Installation and Operating Instructions
Interroll Roller Conveyors
Ball Table RM 8130
Omni Wheel Table RM 8140
non-powered

Version 1.1 (01/2016) en-US
Translation of original instruction manual
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Introduction

Notes about working with the installation and operating instructions

The Interroll Ball Table RM 8130 and Interroll Omni Wheel Table RM 8140 is generally referred to as "module" in this document.

Contents of these installation and operating instructions

These installation and operating instructions contain important notes and information about the various operating phases of the module:
- Transport, assembly and startup
- Safe operation, required maintenance tasks, removal of any faults
- Spare parts, supplementary accessories

Integrated part of the product

The installation and operating instructions describe the module at the time of its initial delivery after manufacturing.

In addition to this manual, special contractual agreements and technical documents apply to special versions of the module and its additional equipment.

Installation and operating instructions are part of the module

- To ensure trouble-free and safe operation as well as the settlement of possible warranty claims, always read these installation and operating instructions first and observe all the information contained herein.
- Keep the installation and operating instructions close to the module.
- Pass the installation and operating instructions on to any subsequent operator or occupant. Interroll does not accept any liability for faults or defects due to non-observance of these installation and operating instructions.

If you have any questions after reading the installation and operating instructions, please contact the Interroll customer service. Contact persons close to you can be found on the Internet under: www.interroll.com/contacts.
Introduction

Warning notices in this document
The warning notices refer to risks which may arise while using the module. They are available in four danger levels identified by the signal word:

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANGER</td>
<td>Identifies a danger with high risk that can lead to death or serious injury if it is not avoided.</td>
</tr>
<tr>
<td>WARNING</td>
<td>Identifies a danger with medium risk that can lead to death or serious injury if it is not avoided.</td>
</tr>
<tr>
<td>CAUTION</td>
<td>Identifies a danger with low risk that can lead to minor or medium injury if it is not avoided.</td>
</tr>
<tr>
<td>NOTICE</td>
<td>Identifies a danger that can lead to property damages.</td>
</tr>
</tbody>
</table>

Symbols

ℹ️ This symbol marks useful and important information.

Requirement:
- ☑️ This symbol represents a prerequisite to be met prior to assembly and maintenance work.
- ▶️ This symbol marks the steps to be carried out.
Safety

State of the art
The module has been built to comply with the state of the art. Nevertheless, users may encounter hazards during its use.

Disregarding the notices in this manual may lead to serious injury.
- Carefully read the manual and follow its content.

Intended use
The module may only be used for industrial applications and in an industrial environment to convey roller conveyor-ready goods such as small packages, cartons or boxes.

The module is an incomplete machine and must be integrated into a complete system prior to operation.

Field of use
The module is dimensioned only for a certain field of use and may not be operated outside of these specific limits. For additional information, see the chapter "Technical data".

Any other use is considered inappropriate. Deviating operating conditions require additional clarifications, a special release of the module and new contractual agreements.

Changes to the module
Any modifications that affect the safety are not permitted.

Personnel qualification
Unqualified personnel cannot recognize risks and, as a result, is subject to greater dangers.

- Authorize only qualified personnel with the activities described in these installation and operating instructions.
- The operating company must ensure that the personnel follows locally applicable regulations and rules during their work with regard to safety and dangers.

The following target groups are addressed in these installation and operating instructions:

Operators
Operators have been instructed in the operation and cleaning of the module and follow the safety guidelines.

Service personnel
The service personnel features a technical training and performs the maintenance and repair tasks.

Electricians
Persons working on electrical installations must have the pertinent technical training.
Dangers

The following list informs you about the various types of danger or damage that may occur while working with the module.

Safety devices
- Perform any maintenance and repair work on the module only in de-energized state and ensure that it cannot be started accidentally.
- In the passage area of persons or if persons can reach between transported materials, additional protective measures may apply.
- Do not remove protective covers or housing.
- Regularly check the safety devices.

Rotating parts
- Never wear loose clothing.
- Never wear jewelry, such as necklaces or bracelets.
- If you have long hair, always wear a hair net.

Parts lying around or falling off
- Remove equipment or material which is not required from the workspace.
- Wear safety shoes.
- Specify and monitor careful placement of the goods on the conveyor.

Risk of injury due to faults during operation
- Regularly check the module for visible damage.
- Immediately shut down the module and ensure that it cannot be started accidentally in case of:
  - fire vapors, unusual, noise, blocked or defective conveyor belt, defective supports, side guides or accessory devices, unauthorized removal of safety covers and with a defective suspension.
  - Immediately determine the cause of the fault by qualified personnel.
  - Immediately remove any escaping gear oil.
  - Do not step on the module during operation.

Maintenance intervals
- Regularly perform maintenance and inspection work.
- Use only OEM spare parts.

Interfaces to other devices
New hazardous positions may occur while integrating the module into a complete system. These positions are not part of this manual and have to be analyzed during the assembly and startup of the complete system.
- When combining the module with other modules or machinery, check for new hazards before startup. In particular, observe the infeed point at the deflection shaft.
- Additional constructive measures may be required.
**Operating modes**

- **Normal mode**
  The module is installed at the customer in a complete system and operated as part of the system.

- **Special mode**
  Special operation refers to all operating modes which are required to guarantee and maintain regular operation.

<table>
<thead>
<tr>
<th>Special operating mode</th>
<th>Explanation</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport/Storage</td>
<td>Loading and unloading, transport and storage</td>
<td>-</td>
</tr>
<tr>
<td>Assembly/Initial start-up</td>
<td>Installation at the end customer and performing the test run</td>
<td>-</td>
</tr>
<tr>
<td>Cleaning</td>
<td>External cleaning without removing protective devices</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Maintenance/Repairs</td>
<td>Maintenance and inspection tasks</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td>Troubleshooting in the event of a fault</td>
<td>-</td>
</tr>
<tr>
<td>Fault elimination</td>
<td>Eliminating the fault</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Shutdown</td>
<td>Removing from the complete system</td>
<td>When de-energized</td>
</tr>
<tr>
<td>Disposal</td>
<td>Removing from the complete system and disassembly</td>
<td>When de-energized</td>
</tr>
</tbody>
</table>
Product identification

Ball Table (RM 8130)

Components

Ball table RM 8130 device design

1. Ball transfer unit
2. Side guide profile
3. Side guide support
4. Universal support
5. Side cover
6. Side frame (C-profile)
7. End cap (side frame)

Property

The ball table transports materials with a solid bottom in any direction using very little force. It is especially suitable for workstation & inspection areas. So that a ball table can be combined with other conveyors, it is installed in a standard side profile.
# Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Ball Table RM 8130</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. load capacity</td>
<td>100 kg/m</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-5 to +40 °C</td>
</tr>
<tr>
<td>Incline/decline</td>
<td>Not suitable</td>
</tr>
<tr>
<td>Between frames</td>
<td>300 to 1020 mm</td>
</tr>
<tr>
<td>Roller type</td>
<td>Interroll Series 5500</td>
</tr>
<tr>
<td>Roller diameter</td>
<td>25.4 mm</td>
</tr>
<tr>
<td>Roller pitch (P)</td>
<td>60 mm</td>
</tr>
<tr>
<td>Roller material</td>
<td>Zinc-plated steel, stainless steel</td>
</tr>
<tr>
<td>Module length (ML)</td>
<td>Multiple of pitch, max. 2,040 mm</td>
</tr>
<tr>
<td>Noise level</td>
<td>Leq ≤ 70 dB(A)</td>
</tr>
</tbody>
</table>
Omni Wheel Table (RM 8140)

Components

1. Omni-directional wheel
2. Side guide profile
3. Side guide support
4. Universal support
5. Side cover
6. Side frame (C-profile)
7. End cap (side frame)

Property

The Omni wheel table with multi-directional wheels is particularly well suited for workstation and inspection areas and for materials with soft bottoms that can be moved in all directions with very little force.
### Technical data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. load capacity</td>
<td>60 kg/m</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-5 to +50 °C</td>
</tr>
<tr>
<td>Incline/decline</td>
<td>Not suitable</td>
</tr>
<tr>
<td>Between frames</td>
<td>300 to 1020 mm</td>
</tr>
<tr>
<td>Roller type</td>
<td>Interroll Series 2800</td>
</tr>
<tr>
<td>Roller diameter</td>
<td>48 mm</td>
</tr>
<tr>
<td>Roller pitch (P)</td>
<td>62 mm</td>
</tr>
<tr>
<td>Roller material</td>
<td>Polyamide, polypropylene housing</td>
</tr>
<tr>
<td>Module length (ML)</td>
<td>Multiple of pitch, max. 2,040 mm</td>
</tr>
<tr>
<td>Noise level</td>
<td>Leq ≤ 70 dB(A)</td>
</tr>
</tbody>
</table>
Scope of supply

The roller conveyor is delivered completely assembled. The scope of supply includes:

- Rack, including side frames, support plate, side covers
- Ball rollers / Omni-directional wheels
- (Optional) Side guide profiles, side guide support and universal supports

The side guide profiles (if ordered) can optionally be delivered assembled or unassembled.

The scope of delivery does not include:

- Supports
- End caps

Nameplate

The information on the nameplate is used to identify the conveyor. The type designation is required to use the conveyor according to its intended use.

The nameplate is located at the end of the conveyor in the right side frame in transport direction.
Transport and storage

Transport

⚠️ WARNING

Risk of injury during transport

- Fix the module securely and slip-proof for the transport.
- Ensure that the lifting device (crane, fork lift, etc.) is rated for the weight of the module.
- Ensure that no persons are located under the suspended load while lifting and moving the module.

Additional information about the transport are located on an information sheet that accompanies the motor.

- Data about weight and requirements for loading capacity and lifting tackle are located on the information sheet.
- Remove any persons from the danger zone.
- Wear safety shoes.
- Check the correct fastening for the transport.

The load lifting points are marked on the packet. Individual modules must be gripped at the bottom profile edge at the ends. Gripping at the top edge is not allowed since it can lead to inaccuracies of the sensor.

Identification of load lifting points

After the delivery

- Inspect module for transport damages.
- Immediately notify the carrier and manufacturer in case of damages to avoid losing any claims for compensation.
Storage

⚠️ WARNING

Risk of injury due to improper storage

- Do not stack modules. Do not place any other objects on the module.
- Check module for stability.

- If the module is not immediately placed in operation, store it at a location protected against humidity and dust.
Installation

⚠️ WARNING
Risk of injury due to improper assembly

- Mechanical assembly tasks should be performed only by service personnel. Observe the safety information.

The module is delivered to the location site as a pre-assembled unit and must be set up, connected and integrated into a system on site.

The side guides (universal support, side guide support and side guide profiles) are delivered, either assembled or unassembled, according to customer specifications.

To be observed during installation

**Torque**
When tightening screws and nuts, always observe the standard tightening torque, unless specifically indicated otherwise. Standard screw lockers should be replaced as needed.

**Grounding**
During the installation of the module, its grounding must be observed. Among other things, the profile connectors are used for this purpose. If no profile connector is used for connecting the modules, alternate measures must be taken.

**Orientation**
- Align the module at the height-adjustable feet of the support. The decisive item for aligning the modules is the roller top edge (for roller conveyors) or the belt top edge (for belt conveyors).
- Secure the adjusted height. Use suitable tools for the alignment (spirit level or rotation laser).
- During the alignment of the module, ensure that no moving parts are touching.

**Connection**
- Connect the individual modules with each other using the profile connector.
- During the setup of the module, check the passageways for the personnel. Install transitions as necessary.

**Anchoring**
- Anchor or fasten the module torsion-free, e.g. to the floor or adjacent components.

**Integration into complete system**
- When integrating the module into the complete system, consider possible danger spots, particularly infeed locations and interfaces.
Setting up the module

The following tasks are required to set up the module:

- Installing supports, See "Installing supports", page 19.
- Connecting the modules, See "Connecting the modules", page 20.
- Installing side guide profiles,
  See "Installing the side guide profiles", page 22.
- Installing side cover and end caps,
  See "Installing side cover and end caps", page 28.
Installing supports

Support with two height-adjustable feet

1 Serrated flange bolts 2 Height-adjustable foot

⚠ CAUTION

Risk of injury when lifting heavy loads

- During the installation and replacement of conveyor modules or heavy spare parts, work in pairs or use a suitable carriage.

The module sits on at least one support. Every support has two height-adjustable feet (2).

- Place the module on the support.
- Position the supports underneath the module.
- Fasten every support to the perforation profiles of the side frames with four serrated flange bolts (1) and nuts.

For further information about the adjustment options, see the installation instructions of the support.
Connecting the modules

1 Side cover
2 Screws
3 Profile connectors
4 Side frame (with C-profile)

During the setup of the conveyor system, check the passageways for the personnel. Install transitions as necessary.

The individual modules of a complete conveyor system are screwed together using profile connectors (3): To connect straight sections, use profile connectors with punch pressing and regular pitch.

⚠️ CAUTION

Risk of crushing and injuries from cuts

- When integrating the module into a complete system, consider possible danger spots, particularly infeed locations and interfaces.

The roller top edge is decisive for the alignment of the modules. Suitable tools for the alignment are spirit level or rotation laser.
Installation

- Position the modules to be connected so that the side frames (4) are aligned.
- On the insides of the modules to be connected, place one profile connector (3) each at the side frames. The noses of the profile connectors must catch in the elongated holes of the side frames.
- Fasten profile connectors to the perforated profiles at the side frames using screws (2). Use two screws for every module.
- Anchor or fasten the module torsion-free, e.g. to the floor or adjacent components.
Installing the side guide profiles

1 Side guide profile
2 Side guide support
3 Mounting bracket
4 Flexible universal support
5 Rigid universal support

The installation of the side guide profiles (1) is done in several steps:

- Attach rigid universal support (5) to side frames, See "Installing the rigid universal support", page 23.
- Attach flexible universal support (4) to side frames, See "Installing the flexible universal support", page 24.
- Place side guide support (2) on mounting bracket (3) of universal support.
- Fasten side guide profiles to side guide supports, See "Fastening the side guide profile on the universal support", page 26. If needed, it is also possible to attach two side guide profiles above each other.
Installing the rigid universal support

The rigid universal support is installed on the perforated profile of the side frame from the top.

Requirement:
- The module is out of operation.
- Loosen the side cover at the module.
- Position the rigid universal support and place it on the perforated profile of the side frame.
- Fasten the rigid universal support with two hexagon head screws and two nuts.
- Reattach the side cover.
Installing the flexible universal support

The flexible universal supports can be delivered pre-assembled upon request. In this case, the universal supports are turned to the conveyor center for the transport and still have to be positioned before startup depending on their use (for the installation of adjustable side guide, photo cell or reflector).
The flexible universal support is laterally inserted into the C-profile of the side frame and clamped in place.

Requirement:
- The module is out of operation.
- Loosen side cover (2) from the side frame.
- Swing up the cover (7) of the universal support.
- Loosen hexagon head screws (6) in the universal support, but do not remove them.
- Insert the clamping plate (3) into the side frame at the rear side of the universal support by slightly turning the support.
- Position the universal support on the side frame and slightly tighten the two hexagon head screws at the desired location.
- Align the mounting bracket (5).
- Firmly tighten the hexagon head screws.
- Swing up the cover (7) of the universal support until you hear it snap in.
- Attach the side cover. Cut the side cover apart at the locations at which the universal support is installed and shorten it accordingly. Snap in the individual parts of the side cover on the right and left of the universal support.
Fastening the side guide profile on the universal support

1 Side guide profile
2 Side guide support
3 Hammer head bolt
4 Hexagon nut
5 Side guide support cover
6 Mounting bracket
7 Flexible universal support

Requirement:
- The module is out of operation.
- Push side guide support (2) onto one of the mounting brackets (6) of the universal support (7). If needed, break out the upper hole cover in the side guide support, e.g. to use two side guides above each other.
- Tip up the cover of the side guide support (5).
Installation

- Slightly loosen hexagon nut (4) in side guide support.
- Place side guide profile (1) at side guide support (2) and position it.
- Slightly turn the hammer head bolt (3) located in the side guide support and insert it into the side guide profile.
- Tighten the hexagon nut.

➤ The hammer head bolt is fixed. The side guide support sits firmly at the universal support.
- Close the cover of the side guide support and snap it in place.
Installing side cover and end caps

1 End caps
2 Side cover

- Snap side cover (2) into the C-profile of the side frame.
- Push end caps (1) into the C-profile of the side frame.
Initial startup and operation

Initial startup

⚠️ WARNING
Risk of injuries due to incorrect handling

- Remove the materials from the module.
- Remove unauthorized persons from the danger zone.
- Wear safety shoes and work clothing.

Operation

- Check the module for visible damage. In particular, observe belt, guides and supports.
- Ensure that only authorized personnel is in the operating area of the module.
- Ensure that it is running freely and that no parts are jammed.
- Remove material or equipment which is not required from the workspace.
- Guide and monitor correct placement of the materials on the conveyor.

Before every operation start

- Stop the module and ensure that it cannot be started accidentally.
- In case of an accident: Render first aid and make an emergency call if necessary.
- Inform qualified personnel.
- Have the fault removed by qualified personnel.
- Restart the module only after this has been approved by qualified personnel.

Procedure in case of accident or fault
Cleaning

⚠️ WARNING
Risk of injuries due to incorrect handling

- Do not remove protective devices.
- Wear safety shoes and close-fitting work clothing.

- Use only suitable cleaning agents (water-soluble, free of phosphate, silicone and potassium, non-acidic). Observe the manufacturer's instructions.
Maintenance and repair

Observe the following for maintenance and repair

⚠️ WARNING
Risk of crushing and injuries

- Ensure that the personnel involved in maintenance and repair have secure footing and sufficient room to move.
- Mechanical maintenance and repair work may only be performed by service personnel. Observe the safety information.
- Observe the weight of the module (see nameplate); if necessary work in pairs.
- Use suitable loading and lifting equipment. Secure the module against falling or tipping.

- Set up warning signs that indicate maintenance and repair work.
- Block off the area around the module.
- Inform persons who have to enter the blocked-off area about the risks.

When tightening screws and nuts, always observe the standard tightening torque, unless specifically indicated otherwise. Standard screw lockers should be replaced as needed.
Replacing the side guide profile

Flexible universal support with detailed view of side guide support at side guide profile

1 Side guide profile  
2 Side guide support  
3 Side guide support cover  
4 Hexagon nut  
5 Mounting bracket  
6 Flexible universal support

Requirement:
- The module is out of operation.
- Open the cover of the side guide support (3) with a tool (e.g. screwdriver).
- Loosen the hammer nut (4) in the side guide support (2) to the point when the hammer head bolt can be removed from the side guide profile (1) by slightly turning it.
- Replace the side guide profile.
Replacing the side guide support

1 Side guide profile
2 Side guide support
3 Hammer head bolt
4 Hexagon nut
5 Side guide support cover
6 Mounting bracket
7 Flexible universal support

Requirement:
- The module is out of operation.
- Open the cover of the side guide support (5) with a tool (e.g. screwdriver).
- Loosen the hexagon nut (4).
Maintenance and repair

- Move the hammer head bolt (3) inside the side guide support to the horizontal position by turning it and pull it out of the side profile.
- Pull the side guide support (2) off of the mounting bracket (6) of the universal support (7).
- Loosen the hexagon nut at the new side guide support, but do not remove it. Create sufficient clearance so that the hammer head bolt can later be inserted into the side profile and the clamp can be pushed onto the mounting bracket.
- Push the new side guide support onto the mounting bracket of the universal support. If needed, break out the upper hole cover.
- Insert the hammer head bolt into the side profile by slightly turning it.
- Tighten the hexagon nut.
  - The hammer head bolt is fixed. The side guide support sits firmly at the universal support.
- Close the top cover and snap it in place.
Replacing the flexible universal support

1 Side guide profile
2 Side cover
3 Clamping plate
4 Side guide support
5 Mounting bracket
6 Hex nuts
7 Universal support cover

Requirement:
- The module is out of operation.
Loosen side cover (2) from the side frame.
- Remove the side guide support (4), See "Replacing the side guide support", page 33.
- Open the cover of the universal support (7) with a tool (e.g. screwdriver) and swivel it down.
- Loosen the hexagon nuts (6), but do not remove them.
- Slightly turn the clamping plate (3) with the complete universal support and remove it from the C-profile of the side frame.
- Loosen the hexagon head screws at the new universal support, but do not remove it.
- Insert the clamping plate into the side frame by slightly turning the complete universal support.
- Position the universal support on the side frame and slightly tighten the hexagon nuts at the desired location.
- Install the side guide support, See "Replacing the side guide support", page 33.
- Align the angles of the mounting brackets (5).
- Firmly tighten the hexagon nuts.
- Swing up the cover of the universal support until you hear it snap in.
Replacing the side cover

- Carefully pry out the side cover (2) out of the side profile at one end using a tool (e.g. screwdriver).
- Starting at this point, loosen the complete side cover from the side profile.
- Snap new side cover into the C-profile of the side frame.
Replacing the end cap

- Remove end caps (1) from the side frame using a tool (e.g. screwdriver).
- Push the new end caps into the C-profile of the side frame.
Replacing a ball roller (RM 8130)

The ball rollers are pressed into the perforated plate with their housing.

During the pressing process, ensure that pressure is not exerted onto the balls, but exclusively onto the housing. Use a suitable sleeve, if necessary.

- Push the respective roller together with the housing from below out of the perforated plate. Use a hammer, if necessary.
- Insert the new roller from the top and press it into the perforated plate.
Replacing an omni-directional wheel (RM 8140)

The omni-directional wheels are fit into each other with their housing.

- Loosen screws at the underside of the support plate.
- Lift the complete roller bed out of the support plate.
Start at the narrow outer side: Remove the roller rows (2) incl. the defective roller (1) from the roller bed. Use a hammer, if necessary.

Work on the removed part of the roller bed and start again at the narrow outer side Remove the roller rows (3) incl. the row with the defective roller (1), use a hammer if necessary.

Uninstall the defective roller and insert the new roller.

Fit the roller bed together again.

Insert the complete roller bed into the support plate.
Maintenance and repair

Maintenance intervals

If maintenance is not performed according to schedule, it may lead to damages and failures. If maintenance intervals are not followed, the warranty will be void.

All bearings of the module feature a life-time lubrication and are maintenance-free within the operating parameters.

Maintenance and inspection list

<table>
<thead>
<tr>
<th>Component</th>
<th>Interval</th>
<th>Task/check</th>
<th>Work to be performed</th>
<th>Performed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete module</td>
<td>Weekly</td>
<td>General visual and acoustic check</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete module</td>
<td>Annually</td>
<td>Check screw connections</td>
<td>Tighten to standard as required</td>
<td></td>
</tr>
<tr>
<td>Complete module</td>
<td>Every 6 months</td>
<td>Check for damages</td>
<td>Replace damaged parts as required</td>
<td></td>
</tr>
<tr>
<td>Supporting balls</td>
<td>Every 6 months</td>
<td>Check for cleanliness</td>
<td>Clean with commercially available cleaners as necessary</td>
<td></td>
</tr>
</tbody>
</table>
Troubleshooting

In case of a fault

⚠️ DANGER

Danger - electrocution

- Only perform maintenance and repair work after you have switched off the power.
- Faults on electrical equipment may be removed only by a trained electrician!

Requirement:
- The danger spots on the module are covered by protective plates and other protective devices.
- Immediately de-energize the complete conveyor system and ensure that it cannot be started accidentally.
- Remove material and blocking objects.
- Before switching it on again, ensure that no persons are at risk.
- Professionally dispose of any gear oil that as leaked out. Have the motor replaced by qualified personnel if necessary.

## Troubleshooting

<table>
<thead>
<tr>
<th>Fault</th>
<th>Possible cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials are transported too slowly or not at all</td>
<td>Indentations on underside of materials</td>
<td>• Reduce weight of loads&lt;br&gt;• Increase resistance of underside of materials or use load boards</td>
</tr>
<tr>
<td>One or several rollers are not turning freely</td>
<td></td>
<td>• Replace defective rollers</td>
</tr>
<tr>
<td>Obstacle or jam</td>
<td></td>
<td>• Remove obstacle or cause of jam</td>
</tr>
</tbody>
</table>
Spare and wear parts

All spare and wear parts are available from Interroll. Maintenance and repair work may be performed only by qualified personnel. Interroll offers training sessions about required maintenance and repair tasks upon request.

Ordering information

Ordering spare and wear parts requires the exact identification of the module, Nameplate.

The following information is required for an order:

- Machine number
- Type
- Item number of spare parts list
- Designation
- Comment

For additional information about the spare parts portfolio, please contact your supplier.
### Ball Table RM 8130 spare parts list

<table>
<thead>
<tr>
<th>Item no.:</th>
<th>Designation</th>
<th>Comment</th>
<th>S/W/T</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ball transfer unit</td>
<td>Ø 25.4 mm</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>Side guide</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>3</td>
<td>Side guide support</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>4</td>
<td>Universal support</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>Side cover</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>6</td>
<td>End cap (side frame)</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>7</td>
<td>End cap (side guide)</td>
<td></td>
<td>S</td>
</tr>
</tbody>
</table>

S = spare part, W = wear part, T = tool
Omni Wheel Table RM 8140 spare parts list

<table>
<thead>
<tr>
<th>Item no.:</th>
<th>Designation</th>
<th>Comment</th>
<th>S/W/T</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Omni-directional wheel</td>
<td>Ø 48 mm</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>Side guide</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>3</td>
<td>Side guide support</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>4</td>
<td>Universal support</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>Side cover</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>6</td>
<td>End cap (side frame)</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>7</td>
<td>End cap (side guide)</td>
<td></td>
<td>S</td>
</tr>
</tbody>
</table>
Decommissioning and disposal

- The packaging must be recycled to provide environmental relief.

Environmental protection regulations

For all work on and with the module, the legal regulations concerning waste avoidance and proper disposal and recycling must be followed.

NOTICE

Substances with a water hazard class, such as greases and oils, hydraulic oils, coolants or cleaning agents with solvents may not be allowed to come into contact with the ground or reach the sewer system!

- Store, transport, catch and dispose these substances in suitable containers!
- Observe the notices on the supply containers.
- Observe any additional national regulations.
Installation declaration

In accordance with the EC Machinery Directive 2006/42/EC, Appendix II 1 B.

The manufacturer:
Interroll Automation GmbH
Dietmar-Hopp-Straße 3
D-74889 Sinsheim, Germany

herewith declares that the conveyor module described below is an incomplete machine in accordance with the EU Machinery Directive:

- Interroll Ball Table RM 8130
- Interroll Omni Wheel Table RM 8140

Important Note! The incomplete machine may only be put into operation if it has been determined that the overall machine/system, into which the incomplete machine is to be installed, meets the requirements of this directive.

The following safety requirements as stated in Appendix I have been applied:
- 1.1.2, 1.1.3, 1.1.5, 1.1.6, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.7, 1.3.8, 1.4.1, 1.5.4, 1.5.8, 1.5.9, 1.6.1, 1.6.4, 1.7.4

The special technical documents mentioned in Appendix VII B have been prepared and will be sent to the responsible authority if necessary. The transmission is done electronically.

Responsible for EC documentation: Interroll Automation GmbH, Dietmar-Hopp-Straße 3, D-74889 Sinsheim, Germany

Applicable EC directives:
- Machinery Directive 2006/42/EC

Applicable harmonized standards:
- EN ISO 12100 "Safety of machinery - General principles for design - Risk assessment and risk reduction"
- EN ISO 13857 "Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs"
- EN 349 "Safety of machinery - Minimum gaps to avoid crushing of parts of the human body"

Sinsheim, dated

Robert Lugauer
(Manager)