

MoveRoll Conveyor Installation Manual



1. Read this first!

This manual contains instructions how to install standard MoveRoll conveyor modules. This manual also contains information for protection of personnel in the roll handling area from possible injury and/or equipment damage. Read this manual before installing MoveRoll conveyor to ensure correct use.

2. Proper use of MoveRoll conveyor



Warning

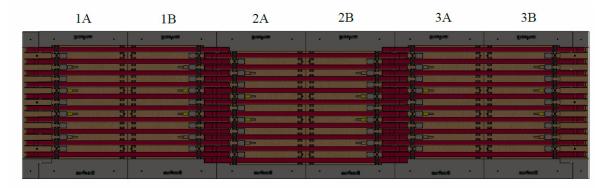
MoveRoll conveyors may only be used for applications described in MoveRoll sales and marketing material, and in relevant technical documentation. Proper transport, storage, installation, commissioning, and maintenance are required to ensure that MoveRoll conveyors operate safely and without any problems.

When leaving the manufacturer's premises, the status of MoveRoll conveyors is 'partly completed machinery'; meaning an assembly which is almost machinery but which cannot in itself perform a specific function. MoveRoll conveyors are only intended to be incorporated into or assembled with other roll handling systems or other partly completed machinery or equipment used in the paper industry. MoveRoll conveyors gain functionality through a third party control system (PLC).

3. Introduction

3.1 Layout drawings

Each delivery includes a layout drawing with module numbering to help installing modules in the right place and order (Graphic 1).



Graphic 1: Module numbering

3.2 Safety

Personnel installing MoveRoll conveyor modules must observe the local occupational safety regulations. As a minimum requirement, safety shoes, safety goggles and safety gloves have to be worn when installing MoveRoll conveyor modules. Particular caution is advised when lifting and moving the modules.

3.3 Foundation

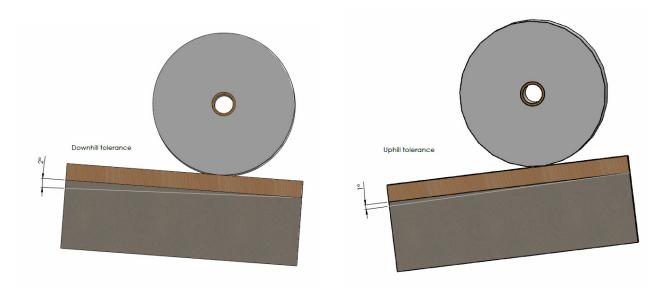
Foundations should fulfil all the requirements agreed in the commercial and technical documents. Clean the foundation surface prior to starting the installation.



Graphic 2: Requirements for the foundation

To ensure that MoveRoll conveyor works as intended, the installing surface needs to be clean and free of bulges or rubble (Graphic 2).

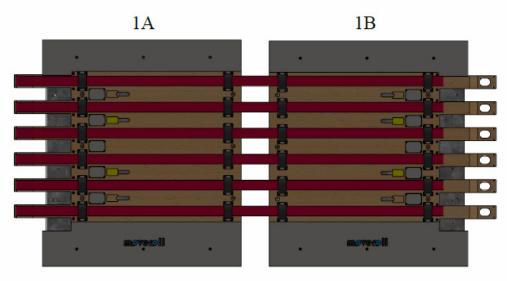
The inclination of the surface is limited to a two degree decline and a one degree incline (Graphic 3).



Graphic 3: Additional requirements for the foundation

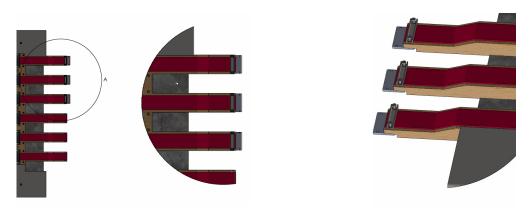
3.4 Standard MoveRoll module

A standard MoveRoll conveyor module consists of two parts, A and B (Graphic 4). This simplifies the installation.



Graphic 4: Standard MoveRoll conveyor module consisting of two parts

For packaging reasons, the pressure elements are only attached at one end of a module. Connect the pressure elements after the two parts A & B have been put together (Graphic 5).

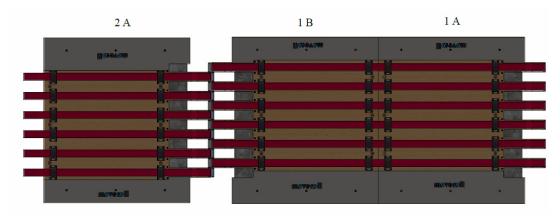


Graphic 5: Reconnecting the pressure elements

4. Installation

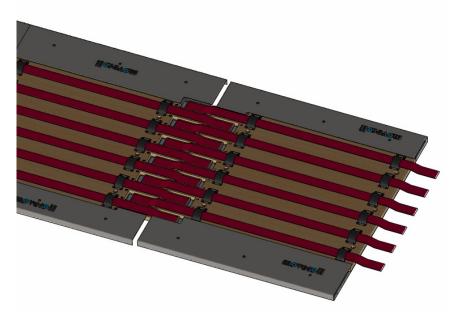
4.1 Connecting MoveRoll modules together

First, place two MoveRoll modules diametrically next to each other (Graphic 6).



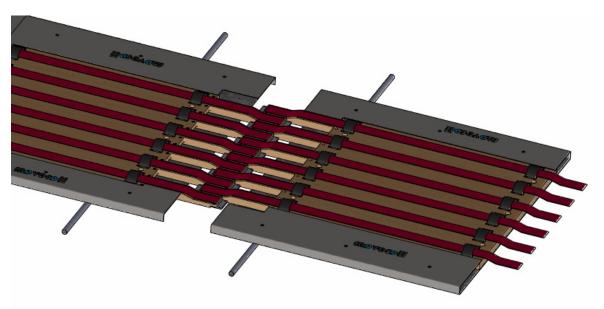
Graphic 6: Diametrical assembly

Second, slide the modules together so that the tips and connection plates overlap each other (Graphic 7). After the modules have been connected in this way, fasten them together with M5 screws.



Graphic 7: Connecting MoveRoll modules

To simplify connecting the modules, use 1 " metal tubes for sliding the modules together (Graphic 8).



Graphic 8: Metal tubes can simplify the process of sliding modules together

4.2 Attaching MoveRoll modules to the foundation

After the modules have been pushed together, they must be attached to the foundation by M8 or 5/16 bolts (Graphics 9, 10, 11) utilizing the fixing points of the module (Graphic 12).



Graphic 9: Hexagon bolt for metal foundation

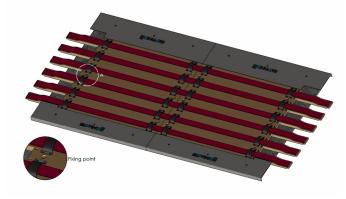


Graphic 10: Anchor bolt for concrete foundations



Graphic 11: Chemical bolt anchor for concrete foundations

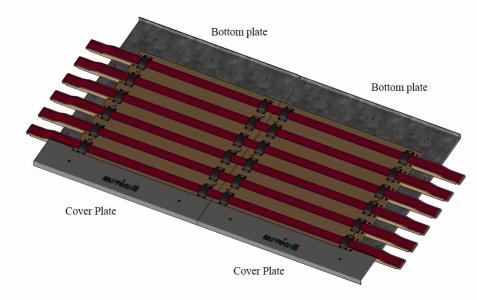
The accurate locations of all fixing points can be found in the mechanical drawings of the modules. We recommend using all available fixing points



Graphic 12: Fixing points

4.3 Pneumatic and electrical connections

All pneumatic and electrical connections are located under the cover plates of the conveyor (Graphic 13). Depending on the type of application, connections are either on the same side or on different sides. The location of the connections is marked on the cover plate with a sticker.

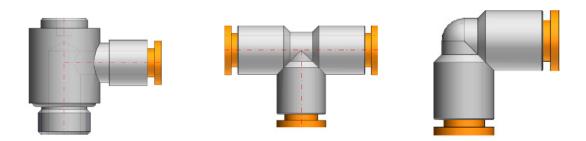


Graphic 13: Side plates

4.3.1 Pneumatic connections

The pneumatic connection for compressed air supply is in the directional valve (10 mm push in fitting).

Since the MoveRoll modules are made of two parts (A & B), certain valve and regulator connections between the parts need to be reconnected after part A and part B have been put together.



Graphic 14: Pneumatic connections

4.3.2 Electrical connections

All cables for electrical connections have M12 plugs. The solenoid directional valve has one plug and the capacitive sensors have two plugs "Roll in" & " Roll out".







Graphic 15: Electrical connections