



Metalúrgica Skymssen Ltda.  
Rodovia Ivo Silveira 9525  
Volta Grande  
88355-202 Brusque/SC/Brasil  
www.skymssen.com - Fone: +55 47 3211 6000  
CNPJ: 82.983.032/0001-19 - IE 250.064.537

54968.1 - INGLIS

Data de Correção: 16/06/2015

- BEYOND THESE EQUIPMENT, WE MANUFACTURE A COMPLETE EQUIPMENT LINE. CONSULT YOUR DEALER.

- DUE TO THE CONSTANT EVOLUTION OF OUR PRODUCTS, THE INFORMATION CONTAINED HEREIN MAY BE MODIFIED WITHOUT PREVIOUS NOTICE.

WWW.SKYMSEN.COM

INSTRUCTION MANUAL



BREAD MILL

MODEL  
**MPAL**

# SUMMARY

<b>1. Introduction</b>	<b>3</b>
1.1 Security	3
1.2 Main Components	5
1.3 Specifications	6
<b>2. Installation and Pre-Operation</b>	<b>6</b>
2.1 Installation	6
2.2 Pre-Operation	7
<b>3. Operation</b>	<b>9</b>
3.1 Drive	9
3.2 Operating Procedure	9
3.3 Cleaning and hygiene	9
3.4 Cautions with Stainless Steel:	10
<b>4. General Safety Practices</b>	<b>11</b>
4.1 Basic Operation Procedures	11
4.2 Safety Procedures and Notes before Switching the Machine ON	12
4.3 Routine Inspection	12
4.4 Operation	13
4.5 After Finishing The Work	13
4.6 Maintenance	13
4.7 Warning	13
<b>5. PROBLEMS ANALYSIS and SOLUTIONS</b>	<b>14</b>
5.1 Problems, Causes and Solutions	14
<b>6. MAINTENANCE</b>	<b>15</b>
<b>7. Electric Diagram</b>	<b>16</b>

[illegible]

This image shows a full page of blank white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, providing a guide for writing. There are no margins, text, or other markings on the paper.

## 1. Introduction

## 1.1 Security

This equipment is suitable for milling (grinding) various types of dry bread to turn into flour, and is potentially DANGEROUS when used incorrectly. It is necessary to perform maintenance, cleaning and / or any service by a qualified and with the equipment disconnected from the mains person.

The following instructions must be followed to avoid accidents:

1.1.1 Read all instructions.

1.1.2 To avoid electric shock and equipment damage, never use the same with: Wet clothes or feet and / or in moist or wet surface, do not immerse in water or any other liquid and do not use water jet directly on the device .

1.1.3 It should always be supervised using any equipment, especially when it is being used near children.

1.1.4 Disconnect the device from the mains when: not in use, before cleaning it, removing accessories, introduction of accessories, maintenance and any other type of service.

1.1.5 Do not use the equipment if it is with a damaged cord or plug. Ensure that the power cord does not remain at the edge of the table / counter or touch hot surfaces.

1.1.6 When the machine has been dropped, is damaged in some way or not it is necessary to work takes him to a local dealer for review, repair, mechanical or electrical adjustment.

1.1.7 The use of non-recommended by the manufacturer may cause injury.

1.1.8 Keep hands and any utensil away from the machine's moving parts while it is running to avoid injury or damage to equipment.

1.1.9 Never use clothes with long sleeves, especially wrists during operation.

1.1.10 Ensure that the voltage of the equipment and the mains are the same, and that the equipment is properly connected to the grounding network.

1.1.11 This product was developed for use in commercial kitchens. It is used, for example, in restaurants, canteens, hospitals, bakeries, butchers and the like.

Use of this equipment is not recommended if:

- The production process is continuously on an industrial scale;
- The workplace is an environment with corrosive atmosphere, explosive, contaminated with vapor, dust or gas.

**IMPORTANT**  
Make sure that the power cord is in perfect condition of use. If it is not, replace the damaged cable with one that meets the technical and safety specifications. This replacement should be performed by a qualified professional and must meet local safety regulations.

**IMPORTANT**  
Make sure that the power cord is in perfect condition of use. If it is not, replace the damaged cable with one that meets the technical and safety specifications. This replacement should be performed by a qualified professional and must meet local safety regulations.

**IMPORTANT**

**This appliance is not intended for use by persons (including children) with physical, sensory or mental capacities reduced, or persons lacking experience and knowledge, unless they received instructions regarding the use of the device or under the supervision of a person responsible for their safety.**

**IMPORTANT**

**This appliance is not intended for use by persons (including children) with physical, sensory or mental capacities reduced, or persons lacking experience and knowledge, unless they received instructions regarding the use of the device or under the supervision of a person responsible for their safety.**

**IMPORTANT**

It is recommended that children be supervised to ensure that they are not playing with the device.

**IMPORTANT**

It is recommended that children be supervised to ensure that they are not playing with the device.

**IMPORTANT**  
In case of emergency remove the plug from the electrical outlet.

**IMPORTANT**  
In case of emergency remove the plug from the electrical outlet.

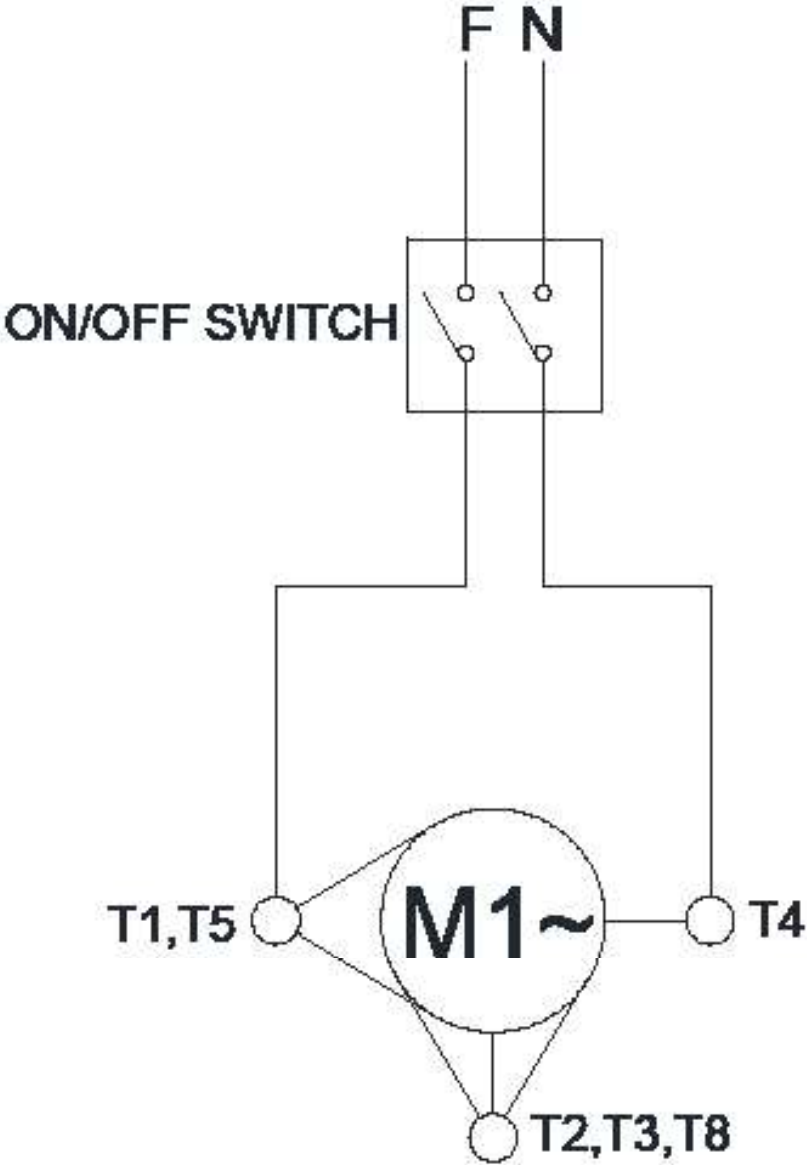
**IMPORTANT**  
Never throw water directly on the equipment.

**IMPORTANT**  
Never throw water directly on the equipment.

[illegible]

7. Electric Diagram

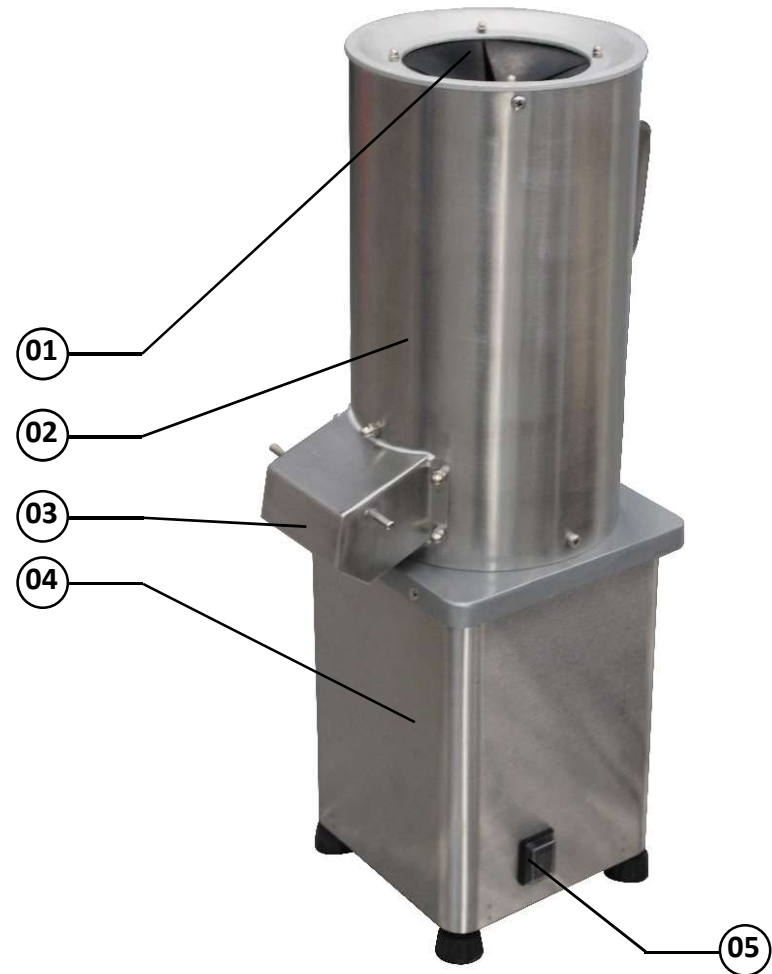
ELECTRIC NETWORK  
220V / 60Hz



1.2 Main Components

All components that incorporate the equipment are made with carefully selected materials for each function within the standards of testing and Skymesen experience.

PICTURE 01



01 - Entry nozzle  
02 - Full Cup  
03 - Output Nozzle

04 - Office  
05 - On / off switch

### 1.3 Specifications

**TABLE 01**

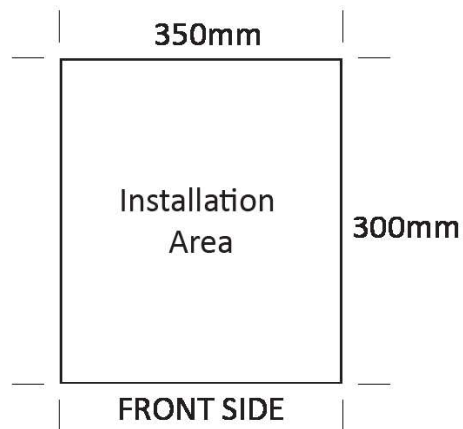
CHARACTERISTICS	UNIT	MPAL
Average Production	kg/h	30
Tension	V	220
Frequency	Hz	60
Power	CV	0,5
Height	mm	760
Width	mm	305
Depth	mm	315
Net Weight	kg	13,5
Gross Weight	kg	15

## 2.Installation and Pre-Operation

### 2.1 Installation

#### 2.1.1 Positioning

Your equipment must be positioned flush on a dry, firm surface.



#### 2.1.2 Electrical Installation

This equipment is designed for 220 volts (60Hz). Upon receiving the equipment check the voltage recorded on the label on the cord.

The power cord has 3 blades with the center pin the ground pin (ground pin - Ground Pin). It is mandatory that the three points are properly connected before operating the equipment.

## 6. MAINTENANCE

Maintenance must be considered a set of procedures with the purpose to keep the equipment best operating conditions , therefore increasing the equipment life and safety.

\* Cleaning – check item 3.3 Cleaning

\* Wiring - Check all wires regarding deteriorate conditions as well as all electric contacts (terminals) regarding tightening and corrosion .

\*Contacts – ON/OFF switch, emergency button, reset button , electronic circuits etc , check the equipment in order to assure that all components are correctly working and the equipment operation is normal .

\* Installation – make sure the installation followed item 2.1 instructions.

\* Useful life of the product : 2 years, for a normal working shift.

1 – Each month check :

- Check the electrical installation
- Measure the voltage at the socket
- Measure the working current and match it with the nominal current
- Check the tightening of all electric terminals to avoid bad contacts
- Check electric motor shaft for possible looseness.
- Check the wiring for overheating , insulation failures and mechanical damages .

2 - Each three month checks :

- Check electrical components such as ON/OFF switch, emergency button , reset button, electronic electric circuits , overeating, insulation failings, or mechanical damages
- Check cutting units and bearings for possible looseness.
- Check retainers, O'rings, V'rings and other seals.

## 5. PROBLEMS ANALYSIS and SOLUTIONS

### 5.1 Problems, Causes and Solutions

This equipment has been designed to require minimum maintenance. However, some performance failures may happen due to natural wearing caused by the use of the equipment.

If any problem arises check the table below, where there are some detailed and recommended possible solutions.

**TABLE 02**

PROBLEMS	CAUSES	SOLUTIONS
- The equipment does not turn on.	- Problem in the internal or external electrical circuit equipment.  - Lack of electricity.	- Call technical assistance (ATA);  - Check for Electricity.
- Burnt smell and / or smoke.	- Problem in the internal or external electrical circuit equipment.	- Call technical assistance (ATA).
- The equipment connects, but when the product is placed on the equipment, the same or to rotate at low speed.	- Problems with Electric Motor.	- Call technical assistance (ATA).
- AC power cord damaged.	- Failure to transport the product.	- Call technical assistance (ATA).
- Unusual noises	- Defective bearings	- Call technical assistance (ATA).

### IMPORTANT

**Make sure the mains voltage where the equipment will be installed is compatible with the voltage on the label on the cord.**

### 2.2 Pre-Operation

Before using your equipment should be washed all parts that come into contact with the product being processed with water and mild soap (read item 3.4 Cleaning).

Lot full glass on the base.

The glass has pins to engage as No. 01 (Fig.02).

At the base there are slots No. 01 (Fig.03) that hold the pins of the glass.

Place the pins on the glass at the base of the slot until the glass sit perfectly on the base, as shown in Fig. 04.

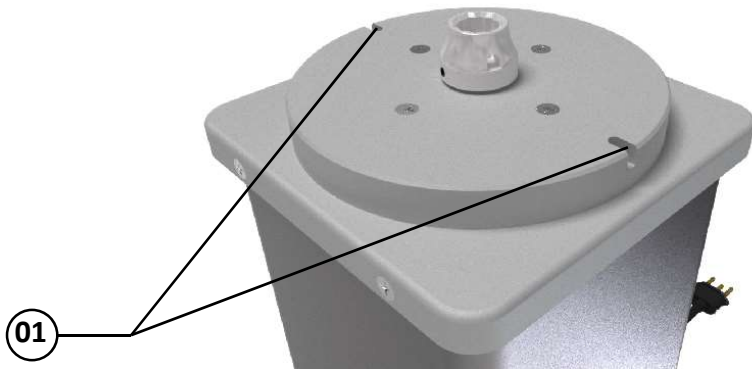
The outlet nozzle should always be mounted to the front of the machine frame as shown in Fig. 04.

Make sure the equipment is firm in his workplace.

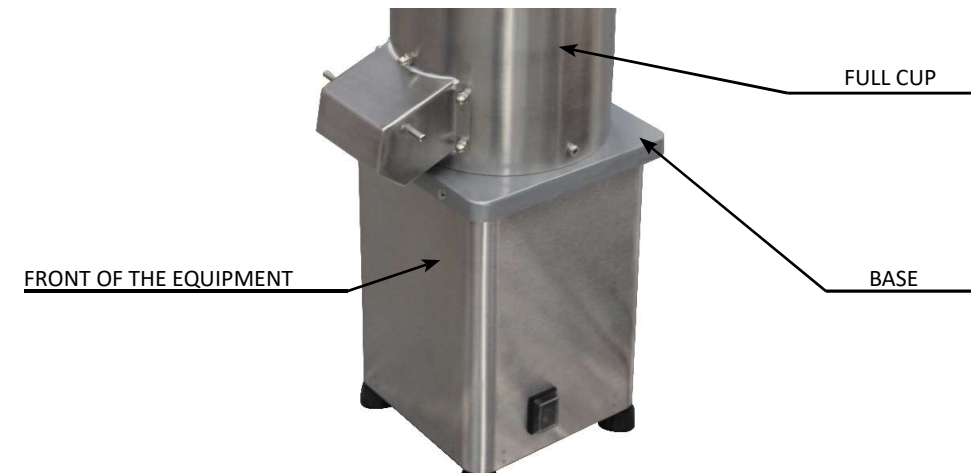
**PICTURE 02**



**PICTURE 03**



**PICTURE 04**



#### 4.3.2 Precautions

Check the motor and sliding or turning parts of the machine in case of abnormal noises. Check the tension of the belts and chains and replace the set when belts or chains show signs of wearing. When checking the tension of belts or chains DO NOT insert your fingers between belts and pulleys, nor between the chains and gears. Check protections and safety devices to make sure they are working properly.

#### 4.4 Operation

##### 4.4.1 Warnings

Do not use the machine with long hair that could touch any part of the machine. This might lead to a serious accident. Tie your hair up well and/or cover it with a scarf. Only trained or skilled personnel shall operate this machine. Never touch turning parts with your hands or any other way, NEVER operate the machine without any original safety devices under perfect conditions.

#### 4.5 After Finishing The Work

##### 4.5.1 Precautions

Always TURN THE MACHINE OFF before cleaning by removing the plug from the socket. Never clean the machine unless it has come to a complete stop. Put all the components back to their functional positions before turning the machine ON again. Check the level of liquids. Do NOT insert your fingers in between belts and pulleys nor chains and gears.

#### 4.6 Maintenance

##### 4.6.1 Danger

Any maintenance with the machine in working situation is dangerous. TURN IT OFF BY PULLING THE PLUG OFF THE SOCKET DURING MAINTENANCE.

#### **IMPORTANT**

**Always remove the plug from the socket in any emergency situation.**

#### 4.7 Warning

Electrical or mechanical maintenance has to be undertaken by qualified personnel.

The person in charge of maintenance has to be sure that the machine is under TOTAL SAFETY conditions when working.



- \* Use recommended or equivalent lubricants, oils or greases.
- \* Avoid mechanical shocks, once they may cause damages or bad functioning.
- \* Avoid water, dirt or dust contact to the mechanical and electrical components of the machine.
- \* DO NOT change the standard characteristics of the machine.
- \* DO NOT remove, tear off or maculate any safety or identification labels stuck on the machine. If any labels have been removed or are no longer legible, contact your nearest dealer for replacement.

## 4.2 Safety Procedures and Notes before Switching the Machine ON

### IMPORTANT

**Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to well understand all the information contained in this manual. If you have any question contact your supervisor or your nearest Dealer.**

#### 4.2.1 Danger

An electric cable or electric wire with damaged jacket or bad insulation might cause electrical shocks as well as electrical leak. Before use, check the conditions of all wires and cables.

#### 4.2.2 Advices

Be sure to well understand all the information contained in this manual. Every operation function or procedure has to be thoroughly clear.

Before using any commands (switch, buttons, lever), be sure it is the correct one. In case of doubt, consult this manual.

#### 4.2.3 Precautions

The electric cable has to be compatible with the power required by the machine.

Cables touching the floor or close to the machine need to be protected against short circuits.

## 4.3 Routine Inspection

#### 4.3.1 Advice

When checking the tension of the belts or chains, DO NOT insert your fingers between the belts and the pulleys and nor between the chain and the gears.

## 3.Operation

### 3.1 Drive

To connect the equipment proceed as described:

- Connect the equipment to the power grid.

- Operate the On / off switch No. 05 (Fig 01.) That attached on the side of the machine frame, positioning it in I (ON).

### 3.2 Operating Procedure

The bread mills are machines working at high speed and both require that the power is equally fast.

To feed them, put the bread by the entrance nozzle No. 01 (Fig.01) and lead them by hand only until the entry (hole) on the same.

The MPAL has a production capacity of 30 kg / h.

The ground product is removed automatically by the machine spout 03 ° C (Fig. 01) located in front of the machine.

### 3.3 Cleaning and hygiene

### IMPORTANT

**Remove the plug before beginning the cleaning process.**

The equipment must be thoroughly cleaned and sanitized:

- Before being first used;
- After the operation of each day;
- Where it is not used for an extended period;
- Before putting it into operation after a prolonged downtime.
- Can be removed for cleaning:
- Full Cup

To do a good cleaning equipment, follow these instructions:

1. Pass a damp cloth on the outside of the equipment.
2. Remove the full cup and wash it completely under running water.

Wash all parts with water and mild soap.

To mount the Full cup proceed as Item 2.2.

### IMPORTANT

**Do not use water jet directly on the equipment.**

### 3.4 Cautions with Stainless Steel:

The Stainless Steel may present rust signs, which ARE ALWAYS CAUSED BY EXTERNAL AGENTS, especially when the cleaning or sanitization is not constant and appropriate.

The Stainless Steel resistance towards corrosion is mainly due to the presence of chrome, which in contact with oxygen allows the formation of a very thin protective coat. This protective coat is formed through the whole surface of the steel, blocking the action of external corrosive agents.

When the protective coat is broken, the corrosion process begins, being possible to avoid it by means of constant and adequate cleaning.

Cleaning must always be done immediately after using the equipment. For such end, use water, neutral soap or detergent, and clean the equipment with a soft cloth or a nylon sponge. Then rinse it with plain running water, and dry immediately with a soft cloth, this way avoiding humidity on surfaces and especially on gaps.

The rinsing and drying processes are extremely important to prevent stains and corrosion from arising.

#### IMPORTANT

**Acid solutions, salty solutions, disinfectants and some sterilizing solutions (hypochlorites, tetravalent ammonia salts, iodine compounds, nitric acid and others), must be AVOIDED, once it cannot remain for long in contact with the stainless steel:**

These substances attack the stainless steel due to the CHLORINE on its composition, causing corrosion spots (pitting).

Even detergents used in domestic cleaning must not remain in contact with the stainless steel longer than the necessary, being mandatory to remove it with plain water and then dry the surface completely.

Use of abrasives:

Sponges or steel wool and carbon steel brushes, besides scratching the surface and compromising the stainless steel protection, leave particles that rust and react contaminating the stainless steel. That is why such products must not be used for cleaning and sanitization. Scrapings made with sharp instruments or similar must also be avoided.

Main substances that cause stainless steel corrosion:

Dust, grease, acid solutions such as vinegar, fruit juices, etc., saltern solutions (brine), blood, detergents (except for the neutral ones), common steel particles, residue of sponges or common steel wool, and also other abrasives.

## 4. GENERAL SAFETY PRACTICES

#### IMPORTANT

**If any recommendation is not applicable to your equipment , please ignore it .**

The following safety instructions are addressed to both the operator of the machine as well as the person in charge of maintenance.

The machine has to be delivered only in perfect conditions of use by the Distributor to the user. The user shall operate the machine only after being well acquainted with the safety procedures described in the present manual. **READ THIS MANUAL WITH ATTENTION.**

### 4.1 Basic Operation Procedures

#### 4.1.1 Dangers

Some areas of the electric device have parts that are connected or have parts connected to high voltage. These parts when touched may cause severe electrical shocks or even be lethal.

Never touch manual commands such as switches, buttons, turning keys and knobs with your hands wearing wet clothes and/or wet shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a lethal situation.

#### 4.1.2 Warnings

- \* The operator has to be well familiar with the position of ON/OFF Switch to make sure the Switch is easy to be reached when necessary.
- \* Before any kind of maintenance, physically remove plug from the socket.
- \* Provide space for a comfortable operation thus avoiding accidents.
- \* Water or oil spilled on the floor will turn it slippery and dangerous. Make sure the floor is clean and dry.
- \* Before using any commands (switch, buttons, lever), be sure it is the correct one. In case of doubt, consult this manual.
- \* Never touch any manual commands (switch, buttons, lever) unadvisedly.
- \* If any work is to be made by two or more persons, coordination signs will have to be given for each operation step. Every step of the operation shall be taken only if a sign has been made and responded.

#### 4.1.3 Advices

- \* In case of power shortage, immediately switch the machine off.