OPERATING / MAINTENANCE INSTRUCTIONS FOR THE

BELT BEND CONVEYOR
R50D – R70D



SAVE FOR FUTURE REFERENCE

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FOREWORD

The curved belt conveyor type R50D/R70D is a high-quality and sturdy machine. To work with the curved belt conveyor without problems for years, you should first familiarize yourself with the contents of this manual.

This manual is designed to help users safely use and maintain the curved belt conveyor. It answers the most common questions about the use and maintenance of the curved belt conveyor. It is therefore important that users are familiar with the contents of this manual.
The manual describes which actions users are allowed to perform on the machine.
Have all actions not described in this manual performed by a qualified maintenance technician from your supplier.

From the perspective of injury to users, emphasis is placed on the parts of this manual that address safety and scope (chapter 3 "Safety"), as well as those parts marked as mentioned in the following "Reading Guide".

Auto-tec Nederland B.V. disclaims any liability for damage and/or bodily injury resulting from failure to follow the instructions in this manual or through carelessness during installation, use, or maintenance of the curved belt conveyor.

The data in this manual is based on the most recent information. The manual is provided subject to future changes. Auto-tec Nederland B.V. reserves the right to change the design and/or execution of its products at any time, without the obligation to adjust previous deliveries accordingly.

READING GUIDE

The various aspects of the curved belt conveyor are clearly organized into different chapters.

- Points of attention are marked in the manual as follows:

Tip	:	Gives users suggestions and/or advice to make certain tasks easier to perform.

Attention!	:	Alerts users to potential issues.

Caution!	:	Indicates damage to the bend belt conveyor if users do not perform the procedures carefully.

Warning!	:	Warns users of risk of injury when procedures are not followed are carried out carefully.

Life-threatening danger!	:	The lives of users are directly threatened.

- The text regularly refers to an image. For example, (2 C) refers to a component that is indicated by the letter C in image 2.
- To emphasize the importance of a piece of text or a single word, the text or word is bolded.
- This manual is suitable for the curved belt conveyor type R50D and R70D. Where differences occur between the R50D and R70D, this is clearly explained in the text.

1. INTRODUCTION

User requirements

The following requirements are imposed on the user of the curved belt conveyor:

The user:

- must have read and understood this manual.
- must have had a demonstration of the work by the person primarily responsible in the company.
- must have general technical knowledge to reasonably assess whether their actions do not pose a danger or cause damage to the curved belt conveyor.
- must comply with the usage purpose set by Auto-tec Nederland B.V., as described in chapter 2.3.

Principles

- The outside, or outer radius, of the curved belt conveyor is the side with the large radius.
- The inside, or inner radius, of the bend belt conveyor is the side with the small radius.
- The drive side, or output side, is the side where the gear reducer is mounted.
- The reverse side, or input side, is the opposite side of the drive side.

  The transport direction is always from the reverse side to the drive side (towards the gear reducer, the so-called pulling setup).

6.1 Keyword index

For positioning of parts and assemblies of the curved belt conveyor mentioned in the text, reference is made to the keyword index in paragraph 6.1 at the back of this manual.

Suggestions

Suggestions regarding this manual or the curved belt conveyor are very welcome. Send your comments and/or remarks on:

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2. GENERAL

This chapter describes technical data, function, scope, construction, and operation of the bend belt conveyor.

2.1 Technical data

-	Name	Belt bend conveyor, type R50D - R70D
-	System	Belt bend conveyor with tapered end rollers. Guide rollers on a round rug.
-	Max. diameter of conical roller	**R50D**: 50 mm **R70D**: 70 mm
-	Height of belt conduction	**R50D**: 90 mm **R70D**: 110 mm
-	Confirmation	If equipped with a subframe: On surface/construction with (anchor) bolts.
-	Tax	**R50D**: max. 35 Kg **R70D**: max. 50 Kg
-	Speed	According to order specifications Auto-tec Nederland B.V.
-	Type of products	According to order specifications Auto-tec Nederland B.V.
-	Temperature working environment	According to order specifications Auto-tec Nederland B.V.

Dimensions of curved belt conveyor:

		R50D	**R70D**
Outer ray	:	min. 500 mm max. 1700 mm	min. 600 mm max. 2200 mm
Bandwidth	:	min. 200 mm max. 900 mm	min. 200 mm max. 1400 mm
Angle	:	45° - 180°	45° - 180°

Other dimensions by arrangement with Auto-tec Nederland B.V.

Material		Stainless steel or carbon steel lacquered
Drive		
-	Engine reducer	According to order specifications Auto-tec Nederland B.V. Frequency converter available on request
-	Connection value	See type plate on electric motor
-	Insulation class	According to order specifications Auto-tec Nederland B.V.
Round Dress		
-	Material	2-layer tape with top layer of PVC or PU
-	Color	According to order specifications Auto-tec Nederland B.V.
Drive role		
-	Material (white)	Stainless steel/steel shaft coated with PVC friction material

2.2 Function

The curved belt conveyor is designed to transport products (parcels, books, flowers, etc.) over an angle. The curved belt conveyor is suitable for installation in an internal conveyor system.
Type R50D is suitable for loads up to 35 kg. For heavier applications, type R70D is used.50 Kg

2.3 Scope of application

The R50D/R70D has multiple application areas for internal logistics, such as packaging processes, sorting and order picking routes, agriculture and horticulture, and the food processing industry. For the food processing industry and/or a humid working environment, a stainless steel version is available.
Stick to the application as described in the order specification of Auto-tec Nederland B.V.

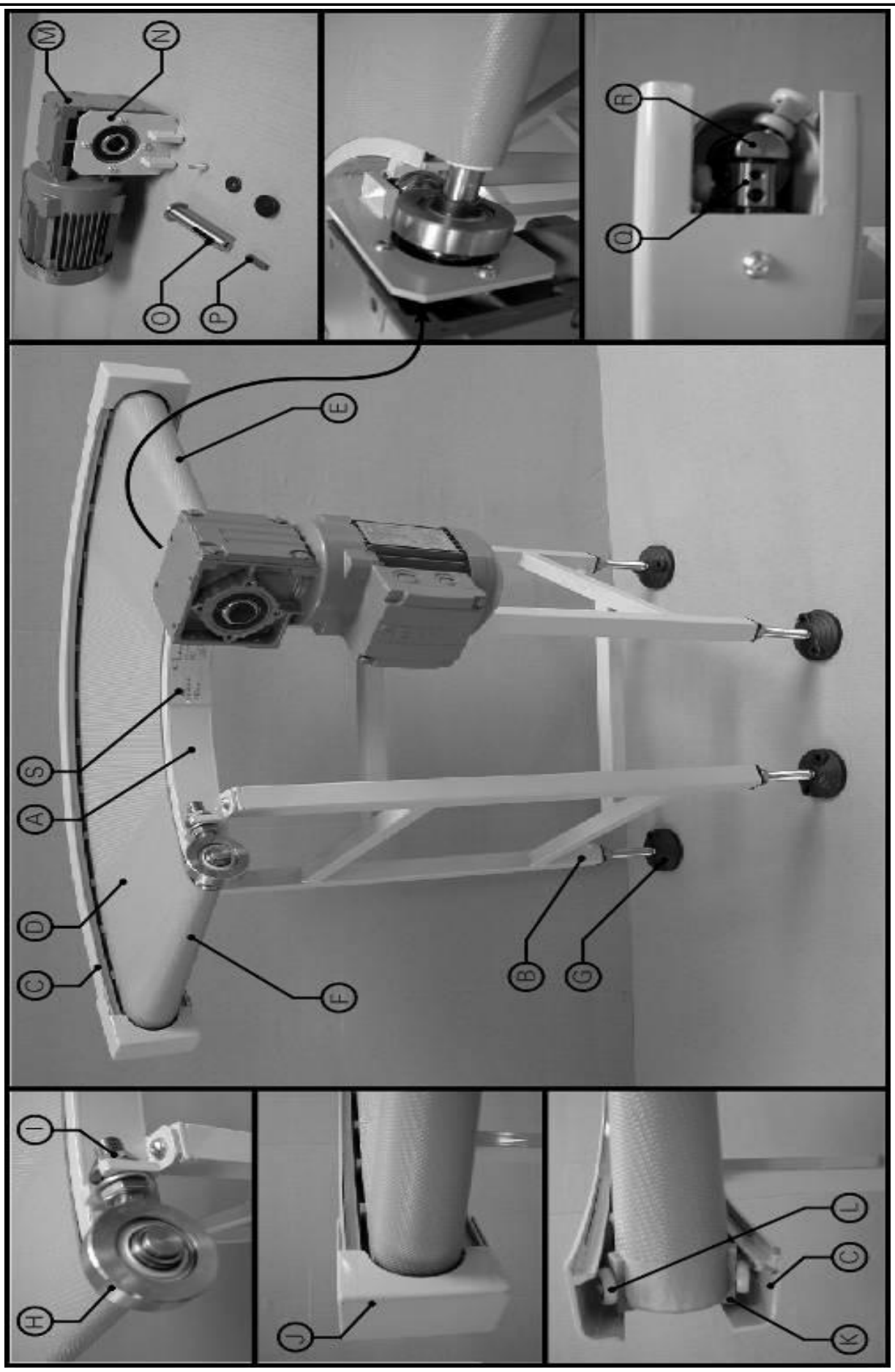
2.4 Structure

This paragraph describes the design of the curved belt conveyor. Table 01 shows the parts list corresponding to image 01. The last column of table 01 refers to the paragraph where the operation or setting of the relevant component is discussed.

Pos.	Number	Naming	Paragraph
A	1	Belt frame	-
B	1	Support frame	-
C	1	Belt guidance profile	5.2.5
D	1	Conveyor belt	5.2.2
E	1	Drive roller	3 / 5.2.1
F	1	Idle roller	5.2.2
G	x*	Lower frame stabilizers	5.2.4
H	2	Bearing house with self-adjusting bearing	5.2.2
I	4	Adjustment nut (for setting belt tension on inner radius)	5.2.2
J	2	Protective cover	5.2.2
K	x*	Sliding block guidance wheel set	5.2.5
L	x*	Bearing guidance wheel set	5.2.5
M	1	Motor gear (type of slip-on)	5.2.1
N	1	Reaction-arm motor gear	5.2.1
O	1	Filling stub drive roller (if applicable)	5.2.1
P	1	Skewer drive roller	5.2.1
Q	2	Tension axle (for adjusting belt pressure on outer radius)	5.2.2
R	2	As	-
S	1	Nameplate	-

Table 01 Parts list in image 01

Attention! : Quantities marked with x* depend on the dimensions of the curved belt conveyor


M
N
O
P
R
Q
E
S
A
D
C
F
B
G
I
H
J
K
L

2.5 Replacing the conveyor belt

1: Switch off the machine and remove any products from the conveyor. Disassemble the drive of the drive roller, see also paragraph 5.2.1.2..

2: Disassemble the frame (pos. A) of the chassis (pos. B) and place it upside down on a workbench.

3: Remove the end caps (pos. J) and loosen the belt at the inner and outer radius, see figure 06 and paragraph 5.2.2.

4: Remove the Allen bolts from the guide rail (pos. C) and slide them off the machine. The round slats to be replaced (pos. D) can now be removed; watch carefully how the "old" round slats fit around it. Remember that the conical rollers that are NOT attached to the outer radius at the scaffolding shaft (pos. Q and R) see the outer radius and can therefore fall out. Preferably secure these rollers with a Tye-Rib.

5: Check the conveyor for dirt and irregularities, especially the guide rail. Clean the conveyor where necessary. Also check the drive roller cover for wear and replace the anti-slip if necessary.

6: Place the conveyor on the side with the outer radius on the ground, slide the new round blanket around it, and place it back on the table with the belt sliding bed facing down. Make sure that the outer radius and the guide wheels (pos. L) remain clear.

7: Make sure the guide wheels fit well over the internal slip strip, then gently slide the guide rail around the belt guide wheels. Loosely attach it from the center to the outsides.
Check that everything is in order and place the frame back on the chassis.
Then secure the guide rail securely.

8: Remove the applied Tye-Rib, followed by paragraphs 5.2.2 and 5.2.1.

9: Check the conveyor belt for good running and for unusual noises over time.

3. SAFETY

This chapter contains the main safety instructions for installing, using, setting, cleaning, and maintaining the curved belt conveyor. Not all hazards can be excluded by design. Therefore, follow these instructions and ensure the entire installation is carried out safely.

3.1 General Safety Instructions

- Read this manual before using the bend belt conveyor or performing any work. Check that the type on the machine matches the type in this manual and on the rating plate.
- Only work on the curved conveyor belt when you have been instructed and have sufficient knowledge and skills.
- Keep hands, feet, and other body parts away from moving parts. Operate the machine only when protective covers and other necessary safety features are installed.
- Do not wear loose clothing or jewelry and tie your hair back long.
- Use the curved belt conveyor only within the application area specified by Auto-tec Nederland B.V. and according to the order specification.
- Do not leave tools or other objects on or in the machine and ensure adequate lighting in the workplace.
- Never stand, lie down, or sit on, under, or in the curved conveyor. When starting and test running, ensure that no people or objects are in hazardous areas.
- Do not make unauthorized modifications to the mechanical or electrical work. Work not described in this manual must be carried out by qualified personnel.

3.2 Disabling and Securing

- Turn off the machine and prevent unexpected reactivation before maintenance, cleaning, assembly, disassembly, troubleshooting or blockages, and any other action that may come into contact with moving or hazardous parts.
- Consider all power sources and surrounding equipment that may affect operations. Apply a Lock-Out / Tag-Out (LOTO) procedure where applicable.

3.3 Electrical Safety

- Electrical work may only be carried out by qualified electrical personnel. Check wiring and mains power cords for damage before commissioning.
- Connect the installation only to a suitable electrical supply with the required protective earth and protections.

3.4 Mechanical hazards

- Moving parts can cause pinching, retraction, slipping, or other injury. Never touch moving parts during operation.
- After integration into the complete installation, check whether additional hazardous zones arise from the final setup. Install suitable shields or other safety measures where necessary.

3.5 Malfunctions and blockages

- Never fix malfunctions or blockages while the curved belt conveyor is operating. Turn off and protect against re-engaging before intervening.

3.6 Engine gear reducer and lubrication

- Check the engine gear reducer for damage and oil leakage. Use only the lubricant prescribed for the specific model. In case of leakage or doubt, contact Auto-tec Nederland B.V. or the drive supplier.

3.7 Conveyor belt

- Check the conveyor belt for damage and tears before use, and check the conveyor belt tension and run according to chapter 5.

3.8 Foreseeable misuse

- Do not use the curved belt conveyor outside the specified scope, without necessary safety features, with damaged parts, or for any function other than its intended use.
- Do not use the curved belt conveyor as a platform, step, seat, support, or lifting point. Never use the drive roller step-off as a lifting point.

3.9 Placement and suspension

- When using a subframe, the machine must rest stably and fully on the designated support points. When suspending or mounting without a subframe, the user/integrator must ensure a suitable, strong, and stable construction.

3.10 Residual risks

- Despite the measures taken, risks remain, among others, such as pinching or retraction of moving parts, unexpected movement of the belt or drive, electric shocks, instability of the setup, and injury during assembly, maintenance, or troubleshooting of faults. These risks must be controlled during integration and use.

4. COMMISSIONING

This chapter describes the steps for commissioning the curved belt conveyor.

4.1 Placement

Warning! :	**If the curved belt conveyor is hung by the user or integrator or otherwise attached to a structure, the user/integrator is responsible for a suitable and safe fastening structure. The curved belt conveyor may only be attached to suitable mounting points indicated by Auto-tec Nederland B.V.**

When installing the curved belt conveyor equipped with a subframe, you should keep the following in mind:

- Place the curved belt conveyor on a flat and stable surface so that the curved belt conveyor rests on the ground with all its leveling legs.

Tip!	:	Depending on your working method, it is possible to use the curved belt conveyor with anchor bolts to the substrate. For this purpose, the raised legs are fitted with holes. The advantage of this is that the curved belt conveyor stands firmly and never shifts against connecting conveyor belts.

- Place the bend belt conveyor so that you can easily reach a control panel and/or a main power switch.
- Adjust the height of the curved belt conveyor to the connecting conveyor belts. For height adjustment, see paragraph 5.2.4 "Leveling legs".
- Install the gear reducer, see paragraph 5.2.1 "Gear reducer".

The above actions are actions that you usually perform only once.

4.2 Connections

If the bend belt conveyor is installed as described in paragraph 4.1, the machine can be connected to the power sources.

Warning! :	The curved belt conveyor is supplied *without* a provision for connection to mains voltage. This provision must be installed by the user themselves. **The responsibility for controlling the bend belt conveyor in a process desired by the user lies entirely with the user.**

Life-threatening danger! :	Connect a plug of the bend belt conveyor only to a socket which is designed to work in combination with the plug. The socket must have grounding ground, or be provided with a grounding pin.

Life-threatening danger! :	Damage to the mains power cord is life-threatening and can cause serious damage to the bending conveyor! Make sure the mains power cord cannot be damaged by pinching in the machine, being run over by vehicles, pinching between doors, etc.

Caution! :	If a plug is removed from the socket, hang the mains power cord on the bend conveyor in such a way that the cord cannot be damaged.

Attention! :	Check the direction of rotation of the conveyor belt. This is viewed from above towards the drive, the so-called pulling setup.

5. USER

This chapter describes instructions for working with the bend belt conveyor.

First, read the previous chapters carefully before proceeding to read this chapter.

5.1 Starting / Stopping / Emergency Stop

Warning! :	Interface requirements for integration: The curved belt conveyor is delivered as an unfinished machine, without a provision for connection to mains voltage, without sensors, and without a control unit.
The integrator is responsible for the safe integration of the curved belt conveyor into the entire installation, for the electrical control, and for the conformity assessment and CE marking of the final machine or production line.	
Emergency stop and other safety functions: The entire installation must have appropriate safety functions, including, where required, an emergency stop function, in accordance with applicable requirements, standards, and the conducted risk assessment.	
Thermal protection: The motor must be equipped with a suitable Overload protection (motor protection switch).	

Warning! :	To perform adjustments on the curved belt conveyor, completely switch off the machine by switching off the mains power and/or by unplugging it from the socket. **Apply a strict Lock-Out / Tag-Out (LOTO) procedure** so that the switching mechanism is mechanically locked and cannot be switched on unexpectedly.

Warning! :	Make sure no one is near moving parts of the curved belt conveyor when you start the machine (as a test).

Life-threat!:	Always unplug the plug from the socket or **Lock the main switch** before you start performing (maintenance) tasks on the curved belt conveyor. This prevents the curved belt conveyor from being switched on unintentionally. Also consider surrounding equipment (a curved belt conveyor is rarely set up alone). Additionally, remove all products present on the curved belt conveyor.

5.2 Settings

This chapter describes the settings that the **qualified technician** may perform on the bend conveyor. Where this is not the case, it is clearly stated. If you still wish to change such a setting, please contact your supplier. For proper operation of the bend belt conveyor, it is important that you perform the settings precisely.

Warning! :	To perform the settings described in this paragraph, completely disable the curved belt conveyor **and protect it against reactivation**.

Warning! :	Have all relevant actions not described in this operating manual performed exclusively by a qualified maintenance technician from your supplier.

5.2.1 Motor gear

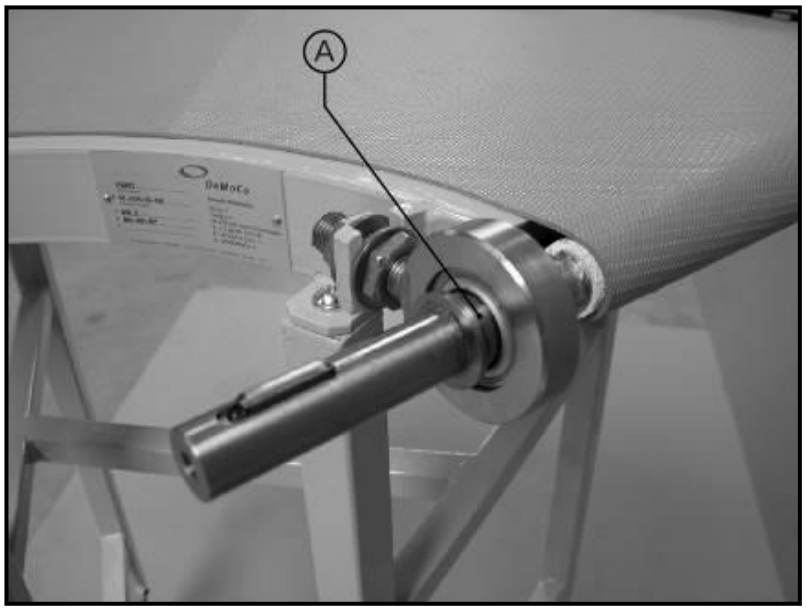
The curved belt conveyor is equipped with a slip-on motor gear for belt drive. At delivery, the motor gear is not installed due to the risk of transport damage. You must install the motor gear yourself.

Attention! :	If the curved belt conveyor is suitable for the food industry, the cabinet filled with a non-toxic lubricant suitable for the food industry. If If the cabinet is leaking, do not refill it yourself, but contact your supplier.

SAFETY INSTRUCTIONS FOR THE INTEGRATOR (IN ACCORDANCE WITH EU REGULATION 2023/1230)

- **Life-threatening danger from electric current:** The electrical connection of the gear motor must only be performed by a qualified electrical technician.
- **Unintended switch-on:** Ensure that the mains voltage and any control voltages are mechanically locked against accidental switching on (Lock-Out / Tag-Out) throughout the assembly and maintenance procedure.
- **Interface requirements for the control**: The integrator is responsible for the design of the electrical control and the necessary safety features of the entire installation.
- **Overload protection:** The motor must be equipped by the integrator with suitable thermal protection (motor protection switch).

Image 02



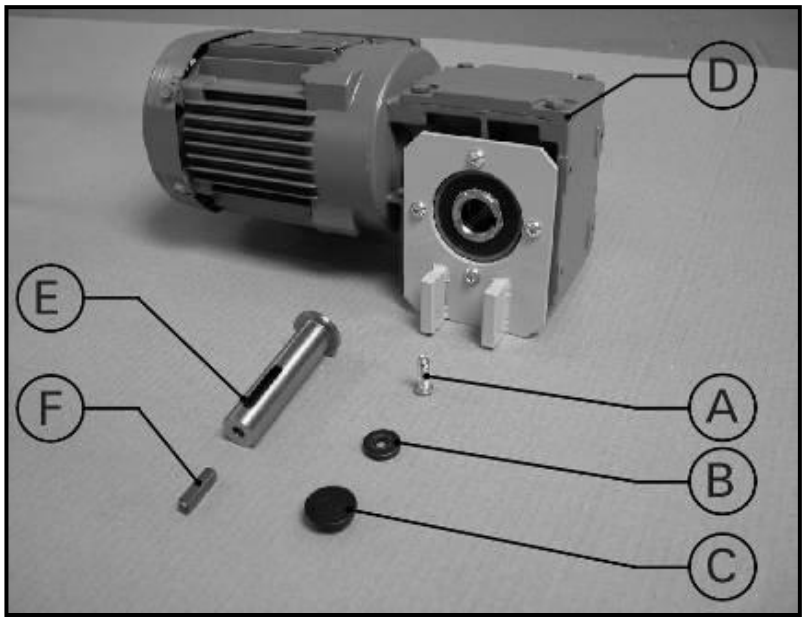


Image 02 Engine reducer and accessories

5.2.1.1 Assembly

To install the slip-on gear motor, follow these steps. See also images 03, 04, and 05.

- **Risk of entrapment:** When handling and sliding the gear motor, watch your hands. The weight of the motor can create a risk of entrapment between the motor housing and the conveyor frame.

- Before initial installation, remove the protective tape from the hollow shaft and clean the hollow shaft, keyway, and key.

- Check that the axle step (03 A), keyway, and skewer () show no damage.04 F

- Check that the filling can (04 E) is placed on the shaft (if applicable).

- Rotate the shaft so that the keyway is facing upwards.
- Place the skewer in the crank slot. Tap the skewer with a plastic hammer into the crank slot until the crank is fully engaged.

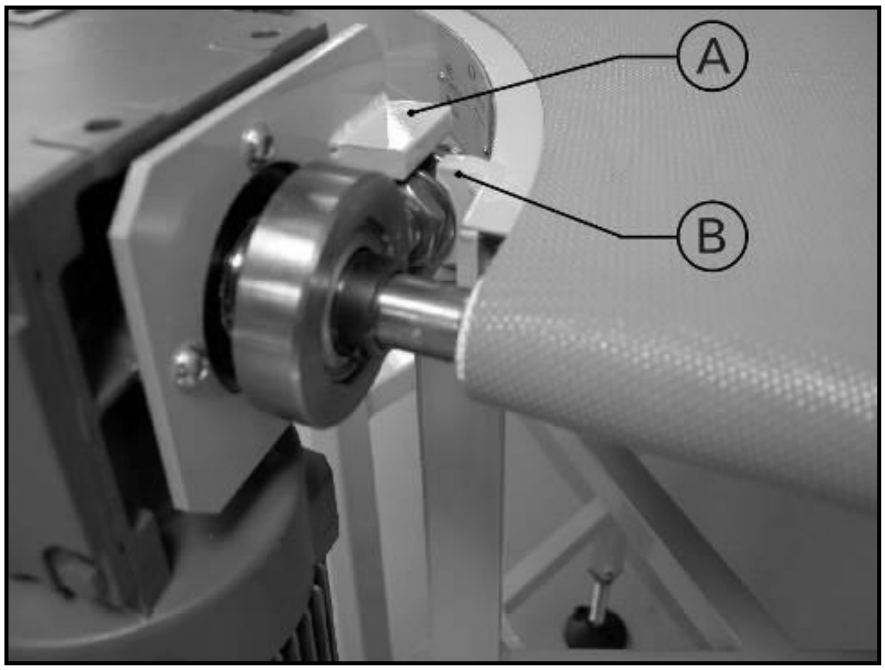
- Remove the cover caps () from the gear motor (04 D) with a thin screwdriver.

- Remove the bolt (), ring (04 B) from the hollow shaft of the gear reducer.

- Apply a thin layer of grease—suitable for the specific application—to the axle step. This prevents the engine gear reducer from being difficult to remove from the axle next time.

- Slide the gear reducer onto the shaft, with the reaction arm () facing the conveyor. Align the keyway in the concave shaft with the shaft. Slide the gear shaft so that the lips on the shaft over the cam (05 B) fall onto the frame. Slide the gear motor further along the shaft until the shaft touches the locking ring in the hollow shaft. If necessary, turn the gear motor to get the reactor arm into the correct position. The gear gear should be able to slide onto the shaft by hand without much effort. Under no circumstances use a hammer or other tools for assembly!

Image 04 Motor gear reducer with reaction arm



- Place the ring (04 B) into the hollow shaft of the gear reducer.
- Insert the bolt (04 A) into the axle step and tighten the bolt.
- Press the cover cap () into the hollow axis of the gear reducer.

SAFETY MEASURE AFTER ASSEMBLY:

- **Rotating parts: The hollow shaft of the motor gear reducer may still be partially open or exposed at the rear after installation. The integrator must check whether the final installation position creates mechanical contact hazards (retraction or wrapping hazard). If necessary, the integrator must install a suitable cover before the conveyor is put into operation.**

5.2.1.2 Disassembly

- Remove the cover (04 C) with a thin screwdriver.
- Loosen the bolt (04 A).
- Remove the bolt and washer (04 B).
- Slide the gear motor (04 D) off the shaft.
- Place the gear reducer with bolt, ring, and cover away so that it does not get damaged.

5.2.2 Tensioning the conveyor belt

Attention!	**:**	Check the conveyor belt tension every 24 hours. An incorrect belt tension has accelerated wear of the curved belt conveyor as a result. Due to contamination, the the conveyor belt may shrink. If this is the case, you must fully retention the belt monthly to ease and tense according to the instructions in this paragraph.

Indications of incorrect belt tension include:

- Folding of the conveyor belt
- Excessive noise on the outside radius during input and output at the location of the drive roller and idle roller.
- Slipping from the belt (check the anti-slip coating of the drive roller)
- Irregular speed of the belt.

Causes of excessive conveyor belt tension can include contamination of the belt, drive roller, and/or the reversing roller. Therefore, first check the belt and rollers and clean them if necessary; see paragraph 5.2.3 "Cleaning".

When checking the belt tension, the following should be taken into account:
Too high belt tension increases wear on the guide wheels and rails, and too low a tension causes slippage between the drive roller and the conveyor belt. As a result, the drive roller and conveyor belt wear out faster.

You check the conveyor belt tension as follows:

- Let the belt spin briefly.
- Turn off the belt bend conveyor and unplug it from the socket.
- The belt tension must be determined by the external- *and* inside (by feel) are the same. It should be noted that a slightly higher belt tension on the inside is normal.
- If the belt tension is too high, you can no longer turn the wheels on the belt and they will hit the guide rails during entry due to high tension. The lifespan of the wheels and guide is then significantly shortened.
- If the belt tension is too high or too low, you must immediately restore the belt to the correct tension.

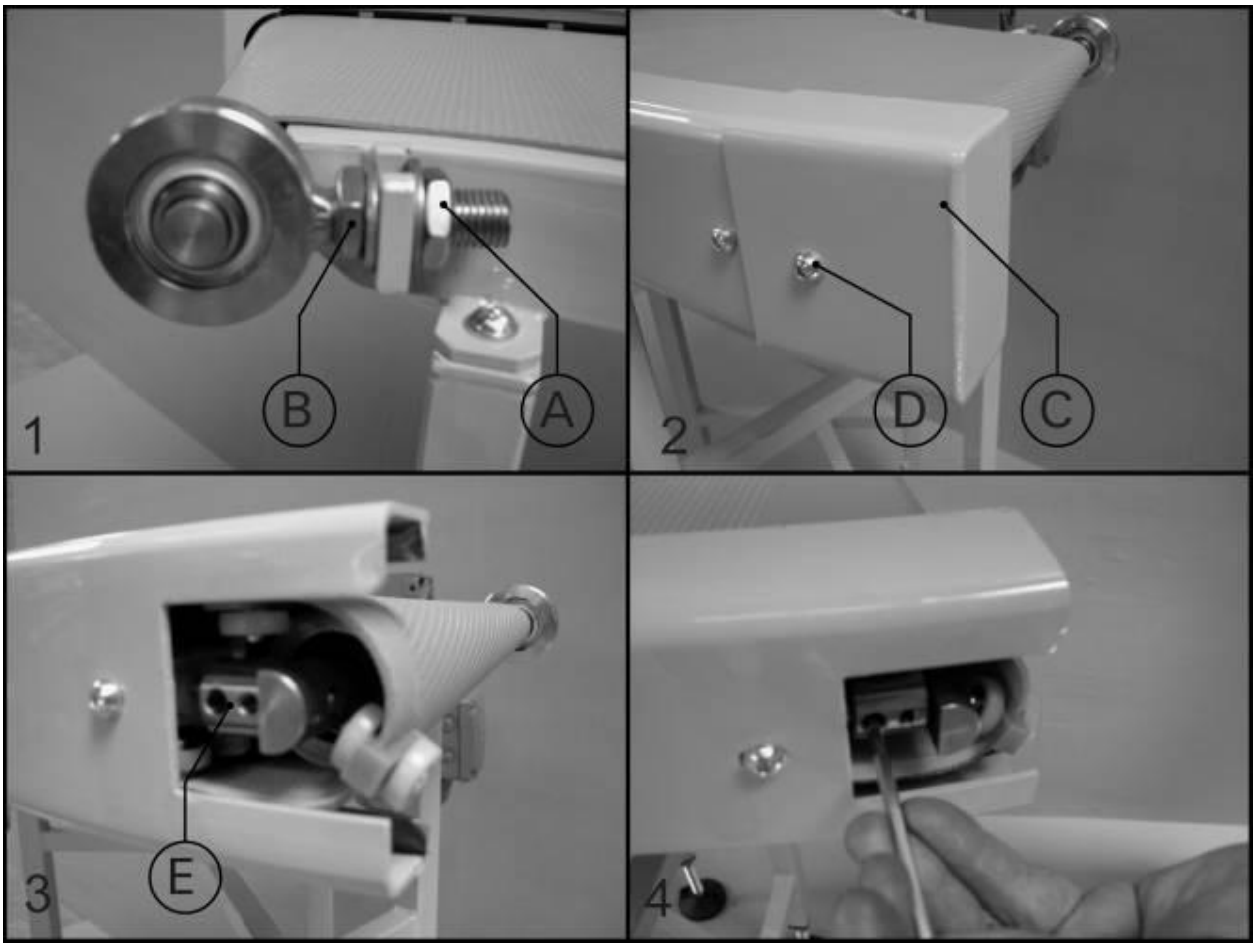
Caution!	**:** Check every 48 hours to ensure the drive roller surface is not damaged. If this is the case, the belt may be damaged. Contact your supplier if the roller is damaged; do not repair it yourself.

Assembly and disassembly of the drive roller and idle roller are not necessary during normal use.
Tensioning is preferably done on the non-driven roller and only in extreme emergency on the driven roller.
Perform the following steps to bring the conveyor belt to the correct tension.

Tip!	**:**	The best way to tension the belt is with two people. Where each set up on one side of the curved belt conveyor.

- The tensioning of the belt is done by adjusting the reversing roller.
- Turn off the bend belt conveyor and remove all products from the belt.

Image 05 tension the belt



- Loosen the ball head screw (05 D) of the protective cover (05 C).
- Remove the protective cover.
- Loosen the locking nut (06 A) of the lower housing on the inside.
- On the inside, unscrew the tension nut (06 B) until the belt is de-stressed.
- Screw in the shaft (06 E) on the outside until the belt is de-stressed.
- Use a thin screwdriver or hex key to turn the shaft that fits into the hole in the shaft.
- Switch on the curved belt conveyor. Observe the precautions described in chapter 3 "Safety".
- Turn the shaft out on the outside radius and the tension nut on the inside until the belt gains grip and starts turning evenly. Do not increase the belt tension anymore.

- The belt tensioning should be proportional. This means that where the conveyor belt is longest, the belt is tightened the most.
  Example: If the belt is extended by 2 mm at the inner radius, the belt will be stretched at the outer radius ($R_{outside}/R_{inside}$) x2 mm

- Turn off the conveyor.
- With the correct belt tension, the belt can still be easily turned by hand when the drive is disconnected.
- Tighten the locking nut (06 A) of the bearing housing on the inside.
- Attach the protective cover (06 C). Attach the bulb head screw (06 D) to hold the protective cover in place.
- Switch on the belt bend conveyor and check the belt movement. Also pay attention to noises from the drive, guide wheels, etc. Repeat the above actions if necessary until the belt tension is correct.

5.2.3 Cleaning

Perform the following steps to clean the belt bend conveyor.

- Turn off the conveyor and remove all products from the belt.
- Remove (if present) the power plug from the socket.

For a stainless steel version:
The belt bend conveyor can now be fully cleaned with a pressure washer which pressure is set to max. 25 bar and the temperature does not exceed 60°C.

Caution!	**:**	Never direct the high-pressure jet directly at drive components of both mechanical and electrical in nature. In particular, the electric motor, bearings of the drive roller and idle roller and wheels on the belt must be spared. Never use hard objects to clean the rollers and/or belt, as this can cause lasting damage to the mentioned components.

For a carbon steel version:

Blow the belt clean with compressor air and also clean the guide and protective covers.
In general, in NON-food-safe applications, it is sufficient to clean the belt with a solution of semi-warm water with green soap. After cleaning, wipe the belt with water and dry it.

5.2.4 Support Legs

To adjust the belt bend conveyor to the correct height, the subframe is equipped with leveling legs.

The belt bend conveyor is set up in the following way. Assuming it is already positioned in the desired location.

- Unplug the power cord from the socket
- Unscrew the control nuts (07 B) of the leveling legs (07 A).
- Adjust the belt bend conveyor on the input and output sides to the desired height by turning the threaded ends. The threaded ends are equipped with a hexagon for this purpose.
- Tighten the locknuts. Check the transition from the bend conveyor to the connected equipment.

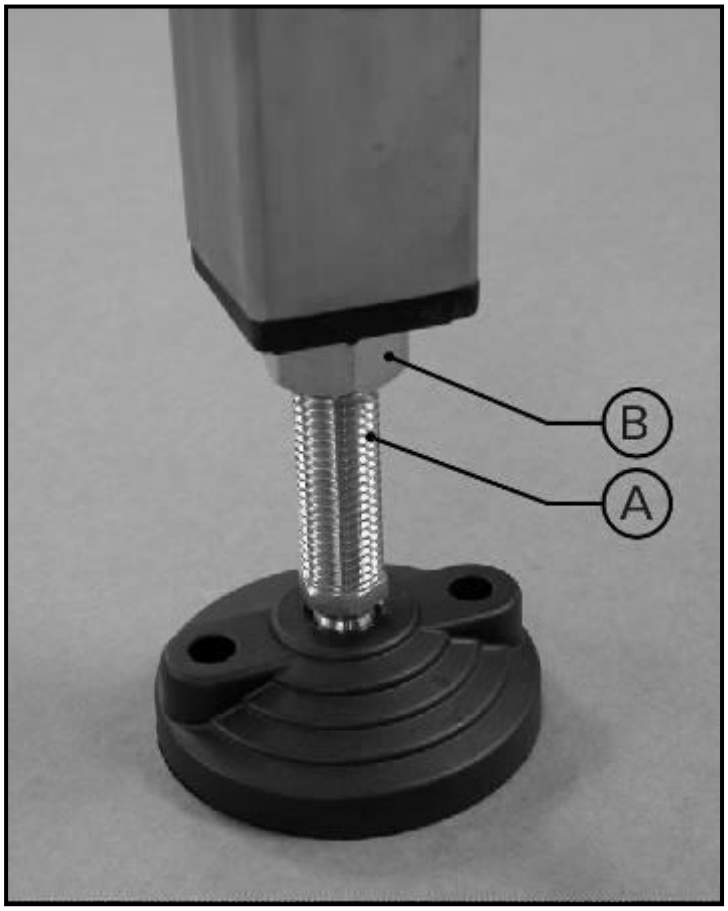


Image 6 Dippers

5.3 Maintenance

We advise you to regularly inspect and maintain the bent belt conveyor.

Warning!	**:**	For all maintenance tasks on the curved belt conveyor, switch the Turn off the belt bend conveyor by switching off the mains power.

With the periodic checklist on this page, you regularly check all points listed and perform actions necessary for the proper functioning of the curved belt conveyor. The list indicates at which times you need to perform checks or maintenance tasks.

Use the checklist in this manual as the original, and make a copy for notes. Write your name and the date on the copy you made, and check off which points you checked.
Keep the completed copies at the back of this manual. You can then find out when you last checked parts. You will also have an overview of the wear points.

Caution! :	Late repair from the belt bend conveyor to your supplier. The curved conveyor requires careful adjustment. Improper repairs and adjustments will cause damage to the curved conveyor. All parts are available from your supplier.

Tip! :	Has your belt bend conveyor serviced annually. During the service, all parts such as bearings, rollers, and drive are checked, and the engine gear oil is changed if necessary. This way, you are assured every year that you can turn it smoothly. Moreover, the annual maintenance prevents points from being overlooked that could lead to costly repairs in the long term.

Periodic checklist

Machine name : BELT BEND CONVEYOR R50D/R70D (strike out what does not apply)
Name : .....
Date : .... .. -... ...-.....

Checkpoint	Frequency	Action / Control
Wheels	Once every 24 hours	Rotate the rollers smoothly. Do the rollers show no flat edges (jam). Dirt.
Conveyor belt	Once every 24 hours	Wear, damage, welding, contamination, belt tension
Drive roller and idle roller	Once every 48 hours	Contamination, damage, wear, bearing.
Motor	Once every 48 hours	Check for leaks and oil level (for refilling, check with your supplier).
Guide rail	Once a month	Contamination, damage, wear. Do not lubricate the guide rail!
Fixtures	Once a month	Check for proper fastening/operation

Caution! :	The belt bend conveyor does not require external lubrication. External lubrication promotes dirt adhesion, which results in accelerated wear of the curved belt conveyor.

If a drive is supplied with the curved belt conveyor, you must maintain it according to the practical instructions provided by the drive manufacturer.

If the drive is a frequency converter (Movimot), an operating manual will be supplied by the drive manufacturer.

5.4 Spare parts

All spare parts for the belt bend conveyor R50D/R70D are supplied by Auto-tec Nederland B.V.

When ordering spare parts, you must always provide the following information:

1. Type of belt bend conveyor: R50D or R70D
2. Version: Steel or stainless steel
3. Serial number / order number as stated on the nameplate. The order number is also engraved on the inside of the belt frame.
4. Belt width
5. Outer radius of the belt
6. Angle (for example, 90° or 180°)
7. Rotation direction: CW (Clockwise, seen from above the belt rotates clockwise)
   CCW (Counterclockwise, when viewed from above, the belt rotates counterclockwise)
8. Height to top of the belt with adjustable legs in middle position.
9. Color and thickness of the conveyor belt. Extra options such as spillage edge
10. Type of motor: See type plate on the motor

5.5 Warranty and Delivery Terms

Our delivery terms apply to all our quotations, all assignments to us, and all agreements concluded with us. These can be sent upon request.

The warranty terms can be found in the delivery terms and are stated on quotes and order confirmations. These warranty terms are binding unless otherwise agreed with you.

The warranty is void if the user permanently removes parts of the curved belt conveyor.

6. MISCELLANEOUS

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EU installation declaration concerning incomplete machines in accordance with Annex V, Part B of Regulation (EU)2023/1230

Manufacturer: Auto-tec Nederland B.V.
Address: Sexton's office 12, 1721 PN Broek op Langedijk
Country: Netherlands

Authorized for the technical file is: Ingenieurs Bureau Kok, Ing. R. Kok

CURVED BELT CONVEYOR TYPE: R50D / R70D

Description and identification of the unfinished machine

Product: curved belt conveyor
Model / Type: Techmaveyor R50D/R70D
Function: Transporting products in a curve, intended exclusively for integration into a complete production line.

Machine Reference / Serial Number:

The following essential health and safety requirements of Annex III of Regulation (EU) 2023/1230 have been applied and complied with: **1.1.2, 1.1.3, 1.1.5, 1.3.2, 1.3.4, 1.7.3 and 1.7.4**, as well as partially **1.3.7** and **1.4** for the already assembled mechanical construction.

Compliance with requirements **1.2** (Operating systems), **1.2.4.3** (Emergency stop), **1.3.7** (full shielding of moving parts after assembly of the separately supplied motor) and **1.5.1** (Electricity supply) is explicit excluded and entirely under the responsibility of the installer/integrator

The relevant technical documentation has been compiled in accordance with Annex IV, Part B of Regulation (EU) 2023/1230.
The specific technical documentation will be made digitally available upon justified request from the national authorities.

Reference to the applied harmonized standards (or parts thereof):
EN ISO 12100:2010 (General design principles for risk assessment)
EN ISO 13857:2019 (Safety distances to prevent the entry of dangerous zones)
EN ISO 13854:2019 (Minimum distances to prevent entrapment of human body parts)
EN ISO 14120:2015 (General requirements for the design and construction of fixed and movable guards)

Important limitation and instruction for the customer:
This unfinished machine must not be put into operation before the final machine or production line in which it is installed has been declared to comply with the provisions of the Machinery Regulation (EU) 2023/1230 and bears a CE marking

Broek op Langedijk - NL, 24-11-2026

Name and Position:

N.S. van der Veer
Management

Signature:

