

# Instructions



## Shaker VIRO neo

**Keep this manual within immediate  
reach of the machine**

Translation of the original instructions -en English



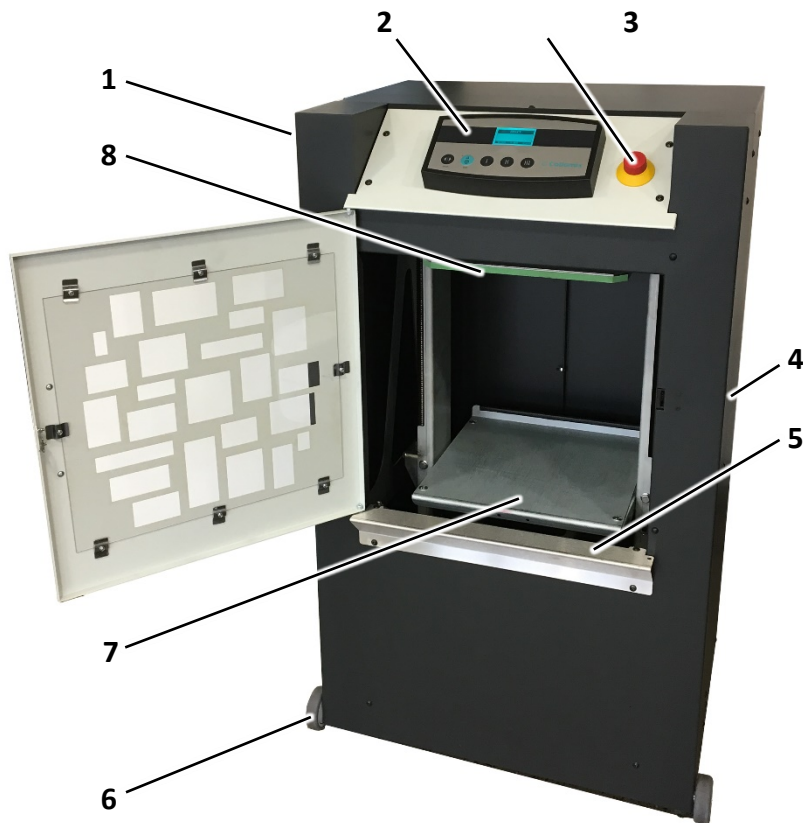


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## 1. Layout Drawings

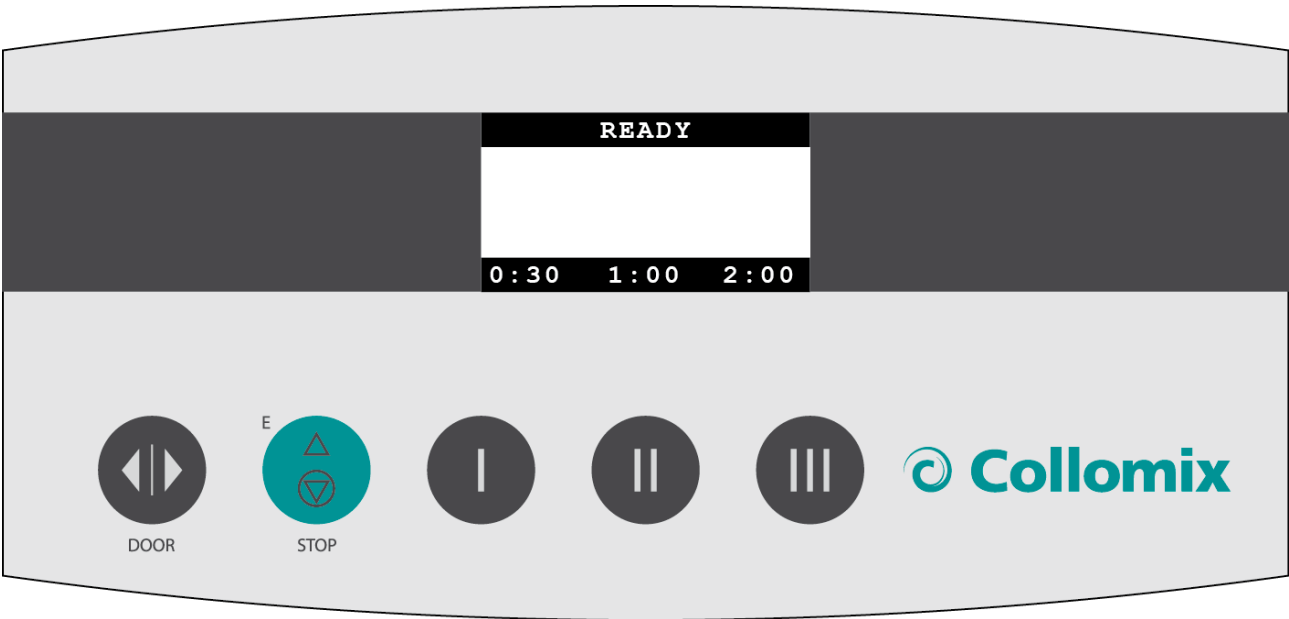
### 1.1 Machine components








### Machine components

1. Main switch and DC fuse	5. Loading shelf
2. Operating unit CSE	6. Transport rollers
3. EMERGENCY STOP Switch	7. Mixing table
4. Manual door release	8. Clamping plate

1.2    Operating and display components



	Button for DOOR	<ul style="list-style-type: none"><li>• OPEN door</li></ul>
	Button E	<ul style="list-style-type: none"><li>• OPEN the mixing unit</li><li>• STOP – stop mixing cycle prematurely</li><li>• ACKNOWLEDGE messages</li></ul>
	Button I	<ul style="list-style-type: none"><li>• Mixing cycle I (Factory settings 1:00 mins.)</li></ul>
	Button II	<ul style="list-style-type: none"><li>• Mixing cycle II (Factory settings 2:30 mins.)</li></ul>
	Button III	<ul style="list-style-type: none"><li>• Mixing cycle III (Factory settings 3:30 mins.)</li></ul>

## 2. About this document

These instruction uses symbols and labels, which should make it easier for you to find information swiftly. Please read the explanations in the following Section. Please read the safety and warning information in these instructions especially carefully. Safety information is in Chapter 2. You find information on warnings in the introduction of Chapters and before instructions.




Collomix GmbH owns the copyright of images and text.

Please read the operating instructions prior to first use. Pay attention to safety instructions. Keep for future use. This documentation is not subject to change services.

### 2.1 Pictograms and symbols

#### Warnings

The following symbols and signal words are used in this documentation.

Symbol	Meaning
<b>DANGER</b> 	This signal word is used, if death or severe physical injuries is the result of not paying attention to the corresponding precautionary measures.
<b>WARNING</b> 	This signal word is used, if death or severe physical injuries may result from not paying attention to the corresponding precautionary measures.
<b>ATTENTION</b> 	This signal word is used, if slight physical injuries occur from not paying attention to the corresponding precautionary measures.
<b>CAUTION</b>	This signal word is used, if malfunction of functions or property damages may occur from not paying attention to the corresponding precautionary measures.
<b>IMPORTANT</b>	This signal word is used for easing operation or for pointing to references.

#### Structure of warnings

##### DANGER

The first line describes the type and source of danger.

The second line describes the consequences which occur if no actions are taken to avert the danger.

➔ The last line describes the actions to take in order to avoid the danger.



##### WARNING

**Danger of injury through disregard of safety symbols**



Ignoring the warnings on the equipment and in the operating instructions can lead to injuries and additional risks.

➔ Pay attention to the warnings on the equipment and in the operating instructions.





The following special safety symbols are used in the appropriate text portions of these Operating Instructions.

#### Mandatory signs

Symbol	Explanation	Symbol	Explanation
	Please read the information		Disconnect from power after use Disconnect from power before opening the housing

#### Warning signs

Symbol	Explanation	Symbol	Explanation
	Warning from a danger zone		Danger of electric shock

Position numbers to the illustrations are stated in parenthesis in the text.

### 3. For your safety

The machine was developed, manufactured, and tested in accordance with the basic safety requirements. Despite, there is an element of risk.

- Therefore, please read these Operating Instructions before working with the machine.
- Keep the Operating Instructions within immediate reach of the machine.
- Please hand the Operating Instructions to any subsequent owners.

#### 3.1 General Safety Information

The basic safety information of this Chapter are supplemented by precise warnings in further chapters of the Operating Instructions.

#### 3.2 Intended Use

The Collomix Shaker is intended to mix:

- Colours
- Colour granulate
- Façade colours
- Industrial colours
- Plaster
- Other materials with low viscosity.

Any other or expanded use of the Shaker is a non-intended and therefore, improper use. In this case, the safety mechanisms and the protection provided by them may be compromised. Collomix GmbH is not liable for any damages caused by it. Part of the intended use are:

- complying with all information in these Operating Instructions
- complying with all safety information
- complying with the inspection and maintenance work

### 3.3 Foreseeable Misuse

Any reasonably foreseeable misuse, which can be hazardous for the user, third parties, or for the Shaker are:

- the use of the Shaker and its accessories contrary to the intended use.
- The use of damaged containers or containers not suitable for mixing.
- The mixing of explosive substances.
- The use of substances, which react chemically with one another; in particular, expanding substances.
- The use of the equipment outside the physical use limitations described in the Chapter "Commissioning / Operating".
- The modification of the control software without the prior coordination with Collomix GmbH.
- Modifications on the Shaker as well as add-ons and retrofits without the prior coordination with Collomix GmbH.
- Operating the system contrary to the requirements of the Operating Instructions concerning safety information, installation, operation, servicing, and maintenance, set-up, and malfunctions.
- Bridging or decommissioning of safety and protective actions of the system.
- Operating the system if malfunctions are obvious / with obvious malfunctions
- Repair, cleaning, and maintenance work without disconnecting the system from power.

#### WARNING

##### Danger of injury through improper modifications

Hazards exist through unauthorized modifications to the system and the use of third party spare parts.

- Use only original spare parts and accessories of the manufacturer.
- Do not change, add to, or retrofit the system without the consent of the manufacturer.



### 3.4 Qualifications of operating personnel

These Operating Instructions are directed toward operators and personnel with the following areas of competency:

Working area	Expertise
Installation, transport and storage	Specialised staff
Commissioning, decommissioning	Trained personnel
Operation	Trained personnel
Servicing and maintenance	Specialised staff
Troubleshooting	Specialised staff

#### Definition acc. to DIN EN 60204-1:

##### Trained personnel:

A person, who was instructed by an expert in the responsibilities he or she has been assigned and any possible hazards in case of improper behaviour and a person, who was trained in the necessary protective devices and protective actions, if needed.

##### Expert staff:

Persons who can evaluate the work assigned to them and recognize possible dangers on the basis of their specialised training, knowledge, experience, and familiarity with the relevant norms.



### 3.5 Safety-relevant components

The machine is equipped with various safety devices. These help to avoid dangers to body and life through electrical and mechanical impacts on the persons working with the Shaker and they help to limit any material damages to the system.

- Do not bypass, remove, or render ineffective the safety equipment.
- Do not operate the system if the safety equipment is not complete or fully functional.

#### Closed housing

The housing, which can only be opened with tools, forms a fixed, separating safety device.

#### Machine door with interlocking device

The door forms a locking, separating unit with interlocking device. The machine cannot be started when the door is open. The door is only released after the mixing process has ended and the mixing vessel is released. Never operate the machine if the machine door is damaged.

#### EMERGENCY STOP Switch

In emergencies the function of the EMERGENCY STOP switch is

- to safely disconnect of the control voltage supply and therefore, bring the machine to a halt.
- to halt the machine, if needed.

### 3.6 Residual Risks

If all precautions are taken, there may be obvious residual risks. Adhering to the safety instructions, the designated use, and the operating instructions can reduce residual risks!

## 4. Equipment Description

The Shaker is a stationary mixing device for closed, tightly closing, round, angular, and oval vessels made of metal or plastic. It is suitable for mixing colours, colour concentrates, building and industrial lacquers, and other materials with low viscosity.

The area of application ranges from the colour wholesale to retail trade, the lacquer and chemical industry to any similar areas. This mixing device is especially suited as system component for colour dosing systems.

The container is automatically clamped into the machine and the substance is mixed by linear inertial forces using an alternating orbital shaking motion.

The necessary mixing time and the suitability of the containers must be determined by mixing trials prior to use.

## 5. Set-up and using the Shaker for the first time

### 5.1 Content

The Shaker is delivered with the following:

- These Operating Instructions
- Cover insert made of foam
- A rubber band to secure the handles
- A power supply cord

### 5.2 Set-up the equipment

The machine is delivered on a wooden pallet packaged in recyclable cardboard. Check the packaging immediately upon receipt and the equipment when unwrapping it for any visual external defects. Keep all parts of the original packaging for a possible necessary return.

**The machine shall be operated only by qualified personnel using suitable lifting equipment eg. a forklift truck to be lifted from the pallette. Only move the fork in from the front or back to avoid damaging the transport rollers (5.5)!**

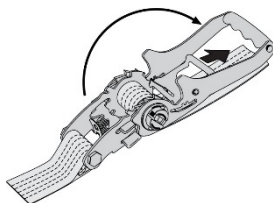
Pay attention to the weight of the machine specified in **11.1** not to exceed the permissible load of the floor.

Do not operate the machine on the shipping pallet or on any other suitable sub-surfaces.

**When setting up, make sure there is enough working space in front of the machine. The opened machine door must not protrude into corridors or walkways!**

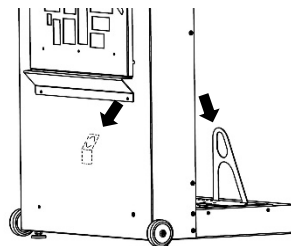
In general, the machine does not need any fine adjustment because of its 3 legs. If necessary, you can adjust any unevenness in the floor with the height-adjustable legs.

To protect the mixing unit from damages during transport, it is secured with a lashing belt, which goes over the mixing unit. The belt must be removed prior to switching on the machine:

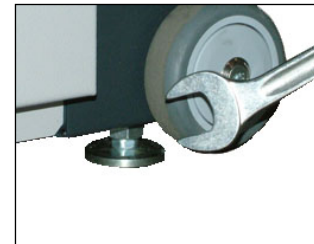


To release, pull the slider and move the lever by approx. 180° to the stop.

The pre-tensioning force is released immediately.



The strap is hooked into the attachment points in the machine.



**Machine legs**



**Transport lock with lashing belt**

### 5.3 Mains connection

Pay attention on proper protection of the electrical circuit such as described under **11.1** Only use Type B residual-current devices (RCD).

Place the mains cable in a way to prevent from stumbling or snagging.

## 5.4 Trial run

A trial run with an empty mixing container must be conducted when first starting the machine or after maintenance and repair work in order to check the proper function of the machine.

### WARNING

#### Risk of injury due to protruding parts

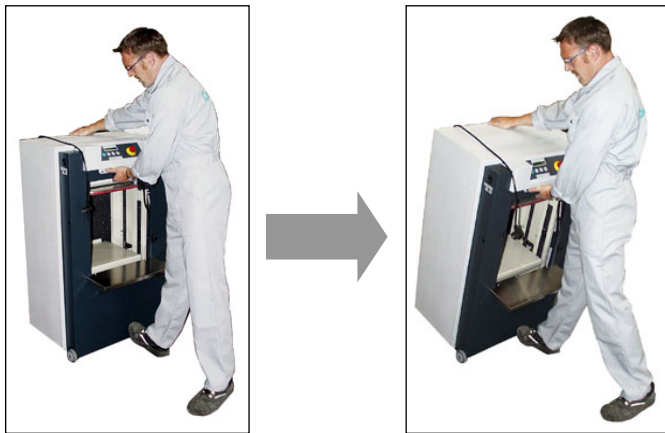
Parts may protrude from the equipment.

- Always work diligently on the equipment and in close proximity of the equipment.
- If the machine is not used, close the door and turn it off on the main switch.



## 5.5 Transport

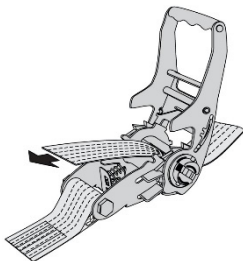
The equipment has two transport rollers on the front side of the housing. These transport rollers allow to move the machine over short distances in an ergonomically user-friendly manner.



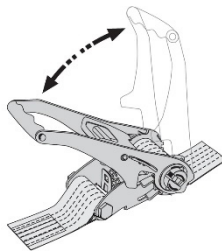
The door must be opened for the machine to be handled safely during transport. Secure the opened door with the hand against swinging.

## 5.6 Attach transport lock

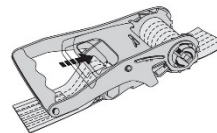
The lashing strap must be inserted into machine during every transport of the machine otherwise the swinging mixing unit could damage the machine. Therefore, you need to keep the lashing strap for a later transport of the machine.



Thread the end of the strap into the shaft until the strap is tight.



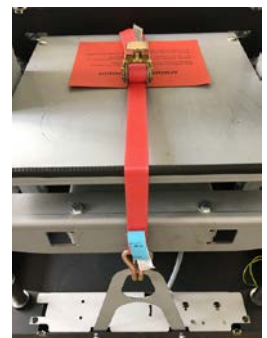
Tension the strap with the lever until the mixing unit reaches the lower limit stop.



Move the lever into the locked position until the slider is engaged.



Front attachment



Rear attachment

## 6. Operation

Prior to working with the machine, check all parts for their proper condition and function. Do not start the machine with defective or missing parts.

Check all safety-relevant structural components of the machine for proper function before starting it. Any defective or damaged parts must be replaced by qualified personnel prior to starting to work with it.

### 6.1 Switching on the machine

The machine is turned on using the main switch (1). After an automatic initialisation, START is shown on the display.

Any errors detected during initialisation are shown in text form on the display.

### 6.2 Load a container

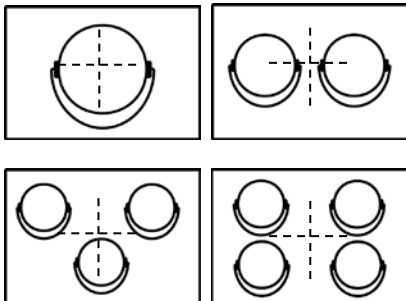
**Only use sufficiently stable and tight-closing vessels for mixing. In case of doubt, consult the manufacturer of the mixing vessels.**

To place the container, proceed as follows:

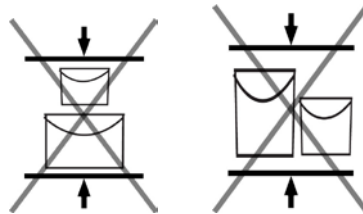
- Unlock and open the door by pushing the **DOOR** button.
- To adjust the mixing unit to the height of the container, use the **E-Button** to raise the clamping plate.
- Observe the weight and size limits of the mixing vessel. Never overload the machine!
- Place the container centrally on the mixing table and secure the container handle with a rubber band or an adhesive.
- Use only undamaged containers, never stack containers!
- Several identical containers can be mixed at the same time. Pay attention to a symmetric arrangement of the containers on the mixing plate.
- Close the door.



**Securing the handle with a rubber band**



**Place containers always in the centre.**



**Do not stack containers!**



**Filler disk**

#### IMPORTANT

If you use larger containers, it is recommended to insert an additional filler disk made of foam. However, the filler disk should not be higher than the rim of the cover. It reduces the membrane effect of the cover and the running noise is reduced.

### 6.3 Starting the mixing cycle

The mixing cycle can only be started after the door is closed.

Push buttons I, II, or III to start the mixing process. The corresponding mixing times are shown on the LD display above the key pad.

The mixing container is clamped into the machine and the mixing process is started. The remaining mixing time is displayed during the mixing process.

### 6.4 Ending the mixing cycle

#### After the selected time is over

The mixing process is automatically stopped. The mixing unit is opened, and the door is unlocked for 60sec. After 60sec. the door must be unlocked to open with the **DOOR** button.

#### Before the selected time is over

The mixing process can be stopped early by pushing the E-button.

### 6.5 End of work

When the machine is not in use, the door should be kept closed.

When done working, switch the machine off at the mains switch (1).

### 6.6 EMERGENCY STOP switch

In dangerous situations, the machine can be turned off with the EMERGENCY STOP switch (3). After the machine is turned off, the mixing unit rotates until it comes to a stop in its position.

#### Reset the EMERGENCY STOP switch

The EMERGENCY STOP switch must be reset by hand.

- Rotate the red control element clockwise.
- After you reset the EMERGENCY STOP switch, reset the message in the display by pushing the E-button.

The mixing unit loosens automatically, the door can be opened, and the container removed.

---

#### DANGER

##### Danger of death by dangerous voltage

There is a residual electrical energy in lines and equipment after the EMERGENCY STOP switch is used. The EMERGENCY STOP switch does not disconnect the machine from the mains voltage.

- If maintenance or repair work is carried out on the machine, always unplug the power cord.



## 7. Errors and Troubleshooting

The troubleshooting tables in this Chapter will help you to determine whether you can troubleshoot yourself or whether you need to call customer service.

### IMPORTANT

Jot down the serial number of the machine and the error code from the display before you call customer service. The machine's serial number is on the type plate.

### 7.1 Possible errors

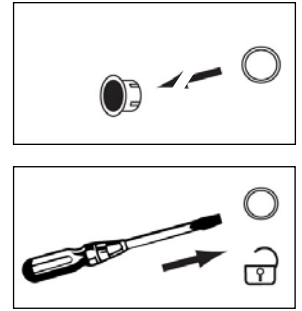
Fault	Description	Machine condition	Solutions
E010	Door open	• Door open	• Close door
		• Door closed	• Check the door lock • Check the power cord / plug to the door lock.
E020	EMERGENCY STOP activated	• EMERGENCY STOP button pushed	• EMERGENCY STOP button released
		• EMERGENCY STOP button not pushed	• Check the switch of the EMERGENCY STOP button • Check the power cord / plug to the EMERGENCY STOP button.
E025	Door unlocked	• Door does not engage	• Check the door lock
E030	Did not find the container	• No mixing container is placed	• Place mixing container
		• Mixing container is placed	• The mixing container is too small
E050	Defective container	• Container is defect	• Container is unstable
			• Check clamping pressure, if necessary adjust
E150	Error clamp motor	• The mixing container is not clamped	• Check the clamp motor • Check the lines to the clamp motor • Check the control
E160	Error rotary decoder	• The mixing unit does not clamp	• Check clamp motor • Check the lines to the clamp motor • Check the control
		• The mixing unit clamps	• Check the control
E170	Error door lock		• Close door completely
			• Check the door lock • Check the connection of the door lock

The grey highlighted services can only be carried out by trained technicians.

## 7.2 Unlock door manually

The machine is equipped with a safety lock, which locks the door automatically after it is closed. In the event of a malfunction or power outage, the door can be locked manually.

- Disconnect the machine from the mains by pulling out the mains plug.
- Remove the plastic stopper (4) from the door unlocking device.
- Use a screwdriver to push the unlocking.
- Open the door.
- Insert the plastic stopper again.



*Door unlocking device*

### WARNING

#### **Risk of injury by machine parts that continue to rotate**

When activating the manual door release, the mixing process is interrupted automatically. The mixing unit will run for a few seconds up to a complete standstill.

- Use the manually door unlocking device only in case of emergency.
- Before using the manually door unlocking device, always disconnect the machine from the mains by pulling out the mains plug.
- Never use the manually door unlocking device whilst the mixing unit is turning.



## 7.3 Fuses on the device

### 7.3.1 Device fuse

If line voltage is available but the power button does not light up, the cause may be a faulty device fuse.

The device fuse is in the mains connection on the back of the machine. Only use 5x20mm, 230V/10AT fuses to replace a blown fuse.

If the device fuse is tripped again, there is a defect in the control unit. If this is the case, contact an authorised service partner to correct the error.



*Device fuse*

### 7.3.2 DC fuse

If the power button is on, but nothing is showing on the display of the operating unit, the cause may be a tripped DC fuse.

The DC fuse is located next to the power button. After the fuse is tripped, wait at least one minute, and only then press the pin back in until it locks into place.

If the device fuse is tripped again, there is a defect in the control unit. If this is the case, contact an authorised service partner to correct the error.



*DC fuse*

## 8. Cleaning, maintenance, and service

It is necessary to check, clean, and service the machine regularly to ensure continuous function.

Unplug the machine from power by pulling the plug before all cleaning, maintenance, and repair work is done on the machine.



### 8.1 Cleaning

Remove any spilled mixed compound immediately from the interior of the machine. For this purpose, use a rag or a scraper. Be careful not to damage any connections or sensors.

**Never use solvent cleaning agents, acetone, gasoline or similar aggressive substances to clean the window in the door or the control panel. Such substances can corrode or even destroy plastic parts.**

Soiled threaded spindles can be cleaned with a rag or a wire brush. The threaded spindles must be re-lubricated with **Mobilux EP2** after cleaning.

#### CAUTION

##### Damage to the machine through dry run ball bearings

If you clean the machine with a high-pressure washer, the lubricant is washed out from the ball bearings and they run dry.

- Never clean the machine with a high-pressure washer or similar.
- Replace dry-run ball bearings immediately.



### 8.2 Maintenance

Only qualified personnel may carry out maintenance and repair work. Use only original replacement parts.

#### 8.2.1 Annual maintenance

- Clean the threaded spindles and lubricate with Mobilux EP2.
- Check the outer flange bearings and swing arms for damages.
- Check the drive belt for wear and tear and adjust the belt tension if needed.
- Check the clamping plate (8) for wear and tear. Replace if needed.

#### 8.2.2 Runtime-dependent service

Drive belts and flange bearings of the mixing unit must be replaced by an authorized service technician every 30,000 mixing cycles but no later than after 1,000 operating hours.

The number of cycles and the operating hours are shown on the LC display of the operating unit during the initialization after the machine is turned on.

### 8.3 Service

If service is required, please consult the customer service or the manufacturer of the machine.

#### DANGER

##### Danger of death by dangerous voltage

Do not open the housing or remove any safety equipment of the machine. Please note that all maintenance and servicing jobs must be left strictly to authorized and suitably trained expert staff. The proper state of all safety equipment and electrical equipment is to verify and document after the repair.

- Only use original spare parts.
- Do not modify or change safety-related parts!
- Any additional components added may not impair safety and must be approved by the manufacturer.





## 9. Accessories

The following accessories are available for the device:

Part	Article no.:
Cover insert 20 mm (set has 5 pieces each)	74088
Cover insert 5 mm (set has 5 pieces each)	74136
Handle fixation	64447
Mobilux EP2 100g	61299

Spare parts are available at [www.collomix.de](http://www.collomix.de).

## 10. Storage, disposal

### 10.1 Storage

The storage area should be cool and dry in order to prevent corrosion on the individual parts of the machine.

The room temperature of the storage area must be constantly above freezing.

- Package the device to prevent any damages through outside impacts during storage.
- If necessary, use cardboard and other packaging material.
- Secure the machine against unintentional tilting and instability.

### 10.2 Disposal

The transport package is made of recyclable material. Please dispose this material accordingly.

At the end of the useful life, the machine must be properly disposed to return the used raw materials to the recycling loop. Please contact the manufacturer directly for any questions concerning disposal.

## 11. Appendix

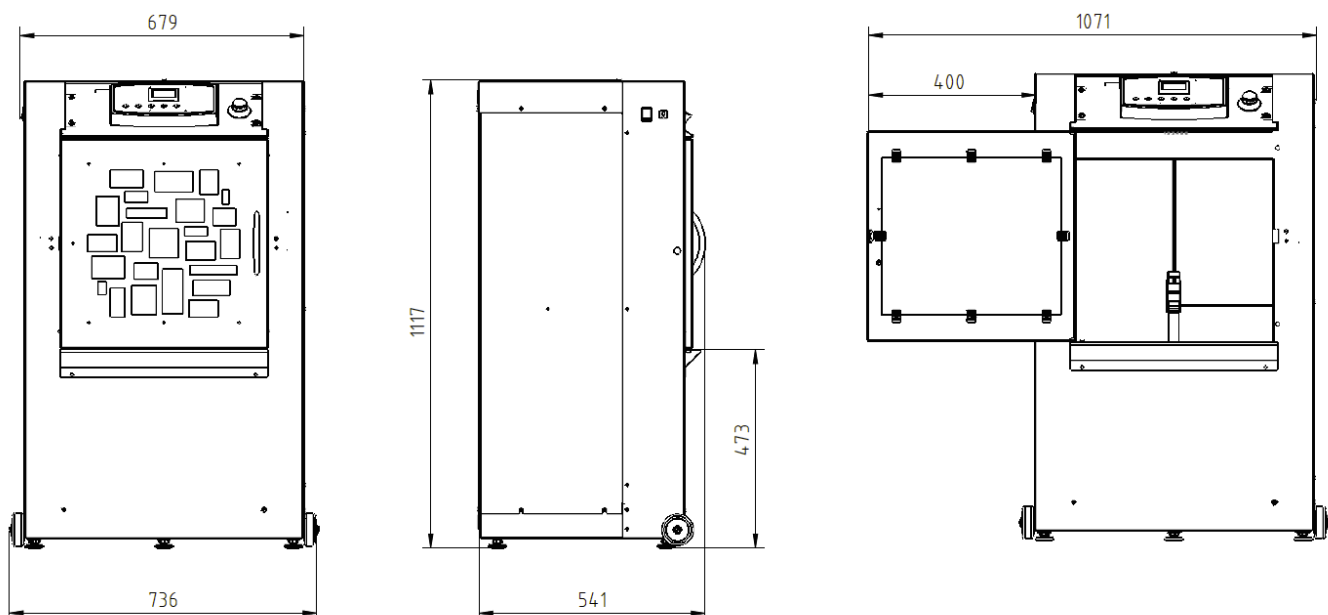
### 11.1 Technical Specifications

<i>VIRO neo</i>	
Power supply:	L1, N, PE; 230 V / 50 Hz
Rated power:	0,9 kW
Frequency:	50 Hz
Fuse:	10 Amp.
Speed of mixing unit:	16 A C (RCD Typ B)
Speed of mixing unit:	- 660 1/min
Mixing weight:	25 kg
Maximum container weight:	40 kg
Maximum container height:	30 - 400 mm
Ambient temperature:	5 ... 30°C
Maximum container footprint (w x d):	360 × 350 mm
Machine weight:	135 kg

Noise emission in accordance with 2006/42/EG

Sound pressure level $L_{pA}$	74,2 dB re 20 $\mu$ Pa
Sound power level $L_{WA}$	66,1 dB re 1 pW
Uncertainty $K_{pA+WA}$	3 dB

### 11.2 Dimensions



### 11.3 EC Conformity Declaration

We hereby declare under our sole responsibility that the products

**VIRO neo**

are in conformity with the following European directives:

2006/42/EC; 2014/30/EU; 2011/65/EU

The following harmonized standards were applied:

EN 60204-1:2006 + A1:2009 + AC:2010, EN ISO 12100:2010, EN ISO 13849-1:2015, EN 50581:2012  
EN 55011:2009 + A1:2010 (group 1, limit class B), EN 61000-3-2:2014, EN 61000-3-3:2013, EN 61000-6-2:2005

Please request technical information from:

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Gaimersheim, 31.05.2018

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#### IMPORTANT

This declaration of conformity will lose its validity if any changes or modifications are made to the machine without the manufacturer's approval.

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### 11.4 Warranty

For your rights in the event any rectifications become necessary, please read our General Delivery Terms and Conditions.

You find these on our website [www.collomix.de](http://www.collomix.de). We are happy to send you our General Delivery Terms and Conditions on request.

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