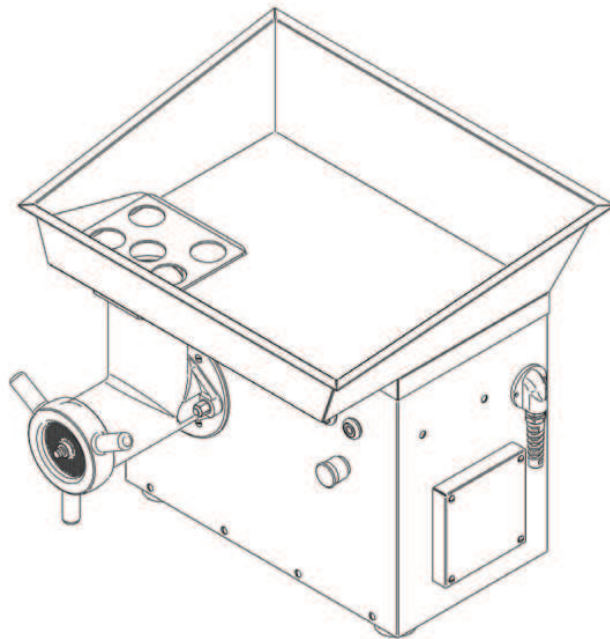


metos

Meat tenderizer
Metos KT-PK
2021066

User manual



10.03.2011

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1. General description

KT-PK meat tenderizer is designed specifically for retail and industrial uses. It is made for tendering boneless meat, chicken and skinless fish. Frozen products and products with bones are not suitable to be processed with KT-PK meat tenderizer.

The product is dropped between two blade sets, which are used by an electric motor. The rotating blades will tender the product. The machine is equipped with a safety switch, which prevents the usage of the machine when the cover is not in place. The frame of the machine is made of stainless steel with features of pretty appearance, well endurance and easy cleaning.

KT-PK/SK Mini-slicer blade set for the machine is available as an option. You may use it to slice meat and fish.

Read these instructions before use and ensure that all users, technicians and cleaners have also read these instructions. Chapter 3.1, which deal with safety must be read with particular attention.

Keep this manual in a safe place for further and regular reference and for ordering spare parts.

1.1 Technical specifications

Rotational speed of blades:	90 rpm (110 rpm for 110 – 120 V)
Power of motor:	0,37 kW (0,55 kW for 110 – 120 V)
Rotational speed of motor	2800 rpm (3380 rpm for 110 – 120 V)
Overall weight:	32 kg
Weight of blade set:	3,4 kg
Weight of slicer blade set:	3,6 kg
External dimensions	
Width:	460 mm
Depth:	435 mm
Height:	395 mm

2. Installation

2.1 Unpacking

Lift the machine from the package. If the machine or the package has been damaged during the transport, please contact the retailer, importer or manufacturer.

2.2 Location

The meat tenderizer must be installed in a place where there is sufficient room to work around the machine and enough light to allow safe working. The machine may be installed on a solid level table. Never incline the machine more than 30 degrees, it may tip over and hurt someone seriously. The machine must be cleaned thoroughly before use (see the cleaning instructions, chapter 4).

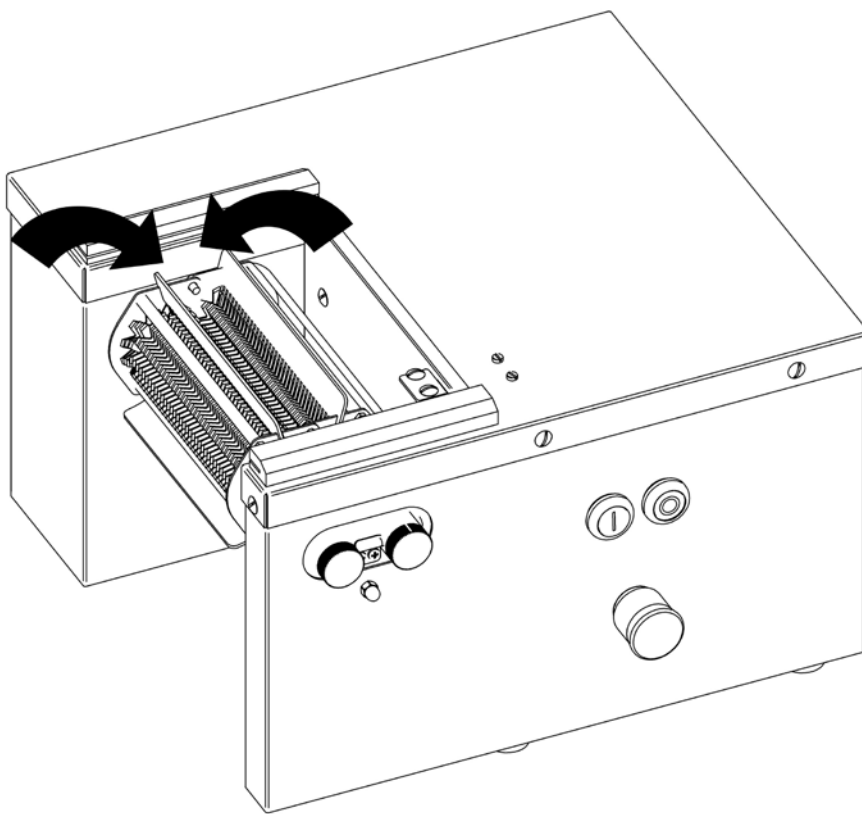
2.3 Electrical connection

2.3.1 Note

1. Ensure that the supply voltage corresponds with the voltage marked on the rating label.
2. The machine must be **CORRECTLY EARTHED**.
3. Only a competent electrician may connect the electrical supply to the machine and carry out electrical servicing work.
4. Ensure that the electrical supply has been properly disconnected (the power cable is unplugged) before any electrical connections are made, or maintenance work is carried out.

2.3.2 Direction of rotation

Before using the machine, check the direction of rotation of the blades. The correct direction of rotation is showed in picture 1. If the direction of rotation is incorrect, ask an authorized electrician to change it. The circuit diagram of the machine is to be found in Annex 3.



Picture 1. Correct direction of rotation.

3. Operation

3.1 Safety

When using the meat tenderizer, pay attention to the following matters:

1. **Don't push your hand or fingers into the feeding hopper or into the outlet opening.**
2. **It is forbidden to use the machine, if the machine parts relating to safety is not in their places or do not work properly.**
3. **Do not open the cover, before the blade has been fully stopped.**
4. **The machine should not work if the front cover is not in place.** If this happens, the use of the machine must be stopped immediately. Contact the service mechanic, retailer, importer or manufacturer.
5. **Do not insert foreign objects into the feeding hopper.**
6. When using the machine, focus to the process. Do not talk to other people.
7. If a foreign object drops between the blade sets, stop the machine immediately by pushing the emergency stop button. Remove the foreign object and ensure that the machine has not been damaged, before you continue using the machine. Unplug the power cable before removing the foreign object.
8. If the machine has been damaged, contact a service mechanic, retailer, importer or manufacturer.
9. The start and stop buttons must not be damaged.
10. Only a proficient person may use, clean and service the machine.
11. Never leave a running machine unattended.
12. Do not wear loose fitting clothes or jewelry as they may get caught in moving parts of the machine.

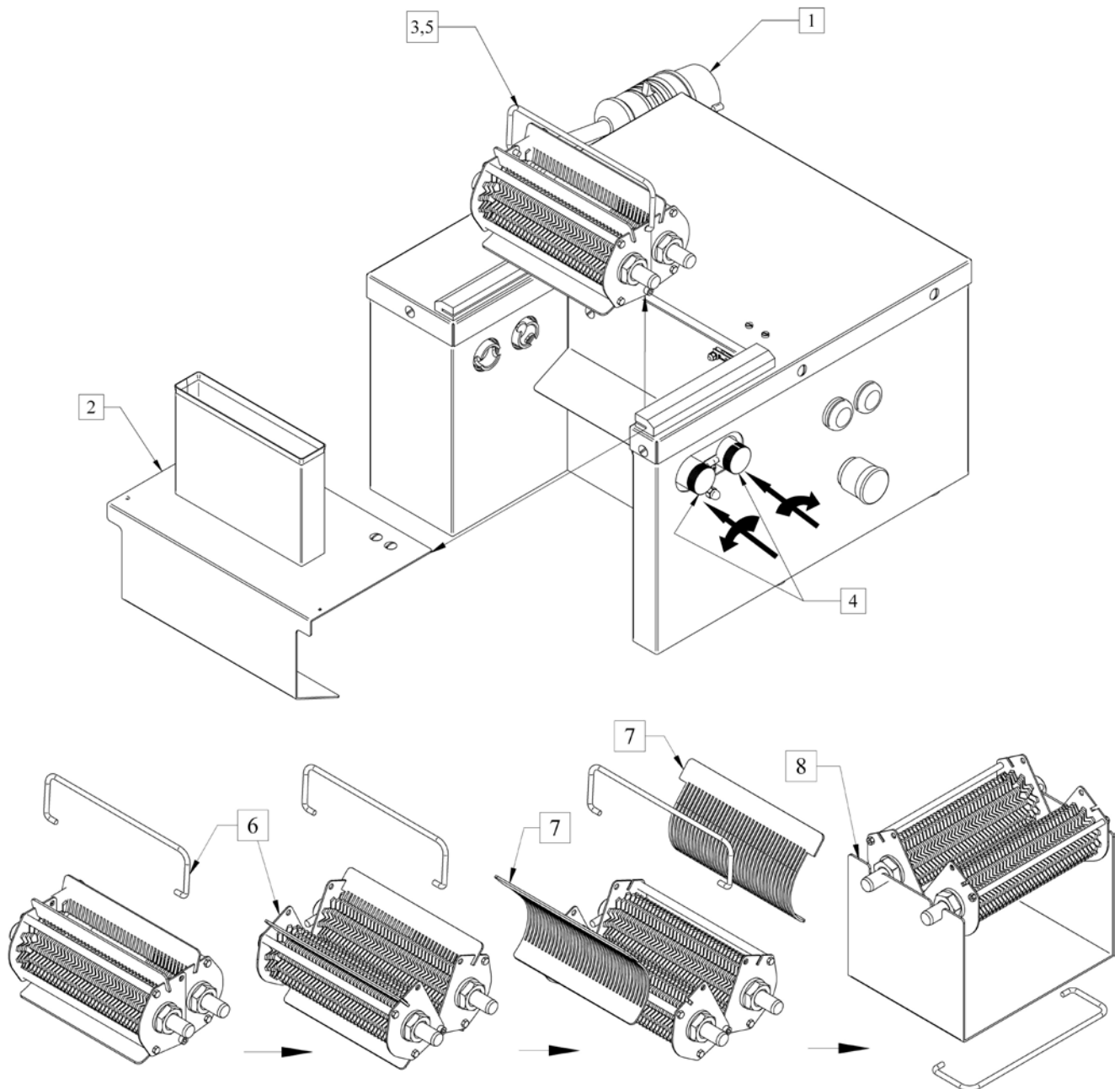
3.2 Using the machine

1. Before starting up the machine, ensure that the front cover is placed correctly.
2. Start the machine by pressing the start button, located at the right side of the machine.
3. The machine should run with full speed before inserting any meat to it. The meat to be treated should be free of any bone chips.
4. Insert the meat to the feeding hopper.
5. **Do not push your fingers to the feeding hopper!!!**
6. The blades will pull the meat inside the machine, and the finished product will come out from the outlet opening below the blade sets.
7. Let the product drop to a sufficient tray. **Do not push your fingers to the outlet opening!**
8. The machine may be stopped by pushing the stop button or the emergency stop button located at the right side of the machine.
9. Clean the machine after every use (see chapter 4).

4. Cleaning

4.1 Removing the blade set

1. Unplug the power cable!
2. Remove the front cover by pulling it.
3. Grab the handle of the blade set.
4. Loosen the support bearings located at the right side of the machine by pushing and rotating them.
5. Remove the blade set by lifting it.
6. Open the blade set by detaching the handle.
7. Remove the combs.
8. Place the blade set to the cleaning stand.



Picture 2. Removing the blade set.

4.2 Washing

You can wash the machine components by hand or in a purpose built washing machine. The machine may be washed with warm water and detergent using a brush. Always rinse after washing. Do not use pressurized water. Do not wet the push buttons. Dry the machine thoroughly after rinsing.

4.2.1 Recommended detergents

Clean and degrease the parts using any approved detergent for food equipment, for example *Kärcher RM 81*

or

Eco-Lab – Oasis 133 – All Purpose Cleaner and Degreaser Concentrate

4.3 Installing the blade set

1. Reinstall the combs.
2. **Attach the handle.**
3. Lift the blade set to its place.
4. Place the left end of the blade set shafts into the drive shafts.
5. Push the support bearings located on the right side of the machine to the blade set shafts and lock them by rotating.
6. Push the cover to its place. Be careful with the key of the safety switch, so it doesn't get bent.

5. Maintenance

The meat tenderizer does not have any parts, which need maintenance. Monitor the condition and wearing of the parts. Worn out parts must be replaced with new parts.

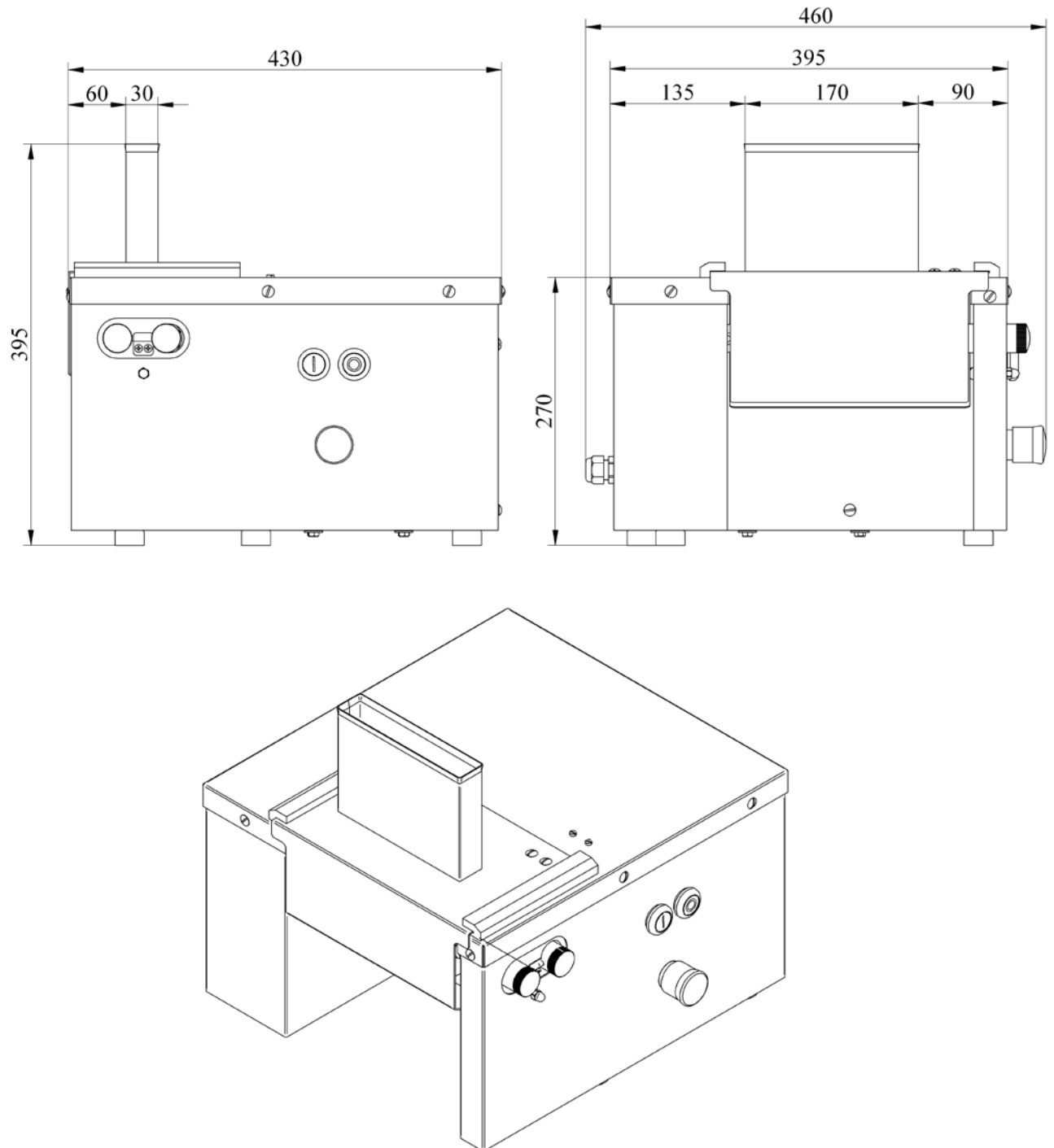
5.1 Fault finding

<i>Fault</i>	<i>Cause / remedy</i>
The product sticks to the blades.	The combs are missing from the blade set. Install the combs.
The product doesn't go through or sticks to the blades.	The product is too thick.
Motor is running but the blades don't rotate.	Change the belt.
Support bearings (part 370011) don't tighten the blade set.	The spring inside the support bearing has been stuck. Release the spring, or replace the support bearings.
The combs will not install correctly.	The comb has been corrupted or the knives are damaged. Replace the damaged parts.

6. Noise emission values

The A-weighted emission sound pressure level at workstation does not exceed 70 dB(A).

ANNEX 1. Dimensional drawing



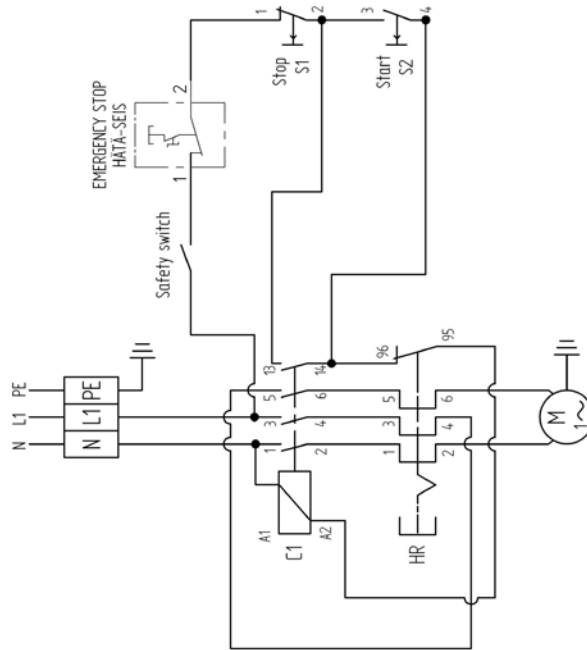
ANNEX 3. Circuit diagram

1-Phase:

220-240 V
50 Hz
0.37 kW
3.5 A
2800 rpm

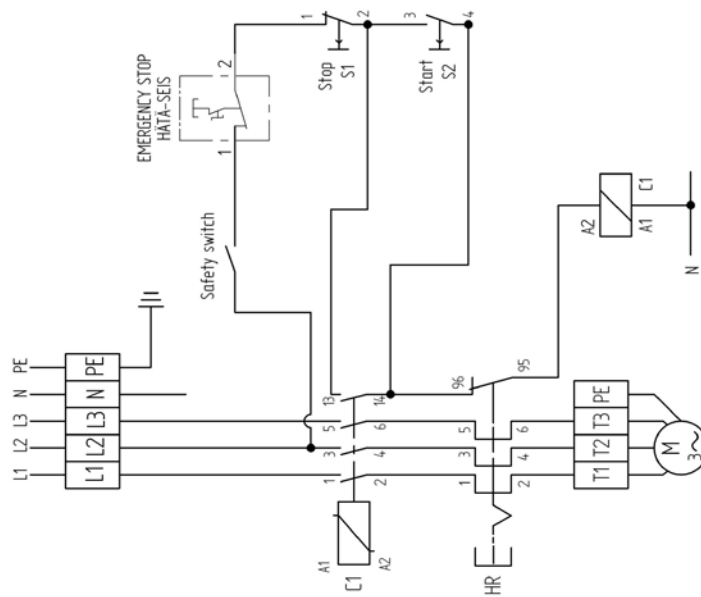
or

110-120 V
60 Hz
0.55 kW
10.7 A
3380 rpm



3-Phase:

318-415 V
50 Hz
0.37 kW
10 A
2800 rpm



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KONETEOLLISUUS OY

EC DECLARATION OF CONFORMITY

We hereby declare that the following machinery complies with the essential health and safety requirements of the Machinery Directive 2006/42/EC.

Manufactured by KONETEOLLISUUS OY
Address below

Technical File Held At KT
Address below

Machine Description and type:

Serial No 139000-150000

MEAT MINCERS: LM-5/P, LM-10/P, LM-22/P, LM-82/P, LM-32/P, LM-98/P, LM-42, LM-130
MIXER GRINDERS: LM-22A, LM-82A, LM-32A, LM-98A, LM-42A, LM-130A, LM-130/280A
KT-MS1, KT-MS2, KT-MS3 CLIPPER MACHINE
KT-PK MEAT TENDERIZER
KT-S FISH SCALER
KT-ALP MEAT PRESSER
F19S MEAT SLICER
HB-4, HB-3 SEALER
HB-10 BAG SEALER
KT-KB2 KEBAB GRILL
KT-KB3 KEBAB GRILL

This machinery has been designed and manufactured in accordance with the following harmonised European Standards:

EN 12100-1:2003+A1:2009, 12100-1:2003+A1:2009 Safety of machinery - Basic concepts, general principles for design
EN 60204- 1:2006+A1:2009 Safety of Machinery – Electrical equipment of machines – Specification for general requirements
EN 1088:1995+A2:2008 Safety of Machinery – Interlocking devices associated with guards. Principles for design and selection
EN ISO 13857:2008 Safety of Machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs
EN 953:1997+A1:2009 Safety of machinery – Guards. General requirements for the design and construction of fixed and movable guards.
EN ISO 14121-1:2007 Safety of machinery – Risk assessment. Part 1: Principles.

Furthermore, this machinery has been designed and manufactured in accordance with the following standards and directives:
SFS 5107, Slaughterhouse and meat dressing machines. Machines and equipment for cutting. Occupational safety.
E.M.C. Electro-magnetic compatibility directive 2004/108/EC

Furthermore meat & mixer grinders have been designed and manufactured in accordance with the following transposed harmonised European Standard:
EN 12331:2003+A2:2010 Food processing machinery. Mincing machines. Safety and hygiene requirements.

Signed

Date 2011-01-01

Name

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The crossed-out wheeled bin means that within the European Union the product must be taken to separate collection at the product end-of life. This applies to your device but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste.