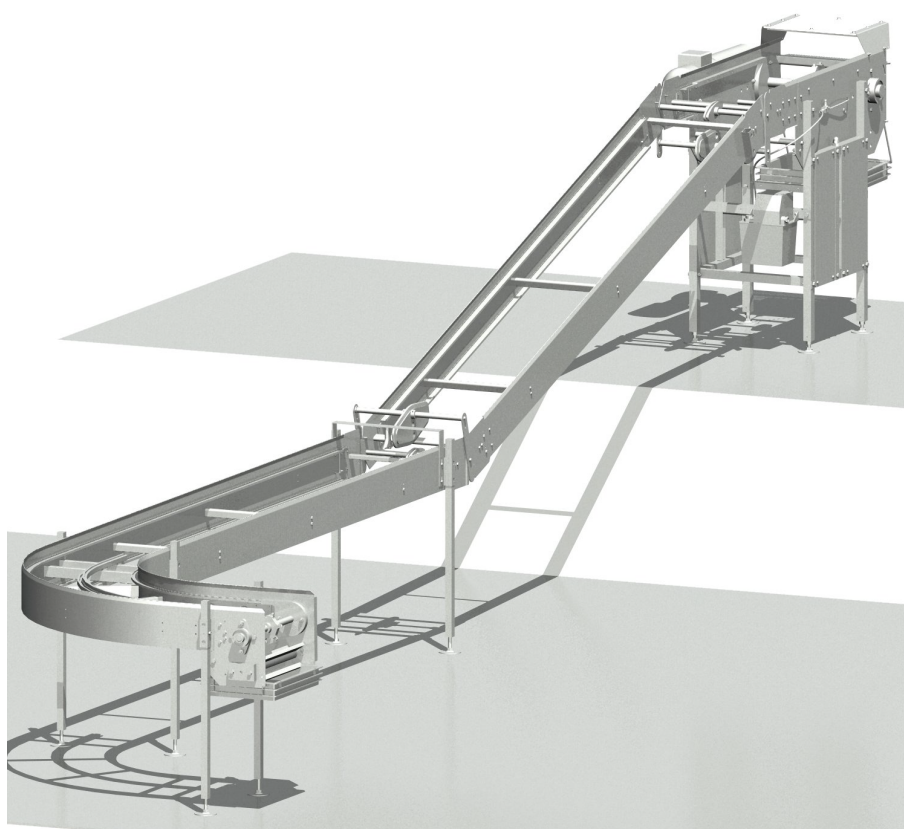


# User Manual

## Vencobelt 40 ALU



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## **1 Foreword**

### **1.1 This manual**

This manual is made as a reference book for the machine that is mentioned on the cover of this document. Only qualified users can use and maintain this machine in a safe way. Keep the manual in the same place near the machine. If the manual gets lost order a new one via your supplier.

This manual provides you with information about safety, technical specifications, operation and maintenance. Take your time to read this document carefully before using the machine.

The machine is developed with all care and meets the CE-marking. Therefore it is not allowed to modify the machine.

The machine is inspected thoroughly before delivery to you.

Note the registration number of the machine. You can find this number on the production label of the machine. Make sure to have this number at hand in case you want to contact the service department of you supplier.

Vencomatic is not responsible for damage or injury caused by not following the instructions mentioned in this manual.

### **1.2 Manual**

Everyone working with or near the machine should know the contents of this manual. Follow the instructions in the manual. The management should instruct the personnel according to this document and follow all regulations and suggestions.

Never change the order of the to do actions.

Keep this manual during the lifetime of this machine in the same place near the machine. The manual should be at the users disposal.

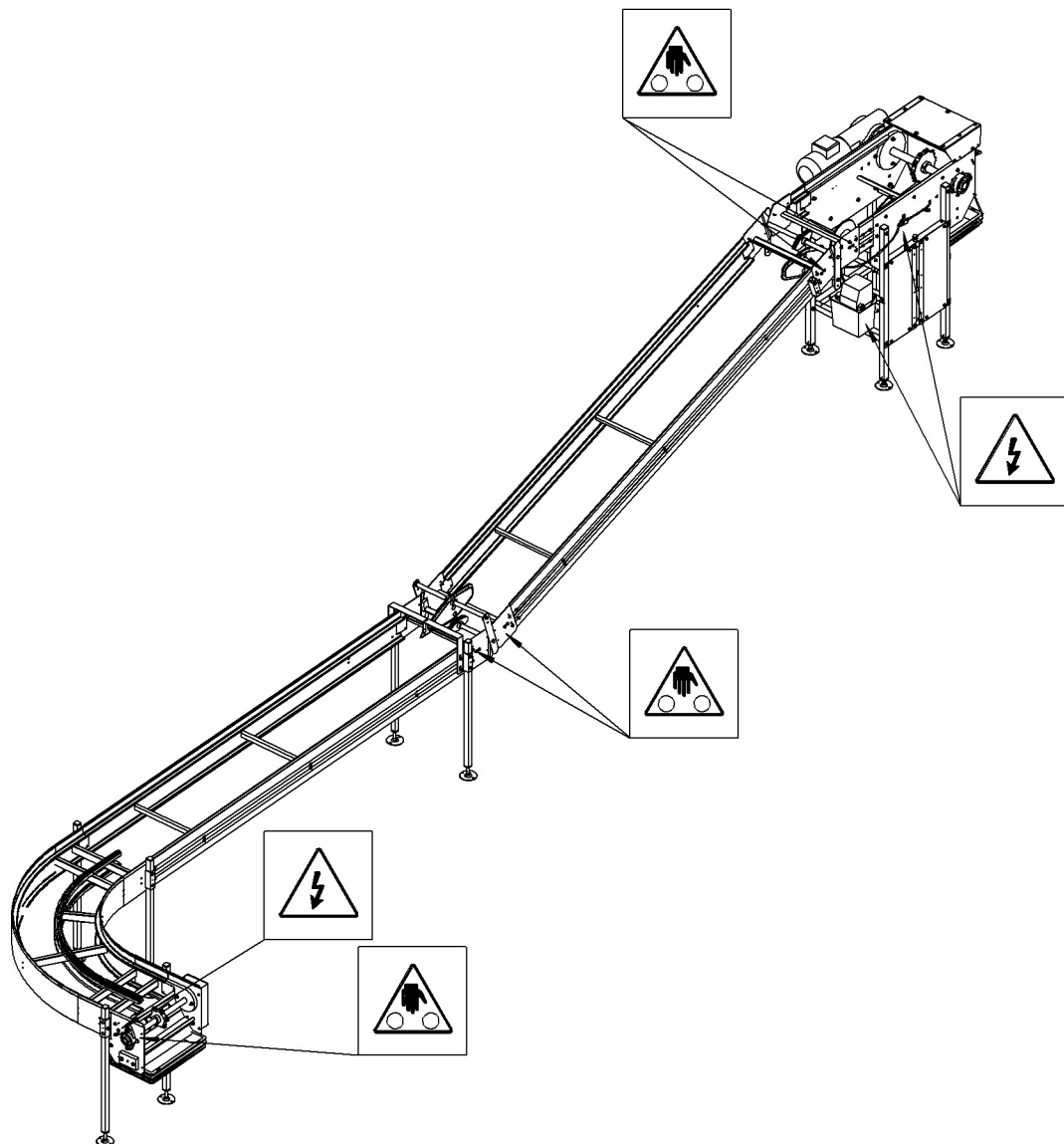
### **1.3 Document codes**

The document code consists of six parts:

- Field 1: document type
- Field 2: product type
- Field 3: version number
- Field 4: language code
- Field 5: month of publication
- Field 6: year of publication

## 1.4 Stickers on the machine

Following stickers are applied to the machine. See picture below.



## 1.5 Icons in this document

In the manual of this machine the following icons are used:



Careful

Procedures that can cause damage to the product, surroundings or environment. This damage can occur if procedures are not carried out carefully.

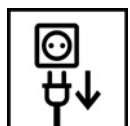


Warning

Danger for electricity / electrical power.



Remarks, suggestions and advices.



Pull out the plug first before proceeding operation.



Consult the indicated Information source first.



Protect against water and moisture.



Watch out!

Procedure that needs extra attention.

## 1.6 Available documentation

The following documentation of the Vencobelt is available:

- user manual (Vencobelt 01-en/August-2001)
- installation manual (Vencobelt-01-en/August-2001)

## 1.7 List of terms

In this manual the following terms are used:

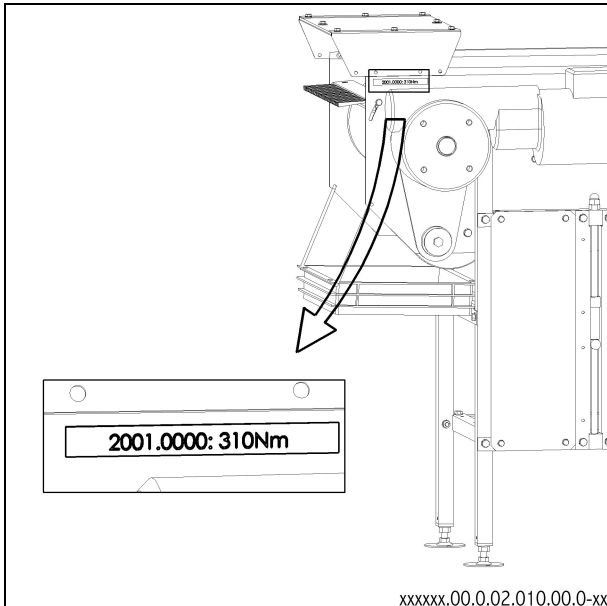
<b>Technician</b>	A trained -and therefore acquainted with the applied technique- expert familiar with the possible dangers of the machine. Technicians have a minimum age of 19 years. They have a solid knowledge of transport techniques. Technicians are authorized to transport, install, place in operation and repair the machine.
<b>Authorized user</b>	See 'User'. The 'authorized user' is also authorized to install and commission the machine.
<b>User</b>	The customer using the machine according to the purpose detailed in the concerning user manual. The user is responsible for the operation and the in the user manual described periodic adjustment, cleaning and maintenance of the machine.
<b>Conveyor belt system</b>	Indication for all possible versions of this machine.
<b>Component</b>	Identification for every separate connectable part of the machine.
<b>Flock</b>	Indication for the economic life cycle of the chickens.

## **1.8 Service and technical support**

When an item is not discussed in this manual contact your local Vencomatic dealer for information about specific procedures.

## **1.9 Identification of the system**

The production label is placed on the drive unit. See picture below.



The number on the production label represents the order number.

## **1.10 The machine and the environment**

### **1.10.1 Packaging material**

The packaging material mainly consists of:

- (corrugated) cardboard
- (untreated) wood
- plastic packaging material

Inform the customer to inquire about the possibilities for recycling and environmentally friendly disposal / re-use of the packaging materials.



### **1.11 Discard the machine**

Discarded machines should be disposed of in an environmentally friendly way according to the local regulations. The used materials can be subdivided roughly in:

- plastic (egg carrier on chain, dirt tray, various plugs)
- untreated metal (shafts)
- coated metal (motor and bearing block)
- galvanized metal (sheet metal, fastening materials, legs)
- aluminum (side profiles of section)
- oil and grease (in motor, bearing block and oil lubrication system)

If an electrical control panel is supplied:

The printed circuit board(s) and their components in the control panel are electrical waste.

### **1.12 General safety instructions**

Vencomatic B.V. will not accept any claim for damage or injury caused by not following the safety regulations and safety instructions, or carelessness during:

- transport,
- installation,
- commissioning,
- operation,
- maintenance,
- troubleshooting and repair,

of the machine and possible accessories. Depending on specific working circumstances or additional accessories, additional safety regulation can be needed. If during previous the aforementioned activities a potential danger occurs, please contact Vencomatic B.V. immediately.

#### **1.12.1 Installation manual / user manual**

- Every technician has to know the contents of the installation manual. The technician must follow the instructions in the installation manual conscientiously.
- Every (authorized) user has to know the contents of the user manual and follow the instructions in the user manual conscientiously.
- Never change the order of the “to do” actions.
- Store this manual carefully.

#### **1.12.2 Stickers and instructions on the machine**

Stickers, symbols and instructions are an integral part of this machine's safety precautions. It is therefore not allowed to cover them up and / or remove them. They have to be present and legible during the whole life cycle of the system.

- Replace or repair illegible stickers, symbols and instructions immediately.

### 1.12.3 Technician

Transport, installation and commissioning of the machine is allowed for authorized and trained technicians only. (See 'Terms and Definitions'.) While carrying out their work they are always fully responsible for compliance of local safety regulations and guidelines. Temporary personnel and persons in training are allowed to work with the machine under supervision of an authorized technician only.

### 1.12.4 Authorized users

An authorized user is the customer using the machine. This use is in accordance with the purpose of the user guide. The user is responsible for the operation of the machine. The user takes care of periodic adjustment, cleaning and maintenance of the machine. These items are written down in the user manual.

The 'authorized user' is also authorized for installation and commissioning of the machine.

### 1.12.5 Technical specifications

The technical specifications cannot be changed.

### 1.12.6 Modifications

Modification of (or parts of) the machine is not allowed. Use original (spare)parts advised by the manufacturer only.

## 1.13 Taken safety measures for this machine

The following safety measure protections are present:

- Guard for transfer brush on drive unit.
- Warning stickers, see 'Stickers on the machine'.
- Electrical protection, see 'Manual Electrical Control Panel'.

## 1.14 CE-marking, intended use

### 1.14.1 Machinery directive

The machine is constructed according to the machinery directive. Therefore the machine is CE-marked.

CE-marking means that the machine at the time of delivery met the CE-requirements applied to the machine at that moment. The responsibility for CE-conformity for the machine expires entirely or partly and changes to the buyer if the following conditions are not observed:

The CE-marking is applied only to the machine.

- The machine can only be used in observance with the contents of this user manual.
- The machine can only be used within the range of the products specifications.
- The original state of the machine cannot be changed without written authorization of Vencomatic B.V.

#### 1.14.2 Purpose Vencobelt

The Vencobelt is a machine for transportation of eggs.

Every other or further use is not regarded conform the purpose. Vencomatic is not responsible for damage or injury because of this. The machine is constructed according to the valid requirements and standards. Use the machine only in technical perfect state, conform previous mentioned purpose.

#### 1.14.3 Use according to purpose

The "Use according to purpose" as recorded in the EN 292-1 is the use where the technical product according to its specifications -including its possibilities according to the sales brochure- is capable of. When in doubt this is the use that seems obvious resulting from construction, type and function of the product. "Use according to purpose" also includes following the instructions in the user guide.

### 1.15 Warranty regulations

The warranty regulations applied to the machine are recorded in the terms of delivery and payment of Vencomatic BV, registered at the chamber of commerce in Eindhoven with number 873/94.

The warranty has a validity of 12 months.

The warranty expires if:

- The warranty validity is past 12 months.
- Not authorized changes and / or modifications are applied to the machine.
- Parts and consumer goods that are not supplied by the manufacturer are applied.
- The maintenance is not carried out according to the indications in the manual.
- The machine is not set up conform the guideline indicated by Vencomatic.
- The machine is installed incompetently.

## 2 General description

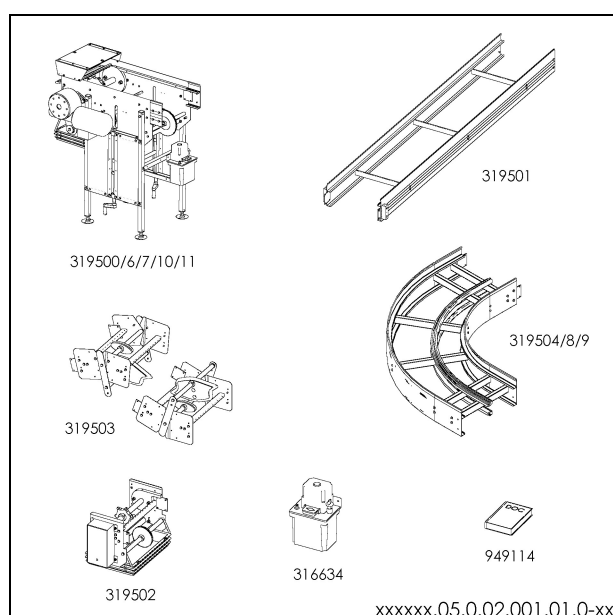
### 2.1 Description Vencobelt

The Vencobelt is made up of modular components. This means that –depending on the use of the component- different positions are possible.

- The maximum capacity of the Vencobelt is 25,000 eggs per hour.
- The belt speed is 4.5 meter/minute with the electric motor running at 50 Hz.

The following components can be part of the Vencobelt.

- 319500/6/7/10/11 : drive unit
- 319501 : section
- 319503 : incline / decline set
- 319504/8/9 : corner
- 319502 : return unit
- 316634 : oil lubrication system
- 949114 : binder with bill of material and manuals



### 2.2 Purpose / use

The Vencobelt is designed for transportation of eggs. Because of the modularity it is possible to make various arrangements, custom made to the local needs and possibilities. Therefore the Vencobelt can be easily integrated in “house layouts”.

### 2.3 Productspecifications

Only chicken- and turkey eggs can be transported with this machine.

### 3 Technical data

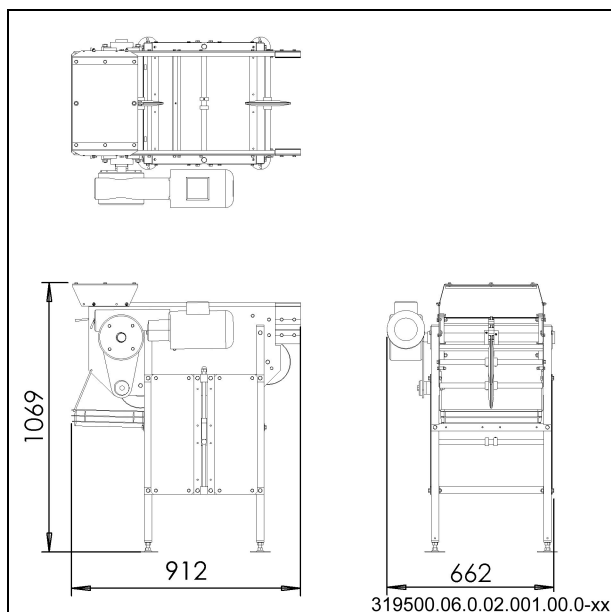
#### 3.1 Technical data drive unit

##### 3.1.1 General drive unit

Description	Torque (Nm)	Max. effective Vencobelt length	
		(m)	(ft)
VB40ALU 110 Nm	110	25	82
VB40ALU 210 Nm	210	50	164
VB40ALU 310 Nm	310	100	328
VB40ALU NEMA-flange *	variable	75	246
VB40ALU Japan	310	100	328

\* motor type to be installed after consultation with dealer.

##### 3.1.2 Dimensions drive unit



All motor versions have the same dimensions.

### 3.1.3 Electrical installation drive unit

Description	Power	Mains voltage
VB40ALU 110 Nm	370 Watt	3x230 / 3x400 V
VB40ALU 210 Nm	550 Watt	3x230 / 3x400 V
VB40ALU 310 Nm	550 Watt	3x230 / 3x400 V
VB40ALU NEMA-flen*	0.5 hp	1x230 V 60Hz
	0.75 hp	1x230 V 60Hz
VB40ALU Japan	550 Watt	3x230 / 3x400 V

\* motor type to be installed after consultation with dealer.



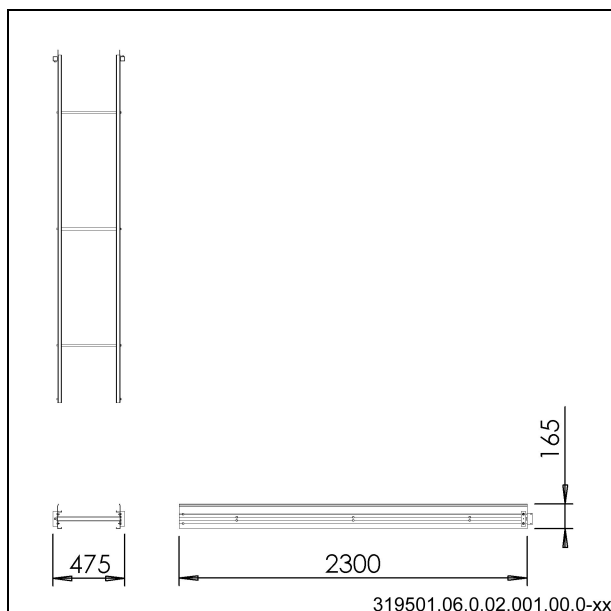
Electrical data is subject to changes.

## 3.2 Technical data section

### 3.2.1 General section

Description	General
Material	Aluminum

### 3.2.2 Dimensions section

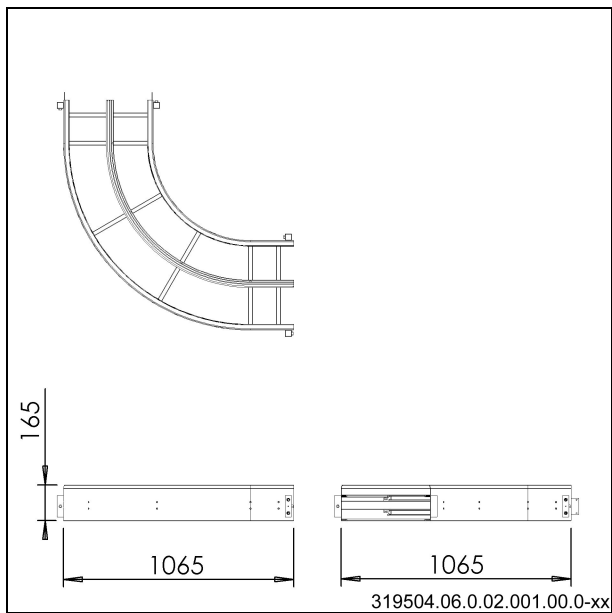


### 3.3 Technical data corner

#### 3.3.1 General corner

Description	Angle of corners
Corner VB40ALU 90 degrees	90 degrees
Corner VB40ALU 45 degrees	45 degrees
Corner VB40ALU degrees	0-90 degrees

#### 3.3.2 Dimensions corner



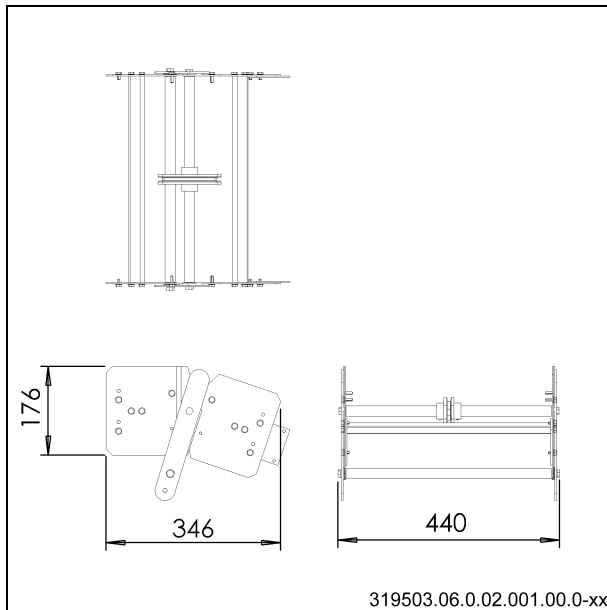
### 3.4 Technical data incline / decline set

#### 3.4.1 General incline / decline set

##### Description

An incline / decline set always contains an inclining, a declining component and a plough. The maximum angle is 28 degrees.

#### 3.4.2 Dimensions incline / decline set





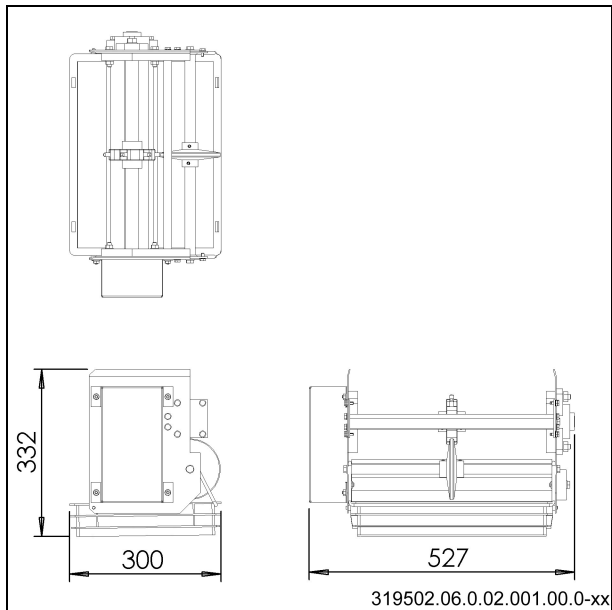
### 3.5 Technical data return unit

#### 3.5.1 General return unit

Description
-------------

On the return unit a rotating cleaning brush is mounted. The cleaning brush cleans the egg carriers on the chain.
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#### 3.5.2 Dimensions return unit

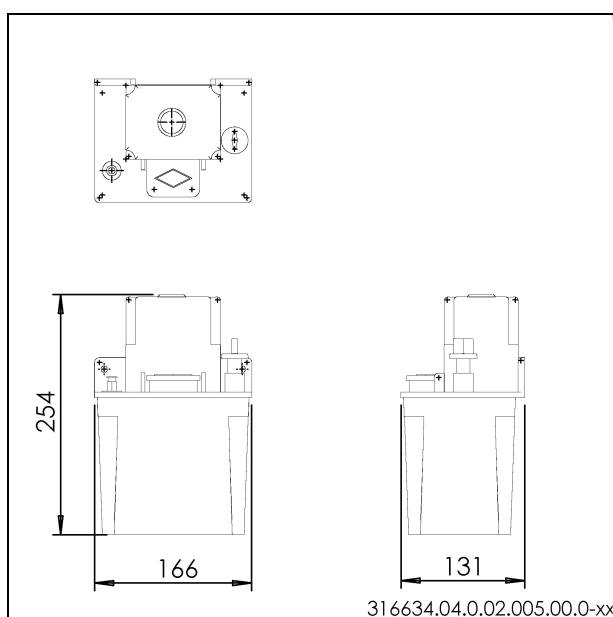


### 3.6 Technical data oil lubrication system

#### 3.6.1 General oil lubrication system

Description	Quantity / unit
Manufacturer	Buijer
Qmax	0,01 cc/minute
Pmax	4,1 bar
Volume oil reservoir	1.8 liter
Oil type	Paraffinum perliquidum PH. EUR. 99

#### 3.6.2 Dimensions oil lubrication unit



#### 3.6.3 Electrical installation oil lubrication system

Description	Unit
Frequency	50/60 Hz
Voltage	230 Volt
Capacity	Max. 3 Watt

## **4 Transport**

### **4.1 Transport safety regulations**

See also 'General safety prescription and -instructions '.

## 5 Storage

### 5.1 Storage safety regulations

- See also 'General safety instructions'.
- Respect the surrounding conditions. Never store the system in a room where the temperature can get under +10 °C. Lower temperatures can damage sensitive parts.
- Store the system in a dry and dust free room.
- Place the system on a level floor.
- Never place heavy products on top of lighter products.

## 6 Operation

### 6.1 Operation elements

The machine is operated from the central control panel.

#### 6.1.1 Operating the oil lubrication system

The amount of lubricant delivered for each stroke of the piston is adjustable from 1cm<sup>2</sup> to 5cm<sup>2</sup>.

Adjustment is made by raising the collar with indicator window and turning manual feed knob and collar.



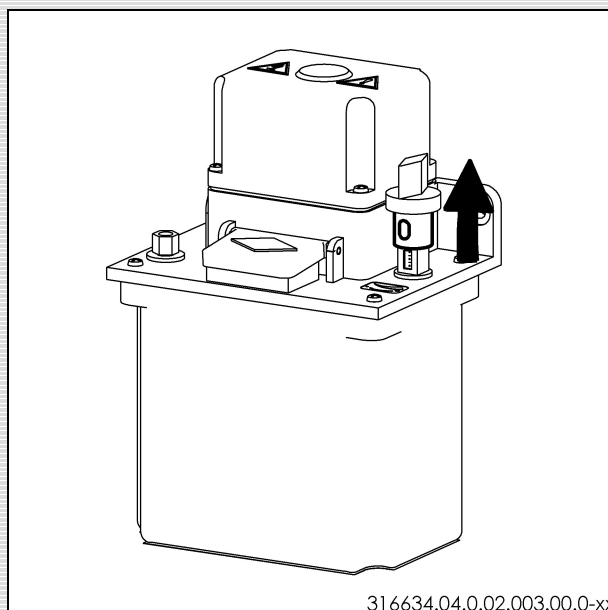
The chain always has to be greasy, this is the responsibility of the owner/user.



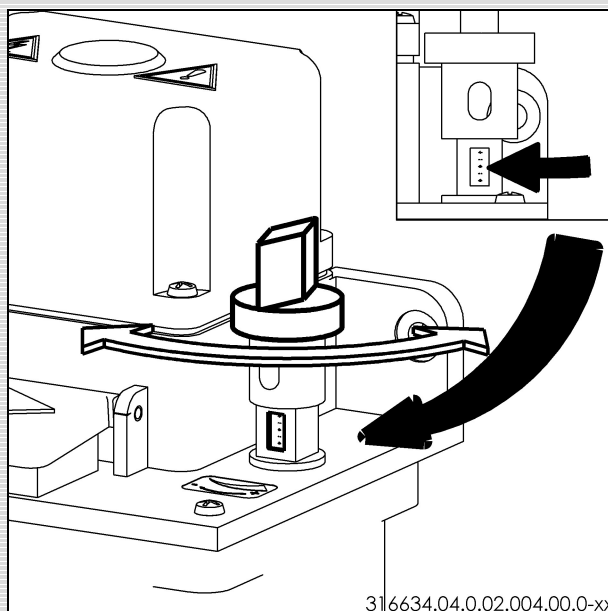
There always has to be sufficient oil in the reservoir, this is the responsibility of the owner/user



Electrical data is subject to changes.



316634.04.0.02.003.00.0-xx



316634.04.0.02.004.00.0-xx

### 6.2 Emergency stop

On the electrical control panel there is an emergency stop.

See also 'Manual Electrical Control Panel' for further information.

## 7 Settings

### 7.1 Settings table



Disconnect all electrical connections before proceeding operation.

Frequency	What to do
<b>Settings after run in period*</b>	Check if all the components of the machine are well aligned and leveled to each other: the chain should run evenly.
	Check if the nut of the adjustable foot is fastened. If not: check if the height is correct and fasten the nut.
	Check if the bearings run smooth.
	Tighten chain: see 'tighten chain'.
	Join chain ends: see 'join together chain ends'.
<b>Settings during 'in operation' situation</b>	Adjusting the oil lubrication system: see 'operating the oil lubrication system'. Attention! Never close the oil reducing valve of the oil lubrication system while pump is in operation.
	Adjusting timer of oil lubrication system: see 'Manual Electrical Control Panel'.
	Tighten chain: see 'tighten chain'
<b>Monthly settings</b>	Check if all the components of the machine are well aligned and leveled to each other: the chain should run evenly.
<b>Setting after one flock</b>	Check if all the components of the machine are well aligned and leveled to each other: the chain should run evenly.
	Check if the nut of the adjustable foot is fastened. If not: check if the height is correct and fasten the nut.
	Check if the bearings run smooth
	Tighten chain: see 'tighten chain'
	Join chain ends: see 'join together chain ends'

- The run in period is past when it is not necessary to tighten the chain anymore.

## 8 Maintenance



Disconnect all electrical connections before proceeding operation.



Always check if the electrical connections are dry after cleaning.

Frequency	What tot do	Where on the machine
<b>After installation</b>	Check the oil level of the motor	On drive unit
<b>Production depending maintenance</b>	Remove feathers from brushes, rotating brushes and shafts	On drive unit, return unit and shafts on remaining components
	Spray chain clean highpressure cleaner	Near return unit. Watch out! Do not spray on bearings. Let the system run during spraying
	Clean the electrical part with a moisten cloth and domestic soap	Motor drive unit and oil lubrication unit
	Clean motor fan	With compressed air
<b>Daily check and maintenance</b>	Empty litter bin	Near drive unit and return unit
	Visually check oil level of the oil lubrication system: the level has to be between the upper and the lower marking	Near drive unit
	Check if the chain is greasy enough	Whole chain
<b>Monthly maintenance</b>	Check on wear and tear, centering of the parts	Drive wheels, transport chain, chain-closing link, green plastic parts on the corners, bends and egg carriers
<b>Yearly maintenance / Maintenance after one flock</b>	Check the oil level of the motor	On drive unit
	Spray chain clean highpressure cleaner	Near return unit. Watch out! Do not spray on bearings. Let the system run during spraying
	Clean the electrical part with a moisten cloth and domestic soap	Motor drive unit and oil lubrication unit

## 9 Failure

### 9.1 Failure table



Disconnect all electrical connections before proceeding operation.

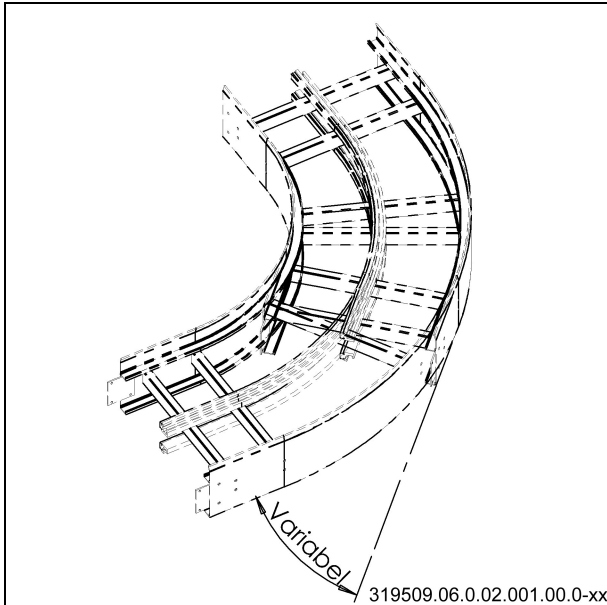
Failure	Cause	Solution
<b>Chain slips near drive wheel</b>	Chain is too loose	Tighten chain. See 'Tighten chain'
	Chain wheel worn out	Replace chain wheel
	Chain worn out	Replace chain
<b>Eggs are greasy</b>	Too much grease on transport chain	Regulate amount of grease. See 'Settings table'
<b>Eggs are dirty</b>	Transfer brushes are dirty	Clean brushes with water and domestic soap
<b>Eggs are broken</b>	Broken or missing egg carriers	Replace egg carriers
	Machine is not leveled correctly, egg carriers stick	Level machine
	Transfer is badly adjusted or broken	Adjust or replace transfer
	Egg supply is too big	Decrease egg supply
<b>Motor drive unit runs heavily</b>	Oil lubrication system is switched off	Switch on oil lubrication unit See: 'Operating the oil lubrication system'
	Out of oil	Check oil level, if necessary refill
	Out of oil motorreducer / oil level too low	Check oil level, if necessary refill
<b>Brushes return unit don't run</b>	Geared belt is loose or worn	Tighten geared belt or fix and tighten geared belt again
<b>Machine will not start after cleaning or installation</b>	Chain is too dry	Oil the chain with a hand brush
<b>Eggs get broken in a corner</b>	Egg supply is too big	Decrease egg supply
<b>Eggs get broken in the incline / decline set</b>	Egg supply is too big	Decrease egg supply
	Setting of incline / decline axis are wrong	Place incline / decline axis in highest position



## 10 Options

### 10.1 Paper roll

### 10.2 Corner with bend 0-180 degrees



### 10.3 Drive unit type VB40ALU NEMA-flange / Japan

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