



# Instruction Manual

BAND SAW - Model

SK

SKL

12670.5 - Março/2011



**METALÚRGICA SIEMSEN LTDA.**

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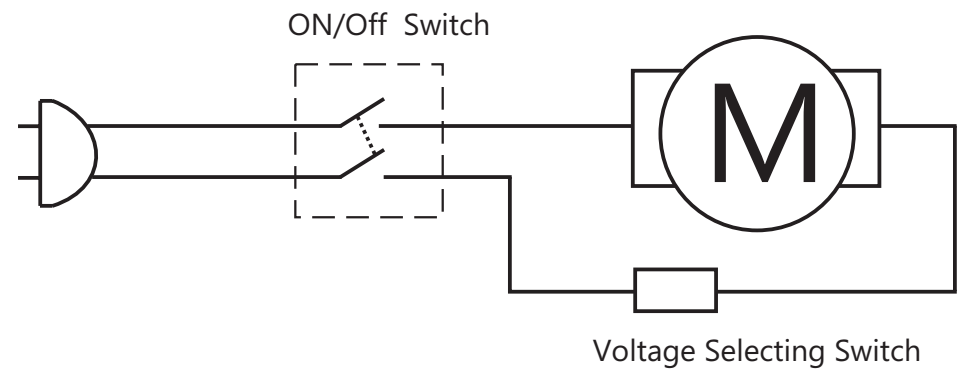


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- ALÉM DESTAS MÁQUINAS, FABRICAMOS UMA LINHA COMPLETA DE EQUIPAMENTOS. CONSULTE SEU REVENDEDOR.  
- ESTE PRODUTO CONTA COM ASSISTÊNCIA TÉCNICA, REPRESENTANTES E REVENDEDORES EM TODO TERRITÓRIO NACIONAL.  
DEVIDO À CONSTATANTE EVOLUÇÃO DOS NOSSOS PRODUTOS,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



5.3 ELECTRIC DIAGRAM



6. GENERAL ADVICES

DO NOT wear loose fitting clothes while operating the unit.  
DO NOT use bracelets or any other piece of jewelry.  
Have your hair ALWAYS shortened and held up (use hair fishnets if necessary) in a way it cannot reach any part of the machine. Roll up any loose sleeves.

SKYMSEN IS NOT responsible for ANY harm or injury caused by the negligent or inappropriate use of this equipment by any operator. This equipment MUST BE operated only by persons whose age equals or exceeds 18 years old, in a safe and sound state of mind, free from the influence of any kind of drugs and alcohol, that received proper training and instructions regarding the correct operation of this machine, that are wearing correct and authorized safety clothes.

All and any kind of modifications carried on and applied to this machine IMMEDIATELY NULLIFIES ANY KIND OF WARRANTY and may result in harm and injuries to the individuals operating this machine and to individuals that are located in the machine surrounding areas while it is being operated.

UNDER NO CIRCUNSTANCES place your hands in the moving parts of the machine while it is being used. MAKE SURE the machine has come to a complete stop before acessing the processed ingredients.

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# 1. Introduction

## 1.1 Safety

When misused, the Band Saw SK can be potentially DANGEROUS. Maintenance, cleaning or any other service on this machine must be made only by properly trained personnel and the power plug must be disconnected. For your safety, the following instructions must be followed in order to avoid accidents:

- 1.1.1 Unplug the machine when you need to remove any removable part during cleaning, maintenance or any other operation.
- 1.1.2 Never make use of any tool or instrument that is not originally part of the machine during any operation.
- 1.1.3 Never touch the blade Nº. 09 (Pic.01), even when the machine is off, because it has sharp edges.
- 1.1.4 Never adjust the upper blade cut regulator, with the blade in movement
- 1.1.5 Never use water jets directly upon the machine.
- 1.1.6 Never use clothes with wide sleeves, especially on the wrists during the operation.
- 1.1.7 Use steel gloves when operating the saw .
- 1.1.8 Keep your hands away from movable parts, when in operation .
- 1.1.9 Never turn the machine on with wet hands, shoes or clothes.
- 1.1.10 Never switch the saw ON with any door open .
- 1.1.11 Always ground machine properly ..



## 1.2 Main Components

All components of this machine were made of raw materials carefully selected for each function, according to the test patterns and Siemens experience.

02

Table - 02

The saw does not switch on	The saw plug is off its socket  Electric energy shortage  Some problem with the internal circuits of the saw	Put the plug on its socket  Check other sources  Call Skymsen Technical
Smoke , or burnt smell	Some problem with the internals or externals circuits	Call Skymsen Technical Assistance
The saw switches on , but when the meat touches the blade No.07 (Pict.01) the Technical blade stops or turns	The belt is slipping  The motor capacitor is failing .	Adjust belt tension . See item 5. 2. 1  Call Skymsen Technical Assistance
Unusual noises	Blade slipping on wheels  The blade is not correctly welded	Turn the blade tension regulator. See item 5. 2. 2  Change the blade
The blade frequently tears	The blade or the wheels are dirty  Faulty wheels	Clean the saw . See item 3. 2  Change the wheels
Difficulty to cut the meat	The blade or the wheels are dirty  Wrong tension on the blade .  The blade is off the wheels center	Clean the saw . See item 3. 2  Regulate the blade tension. See item 5. 2. 2  Proceed to adjust the upper bearing. See item 5. 2. 5 . When no improvement is obtained call Skymsen Technical Assistance .

- Loosen the three nuts N°.01 (Pic.03) with a 10 mm spanner.
- Using a screw driver, rotate the screw No. 02 ( Pic. 03 )  $\frac{1}{4}$  of a turn anti-clockwise, if the blade is dislocated to the front. If the blade is dislocated to the back, rotate the Screw  $\frac{1}{4}$  of a turn clockwise.
- Tighten the three nuts N°.01 (Pic.03), previously loosen., with a 10 mm spanner
- Adjust the blade according to description on 5.2.2
- Manually rotate the Wheel and check if the Blade is centered on it. Proceed like this until the blade is centered.

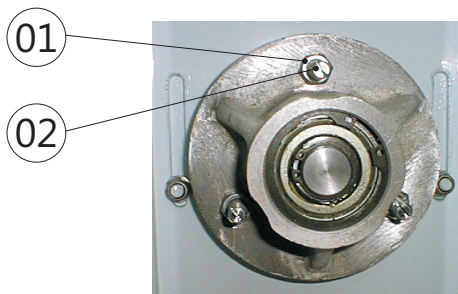
**Figura - 02**



01

02

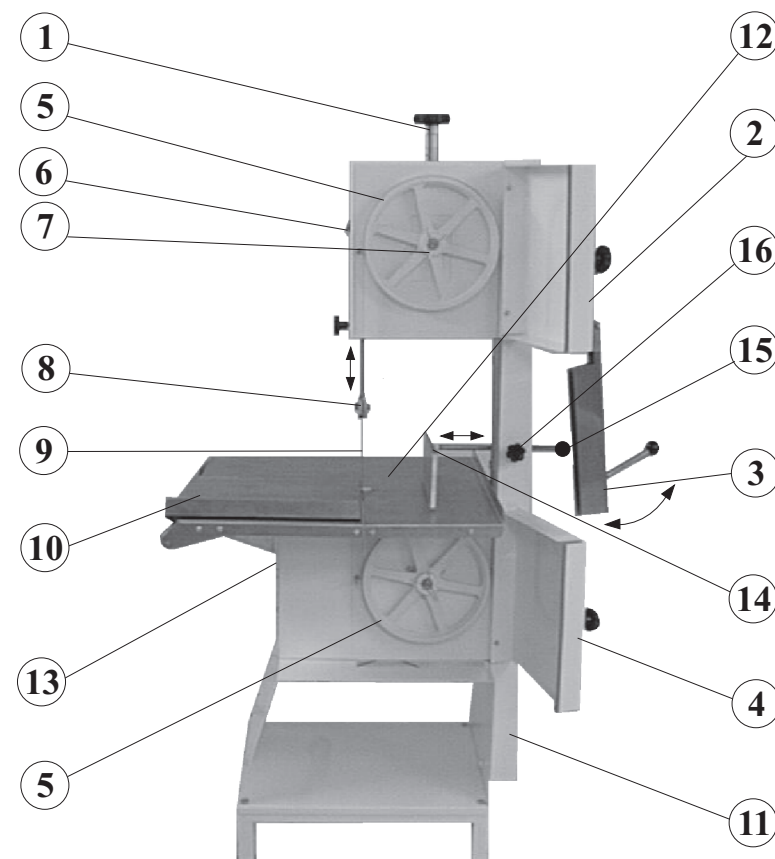
**Figura - 03**



01

02

**Picture - 01**



**01-Blade tension graduator**

**02-Upper door**

**03-Pusher**

**04-Lower door**

**05-Wheel**

**06-ON / OFF Switch**

**07-Loop**

**08-Blade Guide**

**01-02-Blade ( width  $\frac{1}{2}$  " )**

**03-Movable table**

**04-Frame**

**05-Fixed table**

**13 - Cut regulator ( optional )**

**14 - Spherical Handle**

**15 - Cut regulator Knob**

**16 - Blade Guide Knob**

Table - 01

Characteristics	Unit	SK (Pintada)	SKL (Inox)
Voltage	V	110 / 220	110 / 220
Frequency	Hz	50 o 60 (*)	50 o 60 (*)
Power Rating	CV	0,75	0,75
Consumption	kWh	0,6	0,6
Height	mm	1780	1780
Width	mm	840	840
Depth	mm	730	730
Net Weight	kg	91	91
Gross Weight	kg	146	146
Maximum Cut Width	mm	290	290
Minimum Cut height	mm	295	295

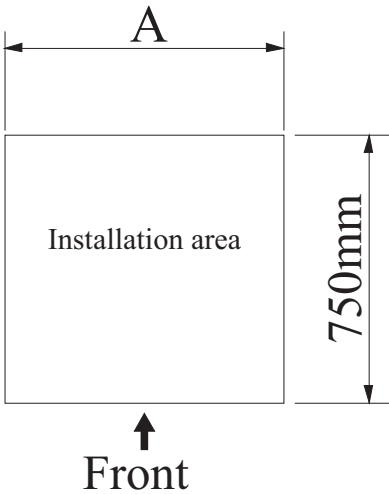
(\*) See nameplate for correct frequency.

2. Installation and Pre-Operation

2.1 Installation

The Band Saw must be installed onto a stable working surface. Verify if the voltage of the power point it will be connected to is 110V. The cord has a plug with two flat pins and one round pin .The round pin is earth, the three pins shall be properly connected before to start the saw .

A = 1600mm (With cut regulator)  
A = 1240mm (without cut regulator)



- Using the spherical handle N°14 (Pic.01), move the Cut Regulator horizontally upon the fixed Table N°.12 (Pic.01), increasing or decreasing the distance between the Regulator and the Blade, according to your necessity.
- Rotate the knob N° 15 (Pic.01) clockwise to lock the Cut Regulator on the desired position.

5.2.4 Blade Guide Adjustment

The blade guide N° 8 (Pic.01) adjustment shall be made accordingly to the height of the product that will be cut. Its main function is to keep the blade perpendicular to the fixed table and inflexible. To adjust the Blade Guide N° 08 (Pic.01), proceed according to description below, keeping the machine disconnected from the power line:

- Turn the knob N° 16 (Pic.01) anti-clockwise to allow vertical movement.
- Adjust it as close as possible to the product that will be cut, however being careful not to avoid any free movement.
- Turn the knob N° 16 (Pic.01) clockwise to fix the Blade Guide in the wanted position.

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5.2.5 – Upper Bearing Adjustment

The adjustment of the Upper Bearing is made in order to centralize the blade on the wheel, and to prevent it from skipping.

To adjust the Upper Bearing, proceed according to description below, keeping the machine disconnected from the power line:

- Loosen the Blade N°.09 (Pic.01) using the graduator, accordingly to item 3.2.3
- Take out the upper rear lid, removing the Screws using a 10mm spanner.

## 5.2 Adjustments and Replacement of Components

### 5.2.1 – Belts

To obtain longer life for belts and a good performance of the machine, the belts must be perfectly adjusted. In case they are loose, they will skid during operation.

One must be careful not to over stretch the belts, because it may cause premature wearing of ball bearings.

To adjust the belt, proceed by following the instructions below:

#### NOTE

**When adjusting the belts, check for perfect alignment of the pulleys.**

Remove the lower rear lid, by releasing the screws with a 10mm spanner.

Loosen the motor nuts n° 2 (Pic.02) with a 13mm spanner.

Then, using a wood lever, dislocate the motor N°.01 (Pic.o2) in order to stretch the belts and retighten the nuts N°.02 (Pic.02).

### 5.2.2 Blade Adjustement

With daily use of the Band Saw SK, the blade can be dilated because of its flexible structure.

Check the blade tension before to start working with the machine. Turn the graduator N° 1 (Pic.01) clockwise, until the graduator warns the skidding has started, this way the blade will be with the ideal tension to work.

### 5.2.3 – Cut Regulator Adjustment

The Cut Regulator was developed to help user on cutting and to improve safety. Its main function is to provide cuts with the same thickness.

To adjust the Cut Regulator, follow the procedures below:

- Rotate the knob N°.16 (Pic.01) anti-clockwise to move the Cut Regulator.

## 2.2 Pre-Operation

#### IMPORTANT

**Make sure the blade is set with the correct tension before the operation, by rotating the Blade Tension Graduator N°.01 (Pic.01) handle clockwise, until it starts to snatch.**

Check if the Band Saw is firm on its position. Before using it, all the parts in contact with the product must be cleaned with water and neutral soap. In order to graduate ( stretch ) the blade, rotate the Graduator N°.01 (Pic.01) handle clockwise until it starts to snatch, by this the blade tension will be always the ideal one recommended by the manufacturer.

## 3. Operation

### 3.1 Procedure for operation

#### IMPORTANT

**Under no circumstances put your hands towards the blade to push the product to be cut.**

With the machine turned off, adjust the Blade Guide No. 08 (Pic. 01) and the Cut Regulator N°.13 (Pic.01). To operate the Band Saw, activate the ON / OFF Switch N°.06 (Pic.01). Place the product to be processed upon the Movable Table N°.10 (Pic.01), push it towards the blade N°.09 (Pic.01) and lean it on the Cut Regulator N°.13 (Pic.01), keeping the desired slice thickness. When pulling back the product, be careful so it does not touch the flat side of the blade, preventing the blade from getting out of the wheels.

#### Siemens Hint

**When using the fixed table , to have the meat to slip with an easy movement spray a little water on the table .**



## 3.2 Cleaning

To clean the machine, firstly disconnect it from the power point. All the parts that have contact with the meat must be cleaned.

Find below the description of the procedure to remove the removable parts:

**3.2.1** – remove the upper door No 02 ( Pic. 01 ) , loosen the handle, and lift the door .

**3.2.2** – remove the lower door No.04 (Pic. 01 ) loosen the handle and lift the door .

**3.2.3** - Loosen the blade by rotating the Blade Tension Graduator No 01 ( Pic 01 ) handle anti-clockwise and remove it from the upper and lower wheels.

**3.2.4** – Remove the loops No. 07 (Pic 01 ) , and then withdraw the wheels pulling them off .

**3.2.5** - Wash all parts with hot water and neutral soap , and after dry them .

**3.2.6** – Never use hard , or sharp objects , such as knives , or hooks to clean meat residuals stuck on the doors . Use a plastic brush .

**3.2.7** – To assemble the movable parts , follow the reversal order . .

### **IMPORTANT**

**Put Vaseline on the wheel holes every 15 days. Pay attention to the blade position to avoid inversion. The teeth must be turned to the front of the machine with the inclination downwards.**

## 4.5 After The Work Ends

### 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. PROBLEMS ANALYSIS and SOLUTIONS

### 5. 1 Problems, Causes and Solutions

The Band Saw SK were designed to operate with minimum maintenance. However, some irregularities may occur during its operation, due to the natural wear out caused by the equipment use.

If there is any problem with your machine, check the Table-02 bellow, where you will find some possible solutions.



#### 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.

#### 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.

#### 3.2.8 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 Rules

### IMPORTANT

**If any item from the GENERAL SAFETY NOTIONS section is not applicable to your product, please disregard 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 Fundamentals 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 Cares and Observations Before to Switch ON the Machine

### 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.