



Quick Installation Guide

RÜHLE

Echte Originale.

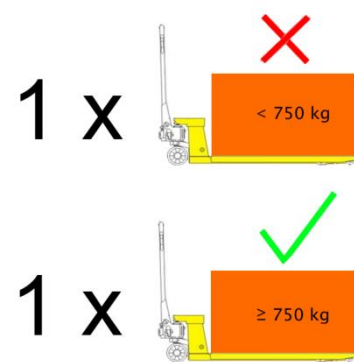
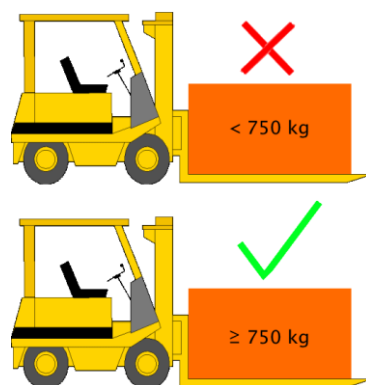
I • Installing the machine



(with machine foot)



(with transportation foot)



II • Operation



- 1) Hood 1
- 2) Hood 2
- 3) Machine foot
- 4) Locking bolt (down holder)
- 5) Down holder
- 6) Cutting knife
- 7) Knife beam
- 8) Vertical blades
- 9) Name plate
- 10) Lateral panel
- 11) Tray
- 12) Folding table
- 13) Power supply
- 14) Charging-position-button cleaning
- 15) Charging -start-button
- 16) Start-button
- 17) Stop-button
- 18) Main switch
- 19) Pusher for residual product
- 20) Door (for trolley)
- 21) Locking bolt (Hood 1)
- 22) Chamber product supply

III • Operating elements

IV • Mains connection

① • Hood 1

② • Hood 2



Charging-position-button cleaning



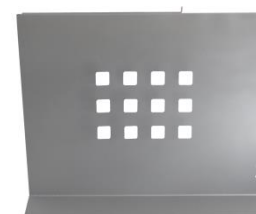
Charging-start-button



Start-button



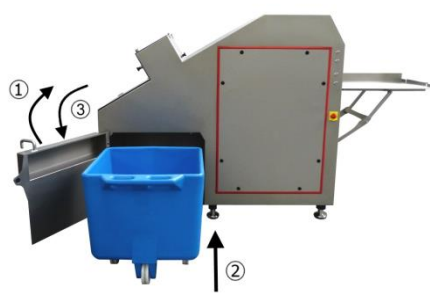
Stop-button



V • folding table (up)



VI • Trolley (push in)



VII • Folding table (charging)



VIII • Tray (charging)



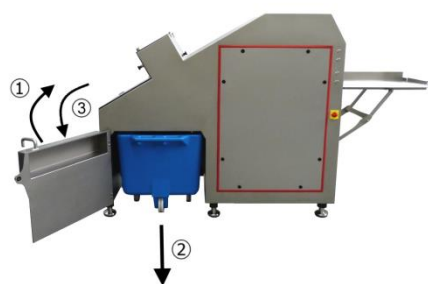
IX • Tray movement



X • Machine start / stop



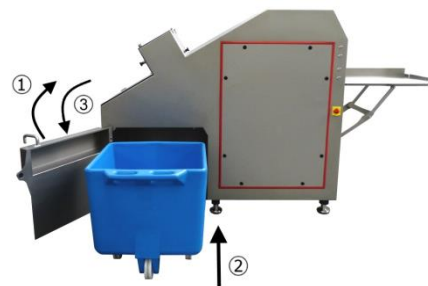
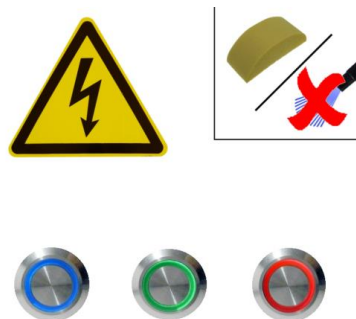
XI • Trolley (pull out)



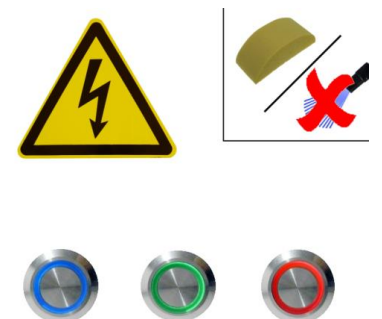
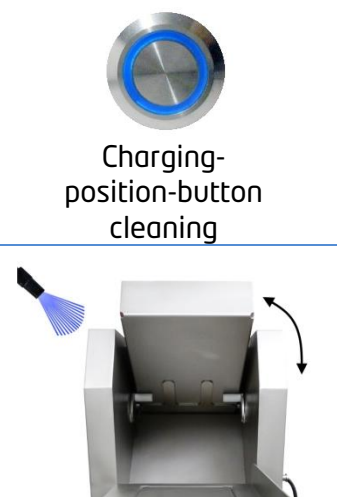
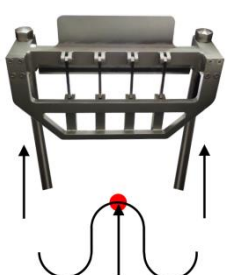
XII • Security functions



XIII • Initial operation



XIV • Cleaning (preparation)



XV • Cleaning



Translation of the original instructions

RÜHLE - Frozen meat cutter

Type: GR 50

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Changes reserved

1 Safety Instructions

!!! Observe the safety instructions during the installation, operation, cleaning and maintenance of the Rühle Frozen meat cutter!



Hazard potentially causing irreversible injuries if disregarded.



Warning, potentially causing serious injuries if disregarded.



Note



Work on electrical equipment of the machine may only be carried out by qualified technicians!



Always disconnect machine from the mains during this process!

1.1 Safety instructions

!!! A **supervisor** (responsible person) must be appointed for the machine!

This person must:

- a) Completely read and understand these operating instructions before transport, commissioning, setup, operation, cleaning, decommissioning, care / maintenance as well as dismantling / disposal!
- b) Prepare work instructions for the intended and safe transport, commissioning, setup, operation, cleaning, decommissioning, care / maintenance as well as dismantling / disposal!
- c) Make sure that the qualified workers have completely read and understood the respective work instructions according to section 1.1b!
- d) Proper functioning of the protective devices must be checked at least once a year by a Rühle service technician!

e) Provide personal protective equipment!

All life cycles phases:



Wear foot protection!



Wear hand protection!



Wear protective clothing!

Cleaning; care / maintenance; dismantling:



Wear eye protection!



Use light breathing mask!

!!! The **operator** must operate the machine according to the intended use and strictly observe all points listed in the "Operation" work instructions prepared by the supervisor.

!!! Before putting the machine into operation for the first time and on each working day, the **operator** must check the functionality of the following safety devices:

- a) Visual check for changes or damages on all machine sides and accessible machine parts, e.g. the cut-off knife. The machine must be shut down in the event of any damages or changes!
- b) Check the safety switches as follows:
Close hood 1, hood 2 and the door for the standard trolley.
 - Start the machine. - Turn the main switch to "0 - Off". - If the machine does not switched off, it must be shut down immediately!
 - Start the machine. - Open hood 1 20 mm. - If the machine does not switched off, it must be shut down immediately!

- Start the machine. - Open the door (for standard trolley) 20 mm wide. - If the machine does not switched off, it must be shut down immediately!
- Start the machine. - Press the stop button. - If the machine does not stop, it must be shut down immediately!

!!! To **shut down** the machine the stop switch must be pressed, the main switch turned to "0" - OFF" and the power plug pulled from the outlet! The machine must be secured against further use!

!!! The **supervisor** must arrange for the repair of the non-functional safety device by a Rühle service technician. Until the corresponding parts have been repaired, the supervisor must ensure that the machine or parts of the machine are under no circumstances put into operation!

!!! The **cleaning personnel** must observe the work procedures from the "Cleaning" work instructions prepared by the supervisor.

!!! The **maintenance personnel** may only carry out work specified as "Regular care", unless any other authorisation has been issued in writing by the manufacturer of the machine. The maintenance personnel must observe the work procedures from the "Maintenance" work instructions prepared by the supervisor.
The power plug must be disconnected for maintenance work!

!!! The machine may not be modified.

!!! Only Rühle spare parts and accessories may be used.

!!! The operating instructions as well as all other technical documents included must be supplied completely when reselling the machine.

1.2 Remaining risk of accidents

!!! All life cycles phases



Damaged knife elements must be replaced!

Any manipulation and bypassing of the safety devices is strictly prohibited!

Do not reach into the area underneath the trough when feeding has started!

When folding down the folding table it must be remembered to hold the folding table in position before unlocking the hinge! To this end, it must be held on the table and not on the flap or its handle!

!!! Maintenance



The machine must be disconnected from the mains when performing maintenance work!



The protective covers may be removed only while performing maintenance (control cabinet, side cover)!

1.3 Intended Use

The frozen meat cutter may only be used for cutting frozen blocks of meat, bone material, fish, vegetables or button up to a temperature of -20 °C. The max. room temperature may be 12 °C for reasons of food hygiene!

This machine may not be operated by persons under the age of 18!



Claims of any type because of damages due to non-intended use are ruled out!

Misuse:

- Any use other than the one listed above is strictly prohibited and is considered misuse!
- Operating the machine in explosion hazard areas is prohibited!

- Handling / processing products and materials not belonging to food products is prohibited!
- The folding table must not be used as storage area, step or seat!
- Meat or bone material with teeth must not be cut!

2 Installation instructions

Installation and commissioning of the machine may only be carried out in the presence of a Rühle service technician or by persons authorised by Rühle.

Rühle GmbH Lebensmitteltechnik shall not be liable for any damage resulting from non-compliance with these operating instructions.

2.1 Machine transport and setup

Please refer to the short instructions supplied with the machine regarding transport and setup of the frozen meat cutter.



The machine and machine parts must be transported by 2 persons (1x operator of floor conveyor / 1x transport supervision).

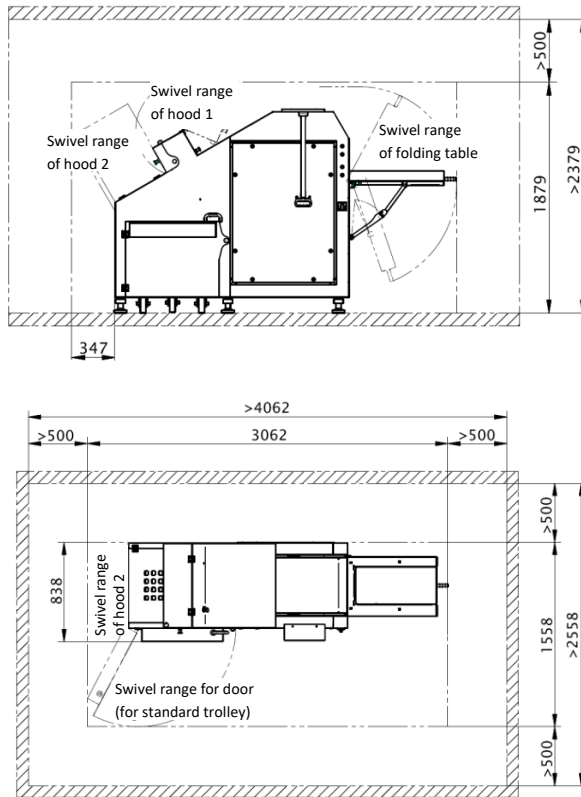
The power supply line must not be damaged by driving over or pinching it!

The machine must be decommissioned until a damaged power supply line has been repaired!



Make sure the machine is stable!

2.2 Workplace description



The work area around the machine is at least 0.5 m on all sides; for maintenance work it is at least 1 m; if used as passage way, it is at least 1.2 m.

2.3 Connecting the machine

The machine is connected to a three-phase current outlet; its data (voltage, amperage) must agree with the specifications on the type plate of the machine.



The machine must be decommissioned until a damaged power supply line has been repaired!

The power supply line must be regularly checked!



Check the correct rotational direction of the machine by starting it. The machine does not start in case of wrong rotational field!



- In such a case, an electrician must change the direction of rotation inside the mains plug.
- The power supply to the machine must be fuse-protected with 16A secured with an AC/DC sensitive ground-fault circuit interrupter (type B).

3 Operating instructions

Please refer to the short instructions supplied with your machine for the operation of your frozen meat cutter.



Follow also the safety instructions in Chapter 1.1!



In its respective life cycle phases (transport, commissioning, setup, operation, cleaning, decommissioning, care / maintenance, dismantling / disposal) this machine is designed for 1-person operation! When using this machine, no other person may be present near the machine. The exception (2-man operation):

- Installation and removal of the cutting blades
- Transport of machine and machine parts
- Maintenance activities

Do not reach into the area underneath the trough when feeding has started!



The operator must make sure that no persons, who do not know the hazards of the machine or cannot anticipate them, are about in the area of the machine!



The operator controls may only be operated by touching it with the fingers. Using any objects (e.g. blade) is prohibited!

4 Cleaning instructions

The frozen meat cutter has been designed to allow for complete cleaning of all parts that come into contact with the food product.

4.1 Safety instructions

- Follow also the safety instructions in Chapter 1.1!
- The cleaning staff must notify the supervisor immediately of any defects on the machine!
- The cleaning staff must use the specified cleaning agents and disinfectants!
- Germ reduction is achieved only by correct cleaning and subsequent disinfection!
- Appropriate material (e.g. brushes, rags, ...) is required and must be provided for the proper procedures of the above!
- Cleaning products and disinfectants approved for the food product area and suitable against contamination (e.g. protein, limescale, ...) must be used!
- The cleaning agents and disinfectants must be prepared to a solution as described in the product data sheet of the manufacturer!
- Personal protective equipment must be worn!



Cleaning with high-pressure cleaners

is permitted only for:

- all outside surfaces,
- insides of the protective hoods,
- inside of the funnel (product feed),
- cutting unit,
- trough and
- slider (residual part presser)

The operator controls must be cleaned manually and may not be exposed to a water jet!



All other parts and surfaces may be cleaned only with normal water pressure!

4.2 Cleaning agents and disinfectants

The following cleaning agents and disinfectants must be used:

Cleaning agents:	Alkaline cleaning:	P3 - topax 12, P3 - topax 19, P3 - topax 66
	Acidic cleaning:	P3 - topax 56
Disinfectants:		P3 - topax 91, P3 - topax 99
Supplier:		Henkel Hygiene GmbH Bonner Str. 117 D-40589 Düsseldorf Tel.: +49 211-9893-0

Or:

Cleaning agents:	Alkaline cleaning:	Somplex F fat solvent
	Acidic cleaning:	Somplex foam, acidic
Disinfectants:		Tego 2000, Tego IMC
Supplier:		Th. Goldschmidt AG Goldschmidtstr. 100 D-45116 Essen Tel. +49 201-1730-1

4.3 Cleaning procedure

Please refer to the short instructions supplied with your machine for carrying out the cleaning procedure.

Cleaning preparations:

- To ensure optimum cleaning, some components of the machine must be removed.
- Start the machine first and move the cutter bar to the highest position.
- Remove any objects lying on the machine.
- Open hoods 1 and 2.
- Remove the standard trolley under the cut product discharge.

5 Service: Care, maintenance, repair

Any work related in any way with service may be carried out only by Rühle service technicians and by persons authorised by Rühle in writing. In this regard, a distinction is made between regular care and maintenance and repair. The respective qualification certificate must be issued explicitly for the corresponding work.



Follow also the safety instructions in Chapter 1.1!



Notify and obtain permission from Rühle customer service if welding or cutting work is required on the machine!
Wear cut protection gloves when working on the blades!



Make sure when working on the electrical equipment of the machine that

- this is only done by qualified personnel!
- the machine is always disconnected from power!

5.1 Regular care

Regular care of the machine must be carried out at least once per week. This prevents malfunctions and signs of wear.

Any abnormalities detected during regular care must be reported to the supervisor! The supervisor must immediately initiate correction or maintenance or notify Rühle Service!

Care schedule:

- a) Disassemble the machine according to the cleaning instructions. Check for any parts moving with difficulty, material abrasion or other signs of wear and tear.
- b) Remove the cut-off knives with the knife sharpener and check them for any damage or broken blades.

- c) Sharpen the vertical knives on both sides with the knife sharpener and check them for damage or broken blades.
- d) Visually check for changes or damages on all machine sides and accessible machine parts, e.g. the cutter bar. The machine must be shut down in the event of any damages or changes!

5.2 Regular maintenance

Regular maintenance of the machine must be carried out every 2000 hours of operation but at least once per year.

Maintenance schedule:

- a) Inspect the safety devices as outlined in Chapter 1.1 Safety Instructions!
- b) Test run with open machine (caution: moving parts)!
- c) All inspection work specified under "Regular Care"!
- d) Replace the vertical knives!
- e) Resharpen and readjust the cut-off knife!
- f) Check radial shaft seals for leak tightness; replace otherwise!
- g) Fill all lubricating nipples and moving parts in the machine compartment with grease!
- h) Read operating hours!

5.3 Repair and spare parts

As a damaged part on a machine is usually damaged due to causes unrelated to the part, always carry out a fault diagnosis.

For this reason, contact our Service Hotline at +49 7748-523-11 for spare parts or technical faults. Please keep the machine type and number ready.

6 Disposal

1. The following components contain low-viscosity grease:
 - Drive for cutter bar and troughDispose of the low-viscosity grease properly!
2. The following components contain oil:
 - Cutter bar gearbox and troughThe geared motor is equipped with an oil drain plug.
Subsequently, dispose of the oil properly!
3. All other materials must be sorted and disposed of at a recycling facility.

7 Technical documentation

7.1 Technical data

Connection voltage:	400 V 50/60 Hz 3-phase AC / N / PE
Power consumption:	6.9 kW
Full-load current:	13.3 A
Back-up fuse max.:	16 A
Protection class:	IP54
Ambient temperature:	-2 °C to +25 °C
Lowest permissible cut product temperature:	-20 °C
Size of standard trolley as per DIN 9797:	200 litres
Height of standard trolley as per DIN 9797:	700 ±5 mm
Dimensions, W × H × D:	3062 × 1879 × 1558 mm
Machine weight:	630 kg
Transport weight:	750 kg
Clear height:	250 mm
Clear width:	440 mm
Working height:	1050 mm
Knife stroke:	45 strokes/min

Output:	3000 kg/h
Emission sound pressure level:	$L_{pA} \leq 70 \text{ dB(A)}$
Measured according to:	DIN EN ISO 11201 accuracy class 2
Measured:	Idling without product

The data on the type plate principally applies; it is located on the back of the machine above the side cover. In case of deviations contact the manufacturer for a written confirmation of the data!

If your country requires a ground fault circuit interrupting device as protective measure, a ground fault circuit interrupting device (type B), AC/DC sensitive, must be used.

7.2 *Electrical circuit diagram*

The electrical circuit diagram of your machine is located in the electrical control cabinet and must be supplied when reselling the machine!

8 EC Declaration of Conformity according to Directive 2006/42/EC

The manufacturer herewith declares		that the following product	
Name:	Rühle GmbH	Type:	GR 50
Legal form:	Lebensmitteltechnik	Designation:	Frozen meat cutter
Address:	Beim Signauer Schachen 10 D - 79865 Grafenhausen	From series no.:	0002

complies with all relevant provisions of the directive indicated above, including any changes to it that are valid at the time of the declaration.

The product complies with all relevant provisions of the following additional EU Directives and standards, including any changes to these that are valid at the time of the declaration:

- DIN EN 1672-2: 2009-07 Food processing machinery - Basic concepts - Part 2: Hygiene requirements
- DIN EN 60204-1: 2007-06 Safety of machinery - Electrical equipment of machines - Part 1: General requirements
- EC 1935/2004 Regulation on materials and articles intended to come into contact with food.

Signed by:		Person authorised for the documentation:	
Place of issue:	D-79865 Grafenhausen	Name:	Jürgen Stegerer
Date of issue:	30.04.2015	Address:	Rühle GmbH Beim Signauer Schachen 10 D-79865 Grafenhausen
Function of the signing person in the company:	Management		
Name of the signing person:	Mr. Claus Rühle		
Signature:	