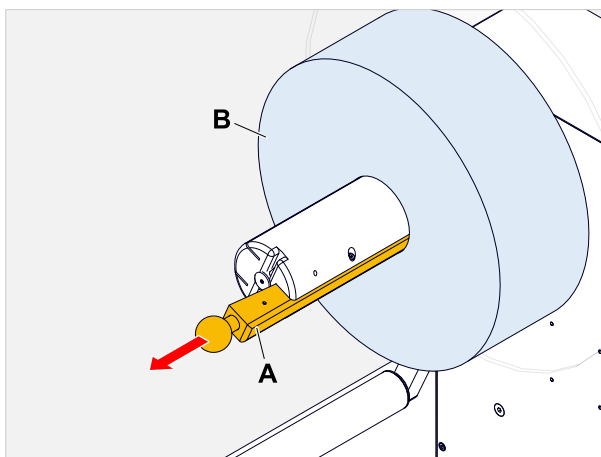
The rewinder is stopped.

### Procedure

1. Open the snap lever (A) and remove the outer guide disk (B) from the winding mandrel.



2. Pull the clamping wedge (A) out as far as it will go:



3. Remove the roll (top image, B) from the winding mandrel.

## U-RX as unwinder

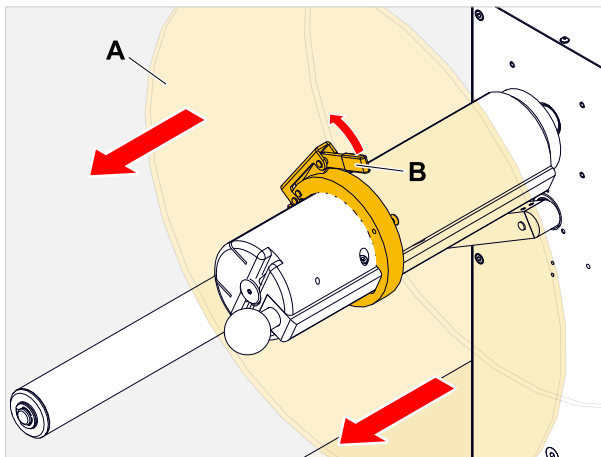
### Before you begin

Prerequisites:

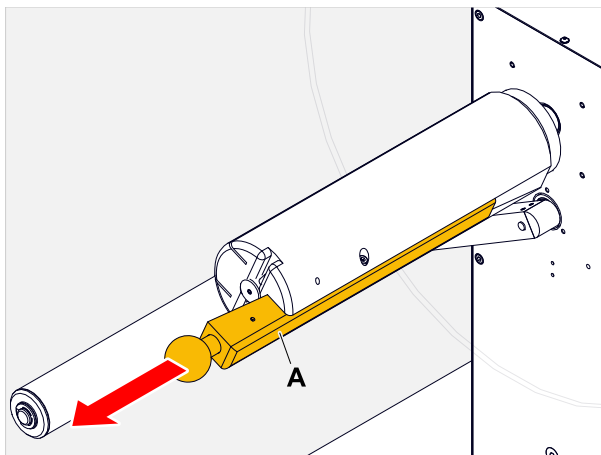
- The U-RX is switched on and ready for operation (red start/stop button lights up)
- Operating mode and winding direction are defined and set on the device

### Procedure

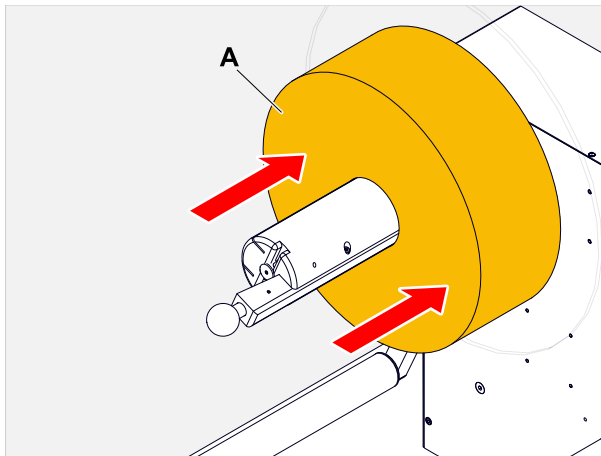
1. Remove the outer guide disk (2). To do this, open the clamping lever (1).



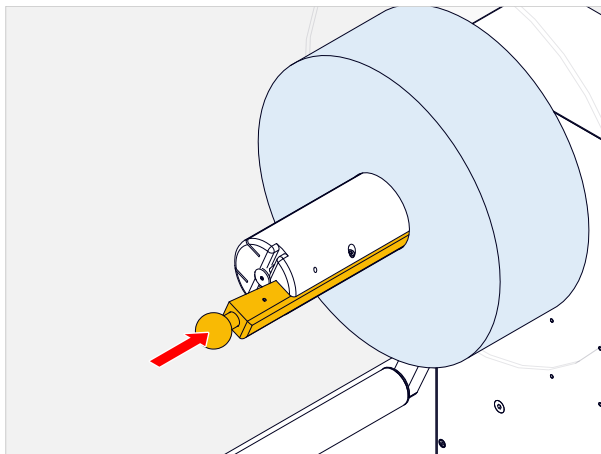
2. Pull the clamping wedge out as far as it will go:



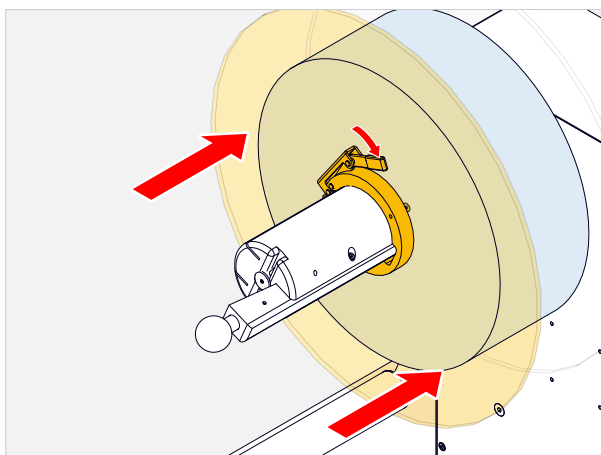
3. Push the material roll (A) onto the unwinding mandrel.  
|| Observe the unwinding direction. ||



4. Push in the clamping wedge to fix the material roll in place:



5. Push the outer guide disk onto the unwinding mandrel up to the material roll. Close the clamping lever:



6. Lay the material web around the deflection rollers and the dancer arm according to the winding diagram.

7. Insert the end of the material into the subsequent processing device (e.g. printer).
8. Press the Start/Stop button.  
The U-RX now unwinds the material until the dancer arm is in the rest position (left stop). During unwinding, the signal lamp on the start/stop button flashes. As soon as the desired position is reached, the lamp goes out.

|| During this time, no material may be transported away from the U-RX! ||  
|| If the red light does not go out, an error has occurred. In this case, repeat step 3. ||

## CLEANING

### Safety notes

Maintenance and cleaning may result in hazardous situations. Accidents can occur by mechanical or electrical means if safety instructions are not observed:

- Turn off the device and remove from the power supply prior to cleaning or maintenance -work!
- On no account should liquid be allowed to enter the unit!
- Do not use any of kind of spray directly on the unit! Moisten a cloth with a cleaning agent to clean the unit!
- Repairs to the unit may only be carried out by a trained service technician!

### Cleaning agents

	CAUTION!	
	Risk of damaging the device	
	► Do not use any cleaning agents that could damage or destroy the finish, the labels, the display, the nameplates, the electrical components, etc..	
	► Do not use any cleaning agents that are abrasive or damaging to plastics.	
	Avoid acid or alkaline solutions.	

- *Housing, base plate*: Commercially available neutral cleaning liquid
- *Rollers, rewinding mandrel*: Cleaning solvent, label remover solvent (part no. 90073)

### Cleaning

- Wet a cloth with the cleaning solvent and wipe down the part that is dirty.

|| Follow the manufacturer's instructions for use on the cleaning agent container. ||



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