

AUTHORIZED DEALER

Ver. 003 07.2021

**OPERATING AND MAINTENANCE INSTRUCTIONS**

**7.3.2 Automatic version cleaning**

- **Protect your hands by wearing appropriate cut resistant Kevlar**
- Rotate by 90° and push the interlocked blade cover to the left (ref. 2, picture 6.4.1); the blade protective elements will be removed.
- Unhook the blade assembly lever (ref. 5, picture 6.4.1).
- Hold the assembly (ref. 2, picture 6.4.1) by using the grip on the basement bars and pull it so that the blade pins are out.
- Put the blade assembly on the basement bars (ref. 1, picture 6.4.1)
- Put the blade assembly and the protective elements in the dishwasher.
- Clean the basement by hand with delicate detergents

**7.4. Waste Electrical and Electronic Equipment**

**In accordance with European 2002/95/CE, 2002/96/CE and 2003/108/CE Directives on the restriction of the use of dangerous substances in electric and electronic equipment as well as their waste disposal”**

The crossed out symbol of the rubbish bin shown on the equipment indicates that, at the end of its useful life, the product must be collected separately from other waste. The separate collection of this equipment that has reached the end of its useful life is arranged and managed by the manufacturer. Users willing to dispose of this equipment shall contact the manufacturer and follow the system he has adopted in order to allow the separate collection of the equipment that has reached the end of its useful life



The adequate separate collection for the subsequent start-up of the equipment sent to be recycled, treated and disposed of in an environmentally compatible way contributes to preventing possible negative effects on the environment and health and optimises the recycling and reuse of components making up the apparatus.

Abusive disposal of the product by the user involves application of the administration sanctions according to the laws in force.

**8. Troubleshooting**

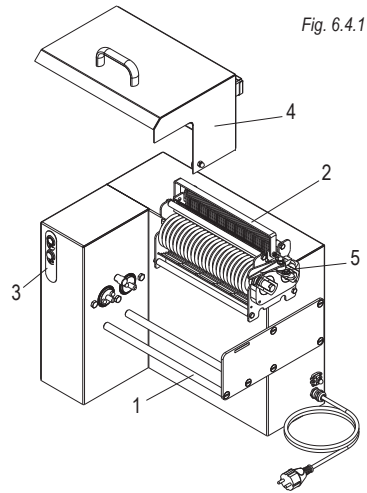
**8.1. Problems, causes, and solutions**

<b>Problems</b>	<b>Causes</b>	<b>Solutions</b>
The machine does not start	The residual current operated circuit-breaker is set to the “0” position.	Set it to the “1” position.
	The plug switch is set to the “0” position.	Set it to the “1” position.
	The start button does not work.	Contact the service centre.
	There are no safety devices or they are not installed properly.	Check the safety devices.
The product is not cut correctly.	The blades are not sharp.	Sharpen the blades or replace them.

## 6.4. Automatic version

- Lift the interlocked blade protective element (ref. 4, picture 6.4.1).
- Put the assembly on the basement bars (ref. 1, picture 6.4.1)
- Rotate the blade assembly lever (ref. 5, picture 6.4.1) so that the blade drum pins are inserted in the dragging pins, until they are hooked.
- Close the interlocked blade protective element (ref. 4, picture 6.4.1).
- Use the controls (ref. 3, picture 6.4.1) in order to turn the machine on or off.
- Hold the product with your hands and insert it in the feeding part; in case of jamming, use the tenderizer.

**CAUTION:** Handle the blade assembly by using the appropriate rip, (ref. 2, picture 6.4.1), protect your hands by wearing appropriate cut resistant Kevlar gloves.



## 7. Maintenance

### 7.1. Requirements

**CAUTION!** Every maintenance and cleaning operation on the machine only has to be carried out when the machine is disconnected from the power supply. **Protect your hands by wearing appropriate cut resistant Kevlar gloves. To handle the blade assembly, protect your hands by wearing appropriate cut resistant Kevlar gloves** The area where these operations are carried out has to be clean and dry. Do not allow unauthorized people to operate the machine. Any replacement of parts, including the replacement of the tool, has to be done with the original spare parts by the manufacturer or at the authorized workshops. The machine is not designed to operate inside a cold room: this could seriously damage the electrical components sensitive to condensate (which forms at low temperatures) and also alter the viscosity of the grease and/or lubricating oil in the gearbox housed inside it, jeopardising the machine's correct operation and causing potential failures.

### 7.2. Lubrication

The machine does not need lubricating.

### 7.3. Cleaning the machine

**CAUTION!** Disconnect the machine from the power supply before cleaning it. Do not clean the machine with a water jet. Do not use noxious detergents; choose products that are suitable for cleaning machines coming into contact with food. Blades are made of AISI 420 steel, so they go rusty if they are wet or dipped into water. We suggest drying the parts of the machine after cleaning them. **To handle the blade assembly, protect your hands by wearing appropriate cut resistant Kevlar gloves**

#### 7.3.1 Manual version cleaning

- **Protect your hands by wearing appropriate cut resistant Kevlar**
- Hold the assembly (ref. 2, picture 6.3.1) by using the grip on the basement bars and pull it so that the blade pins are out.
- Unhook the two blade protective elements (ref. 4, picture 6.3.1) from the assembly (ref. 2, picture 6.3.1).
- Put the blade assembly and the protective elements in the dishwasher.
- Clean the basement by hand with delicate detergents

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## 7. Maintenance

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## 6. Use of the machine

### 6.1. Requirements

CAUTION - Authorized staff is entitled to operate the machine only. Before using the machine, the user has to make sure that all the protective elements are installed correctly and safety devices are in working order. Otherwise, switch the machine off and contact the person in charge of the maintenance.

Make sure that the product to be tenderized/cut has no bones, nerves or other hard parts that may ruin the blades.

The size of the product to be treated has to be such as to make it enter the feeding part. (ref.1, picture 6.1.1). Wear Kevlar work gloves, to prevention accident.

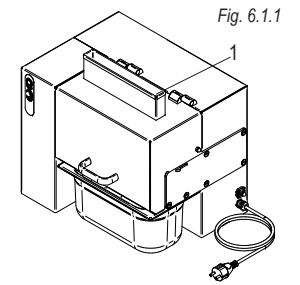


Fig. 6.1.1

### 6.2. Installing the blade drums

The machine can be installed with two different types of drums for the treatment of meat:

1. Tenderizing blades
2. Cutting blades

- The "tenderizing" system is made up of radial blades (1, picture 6.2.1): it penetrates meat and cuts nerves in order make it tenderer.
- The "cutting" system is made up of round blades (2, picture 6.2.1) that are coupled together and cut meat stripes; if the thickness of the spacers varies, the thickness of stripes varies too. Handle the blade drums only if you wear appropriate cut resistant Kevlar gloves.
- In order to insert the blade drums, rotate the blade assembly knob in order so that the slot is open ("1" position, picture 6.2.2), the knob will snap
- Hold the ends of the drum and insert it. **Do not put your hands on the blades**
- Rotate the assembly knob in the opposite direction in order to lock the drum ("2" position, picture 6.2.2), the knob will snap.
- Insert the scraper combs (ref. 3, picture 6.2.3)
- Handle the assembly by using the grip (ref. 4, picture 6.2.3)

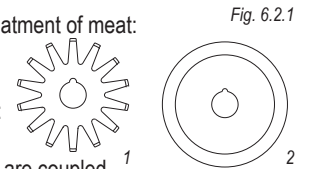


Fig. 6.2.1

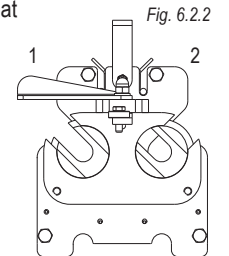


Fig. 6.2.2

**All the configurations are compliant with both the manual version and the automatic one**

### 6.3. Manual version

- Wear Kevlar work gloves, to prevention accident
- Hook the 2 blade protective elements (ref. 4, picture 6.3.1) to the assembly (ref. 2, picture 6.3.1).
- Put the assembly on the basement bars (ref. 1, picture 6.3.1) and push it so that the blade pins are inserted.
- Make the drums work by using the knob (ref. 3, picture 6.3.1). The drums have to make the product go downwards..

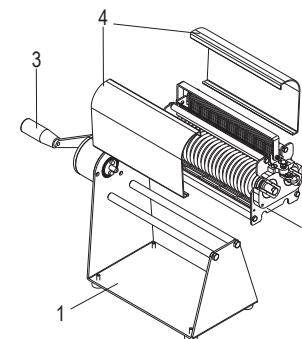


Fig. 6.3.1

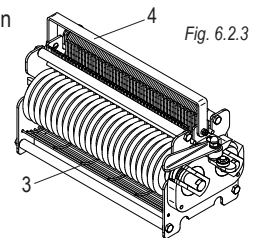


Fig. 6.2.3

### 4.3.2 Handling of the machine

#### CAUTION!

Handle the machine carefully, and avoid accidental falls that may damage it. Use the strength in your legs in order to avoid strains while lifting the machine.

### 4.4. Electric connection

#### CAUTION!

Check that power supply matches with the value indicated in the identification plate of the machine. Every operation has to be carried out by authorized, specialized staff only. Connect the machine to a power supply equipped with efficient grounding outlet.

#### 4.4.1 220 Volt-50 Hz mono-phase machine

This machine is equipped with a power cord with a 3 x 1,5 mm section. This is connected to a "SCHUKO" plug. Connect the cord to the 220 Volt-50 Hz mono-phase power supply, interposing a 10 Ampere residual current operated circuit-breaker.

In case of different voltage diagrams, contact the manufacturer. If you need to lengthen the power cord, use a cord of the same section as the one provided by the manufacturer.

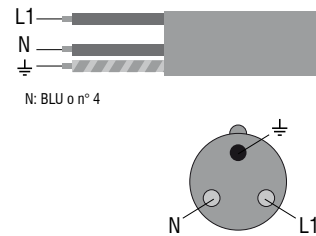


Fig. 4.4.1

## 5. Start and stop

### 5.1. Checking the electric connection

Connect the plug to the power socket.  
Press the start button ("1", picture 3.1.1).

#### Note:

For the machines connected to a mono-phase power supply, the right direction of rotation is defined by the manufacturer.

### 5.2. Checking protective elements and safety devices

When the machine is connected to the power supply and the tool is in use, open the tool cover.  
The machine must stop.

### 5.3. Checking stop button operation (picture 3.1.1)

When the machine is connected to the power supply and the tool is in use, press the stop button (2).  
The machine must stop.

### 5.4. Starting the machine (picture 3.1.1)

Press the start button ("1", picture 3.1.1) after you connect the plug to the socket correctly.  
The machine must start.

### 5.5. Stopping the machine (picture 3.1.1)

Press the stop button ("2", picture 3.1.1). The machine must stop.

## 1. Delivery and warranty

### 1.1. Introduction

**CAUTION - The symbols used in this manual aim at drawing the reader's attention to some steps and procedures that are hazardous for the safety of the users or may represent a risk of damage. Do not use the machine if you are not sure about understanding what is contained in this manual.**

**CAUTION - For reasons of clarity, some pictures contained in this manual describe the machine or its parts without including the boards or the housing. Do not use the machine in those conditions - protective elements have to be correctly mounted and in working order. Reproduction of this manual, in any form, is prohibited (even if partial) and contents cannot be used for unauthorised purposes. Any violation will be prosecuted according to applicable law..**

### 1.2. Storing and using this manual

The aim of this manual is to provide users with the necessary information (by using text and pictures) about requirements and methods for transporting, handling, using, and maintaining the machine. Before using the machine, read this manual carefully. Keep it close to the machine, in an easily accessible place for future reference. If this manual is lost or ruined, ask our vendor or the manufacturer for a new copy. In the event of transfer of ownership of the machine, provide the manufacturer with the new owner's data and address. This manual reflects the state of the art when the machine is marketed and can be considered inappropriate if it is updated following new experiences. For this reason, the manufacturer reserves the right to update its production and the relevant manuals with no obligation to update previous products and manuals, barring exceptional circumstances. In case of doubt, contact the nearest service centre or the manufacturer. The manufacturer aims at the continuous improvement of its products. For this reason, it is pleased to receive any reports or proposals in order to improve the machine and/or the manual. The machine is delivered to the user under the warranty conditions prevailing at the time of purchase. For further information, contact your vendor.

### 1.3. Warranty

The user is by no means entitled to tamper with the machine. Any irregularity has to be reported to the manufacturer. Any attempt to disassemble, alter or tamper with any parts of the machine by the user or unauthorized staff shall invalidate the warranty and the declaration of conformity drawn up according to the 2006/42/EC directive. The manufacturer shall not be liable for any damage deriving from the tampering. Furthermore, the manufacturer is not responsible for the following:

- incorrect installation;
- misuse of the machine on the part of non-suitably trained personnel;
- any use contrary to applicable local law;
- improper maintenance or lack of it;
- use of non original or inappropriate spare parts;
- total or partial disregard of the instructions.

## 1.4. Description of the machine

The machine you are using is simple, compact, highly efficient, and powerful. Since it has to be used with food products, components that may come into contact with them were carefully selected in order to provide the highest levels of hygiene.

- The external structure is made of stainless steel.
- The cover is made of Tritan in order to provide the highest levels of hygiene and make cleaning easy.
- Tools are made of AISI 430 stainless steel so that they are durable and hygienic.
- Fast disassembly of the blade drums for easy cleaning
- Ventilated engines for the following benefits:
  - high performance and duration of the engine;
  - increase in work time thanks to fewer interruptions;
  - low heating rate in order to keep the treated product fresh and unchanged.

The models described in this manual were produced according to the 2006/42/EC directive and subsequent amendments. In the event of accidents, the manufacturer shall not be considered responsible if the machine has been altered, tampered with, deprived of safety devices and protective elements or used for unauthorised purposes.

## 1.5. Intended use

The machine was designed to tenderize steaks and cut stripes of meat or similar products. This machine has to be used in professional environments and the people intended to use it have to be professionals, who have read and understood this manual. Use this machine only if it is placed on solid worktops.

**CAUTION - The dimensions of the product to be treated do not have to be higher than the feeding part.**

## 1.6. Unauthorized use

This machine only has to be used for the intended purposes defined by the manufacturer, in particular:

- DO NOT use this machine to treat food products other than meat or similar.
- DO NOT use this machine if protective elements are not intact and installed properly in order to avoid the risk of serious injury.
- DO NOT place the machine inside a cold room. DO NOT use the machine inside a cold room. inside a cold room: this could seriously damage the electrical components sensitive to condensate (which forms at low temperatures) and also alter the viscosity of the grease and/or lubricating oil in the gearbox housed inside it, jeopardising the machine's correct operation and causing potential failures.
- DO NOT access electrical parts if the machine is not disconnected from the power supply. It may result in electric shock.
- DO NOT treat products whose dimensions are higher than the feeding part.
- DO NOT wear clothes that are not compliant with accident-prevention regulations.
- Contact your employer for further information about applicable safety and accident-prevention requirements.
- DO NOT start the machine if it is damaged.
- Before using the machine, make sure that any hazardous condition has already been solved. In case of any irregularity, stop the machine and inform who is in charge of maintenance.
- DO NOT allow unauthorised people to use the machine.
- Emergency measures in case of accident due to electric current consist of moving the injured person away from the conductor (he/she would usually lose consciousness). This operation is hazardous. In this case, the injured person is a conductor: touching him/her may result in electric shock. Therefore, it is convenient to remove the electrical contacts from the power valve or, if this is not possible, move the victim away by using insulating material (wood or PVC sticks, fabric, leather, etc.). It is convenient to help the patient by calling medical staff.

## 3. Controls and indicators

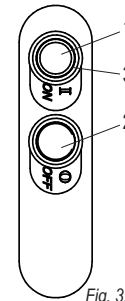


Fig. 3.1.1

### 3.1. List of controls and indicators

- 1 - Start button  
Press to start the machine.
- 2 - Stop button  
Press to stop the machine.
- 3 - Start button led  
It is lit when start button is pressed.

## 4. Testing, transport, delivery, and installation

### 4.1. Testing

Your machine was tested in order to confirm the good operation and setting. Tests on product treatment were carried out with the ingredients that will be used by the customer.

### 4.2. Delivery and handling of the machine

All the material shipped is checked carefully before the machine is delivered to the forwarder. Unless otherwise agreed with customers, the machine is packed with nylon and strapped on the pallet; cardboard is inserted above and will be strapped on the pallet as well. Check that the packaging is intact on the receipt of the machine. If you detect any damage, sign the delivery note of the carrier and add: "I accept it, but under protest..." and the reason.

Once the package is opened, report any damage to the forwarder within three days from the date indicated in the documents.

### 4.3. Installation

#### CAUTION!

The area where the machine is installed has to be levelled and solid, and the bearing surface has to be safe. Furthermore, the machine has to be placed keeping a large space around it. This allows users to handle it and access the machine easily during maintenance operations. Lighting around the machine has to be suitable in order to provide users with visibility.

- Remove the cellophane around the machine and any other packaging inside.

#### 4.3.1 Disposal of the packaging

Packaging elements such as cardboard, nylon, and wood, are solid urban waste. They can be disposed of freely. Nylon is a polluting material that produces noxious fumes when it is burnt. Do not burn it or dispose of it in the environment, but follow the applicable law. If the machine is delivered in countries with specific laws, dispose of packaging according to those regulations.

## 2.4. Wiring diagrams

### 2.4.1 Electric diagram with overcurrent protection device

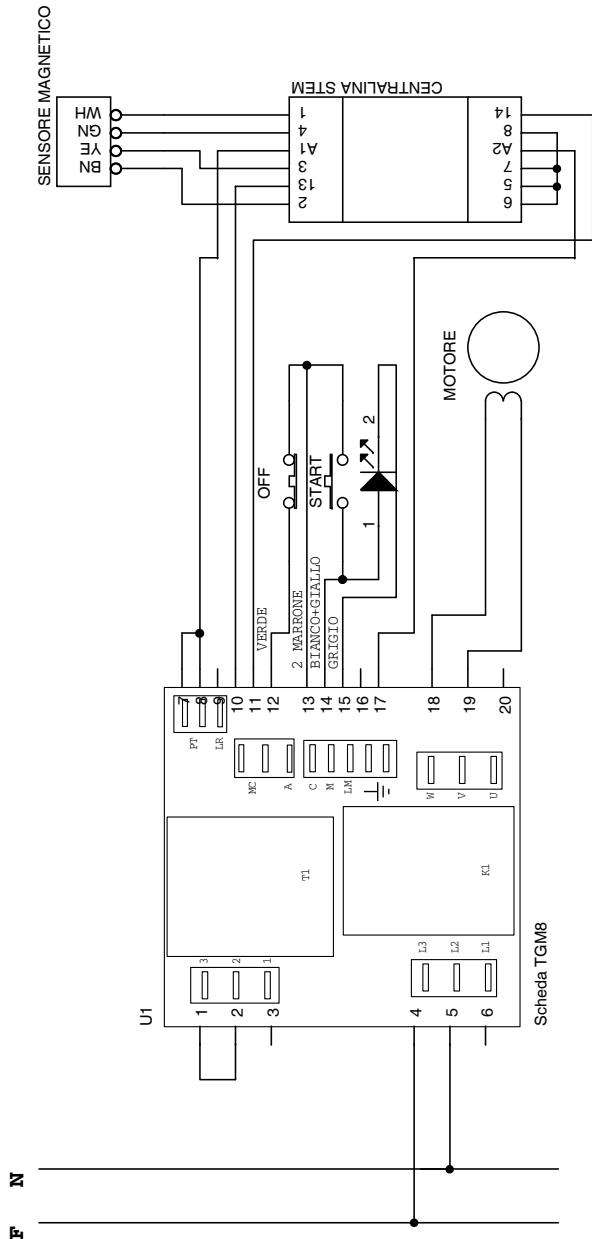


Fig. 2.4.1

## 1.7. Data of the machine

A precise description of the “Model”, “Matriculation number” and “Year of production” of the machine will help our service personnel give efficient answers to your requests. Please indicate the model and the matriculation number of the machine whenever you contact the service centre. Use the data shown in the plate (picture 1.7.1). As a reminder, we suggest adding these data in the table below.

Model .....	.....	Model: (A)	WATT: (C)
Matriculation number .....	.....	VOLT: (B)	KG: (E)
Year of production .....	.....	HZ: (D)	ANNO: (G)
Type .....	.....	AMPS: (F)	SERIAL NO: (H)

A Model	F Ampere
B tension, supply, voltage	G Month and year of production
C engine power (Watt)	H Matriculation number
D Frequency (Hz)	I Manufacturing company
E Weight (Kg)	L Barcode

(I)	(L)
-----	-----

Fig. 1.7.1

**CAUTION - Do not change the data shown in the plate for any reasons.**

### 1.7.1 Hazard and warning plates (picture 1.7.2)

**CAUTION - Do not touch the electrical parts when the machine is connected to the power supply. It may result in electric shock. Follow the warnings shown in the plates. Disregarding the rules may result in physical injury. Make sure that the plates are available and readable. Otherwise, attach or replace them.**



## 1.8. Protective elements and safety devices

**CAUTION - Before using the machine, make sure that safety devices are intact and installed correctly. Check that they are in working order at the beginning of a process.**

Otherwise, inform the person in charge of maintenance.

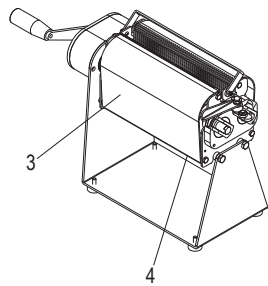
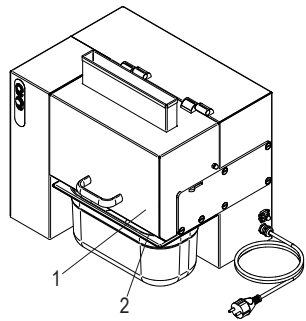


Fig. 1.8.1

1. Tritan cover interlocked with the feeding part.
2. Lower protection grid, made of AISI 304 stainless steel
3. AISI 304 stainless steel cover
4. Lower protection grid, made of AISI 420 stainless steel.

**CAUTION - Do not tamper with safety devices for any reasons.**

### 1.9. Work station

The correct work station users have to choose in order to improve the work with the machine is indicated in picture 1.9.1..

### 1.10. Vibrations

The vibrations transmitted by the machine to the worktop are not signif.....

### 1.11. Environmental conditions

The machine is intended to work in the following environmental conditions:

- lowest environmental temperature: -5 °C;
- highest environmental temperature: +40 °C;
- relative humidity: 50% at 40 °C.

### 1.12. Lighting

The place where the machine is installed has to have sufficient natural light an artificial lighting compliant with the applicable local law. Lighting must be compliant with the applicable local law and does not have to create any risk.

Lighting must allow users to read control panels clearly and find start and stop buttons.

### 1.13. Accident-prevention systems

DO NOT wear clothes that are not compliant with accident-prevention regulations.

Wear Kevlar work gloves, to prevention accident

To handle the blade assembly, protect your hands by wearing appropriate cut resistant Kevlar gloves

Contact your employer for further information about applicable safety and accident-prevention requirements.

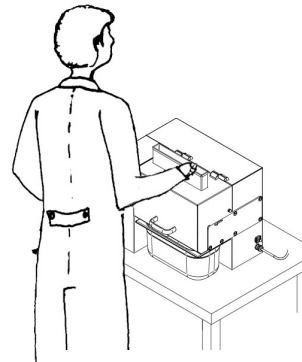
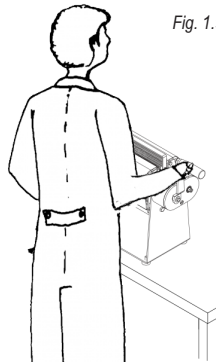


Fig. 1.9.1



## 2. Technical characteristics

### 2.1. Main parts

The main parts of the machine are listed and shown in picture 2.1.1 for easy understanding.

#### Electrical machine

1. Tool cover with feeding part, made of Tritan
2. External structure
3. Machine controls
4. Collecting tray, made of Polycarbonate, for treated products

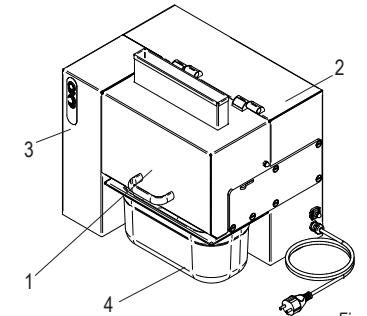


Fig. 2.1.1

#### Manual machine

5. Tool cover, made of AISI 304 stainless steel
6. Basement, made of AISI 304 stainless steel
7. Movement knob of the carrier pin
8. Treated product output

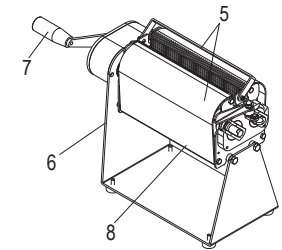
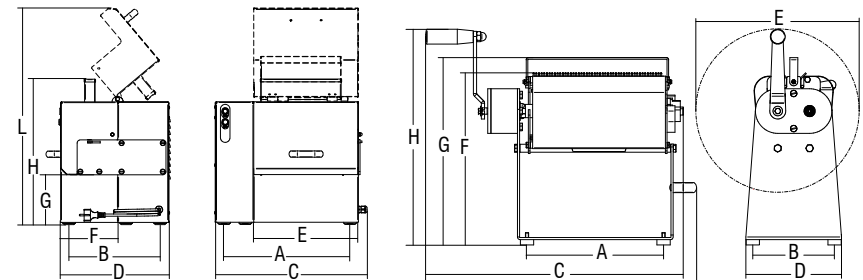


Fig. 2.1.2

### 2.2. Technical characteristics

		EFMSM25
Power	Watt/Hp	370/0,5
Supply		230V/50Hz
Revolutions/min.	R.p.m.	110
Drum length	mm	250

### 2.3. Size and weight of the machine



	A	B	C	D	E	F	G	H	L	Net weight
	mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
	257	154	485	180	308	324	303	406		
EFMSM25	397	287	480	390	330	180	157	460	685	31





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