



# Instruction Manual

High Efficiency  
INDUSTRIAL GRINDER

Model

# TR-02T



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- ALÉM DESTAS MÁQUINAS, FABRICAMOS UMA LINHA COMPLETA DE EQUIPAMENTOS. CONSULTE SEU REVENDEDOR.  
- ESTE PRODUTO CONTA COM ASSISTÊNCIA TÉCNICA, REPRESENTANTES E REVENDEDORES EM TODO TERRITÓRIO NACIONAL.  
DEVIDO À CONSTANTE EVOLUÇÃO DOS NOSSOS PRODUTOS, AS INFORMAÇÕES AQUI CONTIDAS PODEM SER MODIFICADAS SEM AVISO PRÉVIO.

# SUMMARY

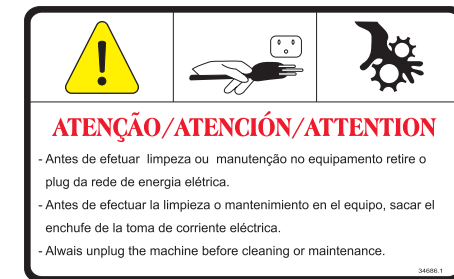
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## 1. Introduction

### 1.1 Safety

The High Efficiency Industrial Grinder model TR-02T is simple to operate and easy to clean, however for better safety, read the following instructions to avoid accidents.

- 1.1.1 – Always unplug the machine for cleaning, maintenance or any other service.
- 1.1.2 – Never use any instruments which are not part of the machine to help operating it.
- 1.1.3 – Before turning the machine ON, make sure the Cup N°02 (Pic-01) is properly attached on its position.
- 1.1.4 – Never spray water directly upon the machine.
- 1.1.5 – Never turn the machine ON with wet feet or clothing.
- 1.1.6 – When installing the machine connect the ground wire.



### 1.2 Main Components

All components of this machine were designed and manufactured using carefully selected materials proper to their function according to test standards and experience of Siemens.

**PICTURE - 01**

- 01 – Cup Lid
- 02 – Cup
- 03 – Motor Support Flange
- 04 – Housing
- 05 – Base
- 06 – ON/OFF Switch
- 07 – Cup Holder
- 08 – Voltage Selector Switch 110/220
- 09 – Over Lid



Table - 01

Characteristics	Unit	TR-02T
Voltage	[V]	110/220
Frecuencia *	[Hz]	50 ou 60 *
Power Rating	[CV]	0,33
Consumption	[kW/h]	0,26
Height	[mm]	680
Width	[mm]	200
Depth	[mm]	220
Net Wiegth	[kg]	7,5
Shipping Wiegth	[kg]	8,3
Speed	[ rpm]	3500

(\*) The frequency shall be 50 or 60 Hz. according to the motor frequency

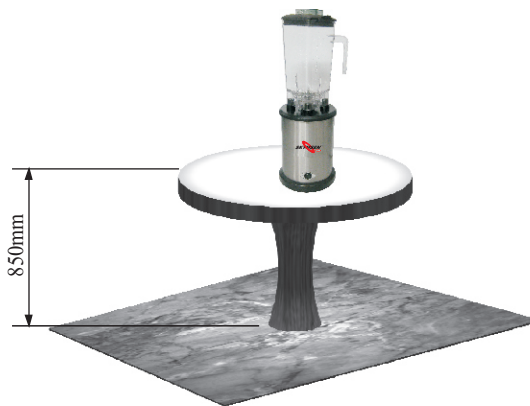
## 2. Installation and Pre Operation

### 2.1 Installation

For a good performance, the High Efficiency Industrial Grinder TR-02T must be placed onto a leveled stable surface approximately 850mm high.

The TR-02T is equipped with a 110/220v motor. When you receive the machine, check the voltage indicated on the electric cable tag and the voltage of your power supply. In case the voltages are different, adjust it by using the Voltage Selector Switch N°. 08 (Pic-01), located under the machine.

The electric cable brings a plug with 2 (two) flat pins and 1 (one) round pin (ground wire). It is mandatory that the 3 (three) pins are properly connected before using the machine



### 2.2 Pre Operation

#### IMPORTANT

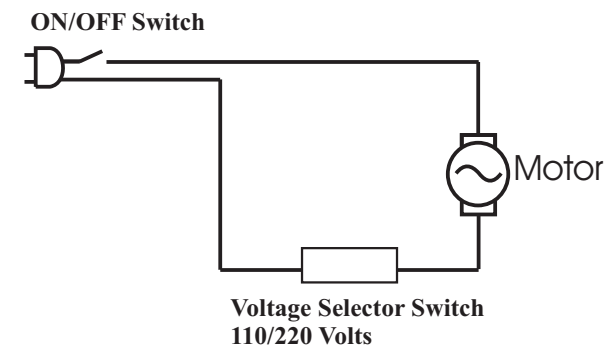
When putting the Cup N°.02 (Pic-01), check if it is well fitted. The attachment system locks the Cup in any position without affecting the machine performance.

Before using the TR-02T, you must wash all the parts in contact with the products to be grinded. Use water and neutral soap. To clean your TR-02T, read the item 3.3 Cleaning (Page 04).

Table - 02

Problem	Causes	Solutions
*The machine does not turn ON.	*Lack of electric energy.  *Problem on the internal or external electric circuit of the machine.	*Check if the plug is connected to the socket and if there is electric energy.  *Call technical assistance.
*Cup leakage.	*Sealing system problem.	*Call technical assistance.

### 5.2 Electric Diagram TR-02T



## 4.4 Operation

### 4.4.1 Advice

Be sure your hair is not loose in order to avoid getting caught by turning parts which could lead to a serious accident. Tie your hair well up and/or cover your head with a scarf.

The operation performed by not trained or skilled personnel shall be forbidden.  
Never touch turning parts with your hands or in any other way.  
NEVER operate machine without all original safety devices under perfect conditions.

## 4.5 After Finishing The Work

### 4.5.1 Precautions

Always TURN THE MACHINE OFF by removing the plug from the socket before cleaning the machine. Never clean the machine unless it has come to a complete stop. Put all components back to their functional positions before turning it ON again. Check level of oil. DO NOT place 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.

## 4.7 Advice

Electrical or mechanical maintenance must be done by qualified personal for such operation.  
Person in charge has to be sure that the machine is under TOTAL SAFETY conditions when working.

# 5 Analysis and Problems Solving

## 5.1 Problem, causes and solutions

The High Efficiency Industrial Grinder TAR-02T was designed to operate with minimum maintenance, but the natural wearing caused by long time use of the equipment may eventually cause some malfunctions.  
If you have any problem with your Industrial Grinder TAR-02T, check the Table 02 next, on which the most common situations are listed with recommended solutions.

## 3. Operation

### 3.1 Starting

**IMPORTANT**  
**Always wait until the motor complete stop before removing or replacing the Cup N°.02 (Pic-01).**

Start the machine by switching on the ON/OFF Switch N°06 (Pic-01) located on the Base N°05 (Pic-01).

### 3.2 Feeding Procedure

The High Efficiency Industrial Grinder TR-02T is a machine that works at approximately 3.500 rpm speed.  
To feed it, follow the below procedures:

- 1 – Remove the Lid N°.01 (Pic-01) by lifting it;
- 2 – Insert the products inside the Cup N°.02 (Pic-01) with the machine turned OFF;
- 3 – Replace the Lid N°.01 (Pic-01) and turn the machine ON.

**NOTE**  
**The processing time depends on the kind of product.**

**IMPORTANT**  
**Never turn the machine ON empty, because it may get damaged.**

### 3.3 Cleaning

**IMPORTANT**  
**Always wait until the motor complete stop before removing or replacing the Cup N°.02 (Pic-01).**

Find below the procedure to move the removable parts:

- 3.3.1 Turn the machine OFF;
- 3.3.2 Remove the Lid N°.01 (Pic-01) and the Cup N°.02 (Pic-01);
- 3.3.3 Wash all the parts with water and soap;
- 3.3.4 To replace the parts, follow the sequence above inversely.

**IMPORTANT**  
**When washing the Cup, be careful with the Blades, once they have sharp edges.**

## 4. General Safety Practices

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 to the operator in perfect conditions of use, the Distributor must instruct the Dealer about the machine operation and safety . 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 Practices

#### 4.1.1 Dangerous parts

Some parts of the electric devices are connected to high voltage points . These parts when touched may cause severe electrical shocks or even be fatal.

Never touch commands such as buttons, switches and knobs with wet hands , wet clothes and/or shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a fatal 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 giving any manual command (switch, buttons, turn keys or lever) be sure the command is the correct one. Check this manual for further details if necessary.

Never use a manual command (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 turn the machine OFF.

Use recommended or equivalent lubricants, oils or greases.

Avoid mechanical shocks as they may cause failures or malfunction.

Avoid penetration of water, dirt or dust into mechanical or electrical components of the machine.

DO NOT modify original characteristics of the machine.

DO NOT remove, tear off or maculate any labels stuck on the machine. If any label has been removed or is no longer legible, contact your nearest dealer for replacement.

READ CAREFULLY AND WITH ATTENTION THE SAFETY OR OPERATION INSTRUCTIONS LABELS DISPLAYED ON THE MACHINE, AS WELL AS THE INSTRUCTION MANUAL AND THE TECHNICAL CHARACTERISTICS WRITTEN INSIDE .

### 4.2 Safety Procedures and Notes Before Switching Machine ON

#### IMPORTANT

Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to be familiar with the instructions and that you have well understood all 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 could cause electrical shocks as well as electrical leak. Before use, check conditions of all wires and cables.

#### 4.2.2 Advices

Be sure ALL INSTRUCTIONS in this manual have been thoroughly understood. Every function and operational procedure have to be very clear to the operator. Contact your nearest Dealer for further questions.

Any manual command (switch, button or lever) shall be given only after being sure it is the correct one.

#### 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.

Oil reservoir has to be full up to the required level as indicated. Check level and add oil if necessary.

### 4.3 Routine Inspection

#### 4.3.1 Advice

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

#### 4.3.2 Precautions

Check if motors, belts, chains or gears and sliding or turning parts of the machine produce abnormal noises.

Check the tension of the belts and chains and replace the set when belt, chain or gears show signs of being worn out.

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

Check protections and safety devices to make sure they are working properly.