

# **DSW - 200**

# DOUBLE HEAD WELDING MACHINE ZERO WELDING FOR 200MM



**USER MANUAL** 





CE



# THE GUARANTEE CERTIFICATE

MANUFACTURER MAK	MEZ PVC ve ALÜMİNYUM İŞLEME İNELERİ SAN.TİC.LTD. ŞTİ KAYAPA ORG.SAN.BÖL.LALE SOK NO:14
TELEFON	: +90 224 367 33 04 PBX
TELEFAX	: +90 224 367 00 49
THE SIGNATURE AND THE PRESS OF THE	:
REPRESENTATIVE OF FIRM PRODUCTION KIND : WELDING FOR 200MM MARK	: DOUBLE HEAD WELDING MACHINE ZERO : SÖNMEZ ,INTELLI-MACH
MODEL	: DSW-200
<b>BANDIT ROLE and SERIES No</b>	:
DATE and DELIVERY PLACE GUARANTEE PERIOD	: : 2 YEARS
THE MAXIMUM TERM OF REPAI	IR : 30 WORKING DAYS
THE NAME OF THE AUTHORIZE TRADING FIRM THE ADRESS TELEFON TELEFAX DATE-SIGNATURE-STAMP	D : : :

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# 1. GENERAL INFORMATION

#### **1.1.INTRODUCTION**

The user's manual given by the manufacturer contains necessary information about the machine parts. Each machine operator should read these instructions carefully, and the machine should be operated after fully understanding them.

Safe and efficient use of the machine for long term depends on understanding and following thne instructions contained in this manual. The technical drawing and details contained in this manual constitute a guide fort he operator.

#### **1.2 MANUFACTURER**





In case of any technical problem please contact your nearest SONMEZ dealer, or SONMEZ head ofise through the above mentioned phone fax or e-mail adress

\* Technical labels with the model description of the machine are fixed onto the front side of cach machine. \*The machine's serial number and manufacturing year are stipulated on the technical label.

Average life usade of production is 10 years. If you have any furher failure and complaint, please inform to our below mentioned technical service by verbal or written

#### **AUTHORIZED TECHNICAL SERVICE CENTER ADRESS;**

For minimize the documantation, It is wery necessary to mention below details at the agreements signed with suppliers and dealers of the purchased machines.

Kayapa org.san.böl.Lale sok. No:14 NİLÜFER – BURSA-TÜRKİYE Tel : 0224 367 33 04 Pbx. Fax : 0224 367 00 49 e-mail : export@sonmakpvc.com iletisim@sonmakpvc.com web : http//www.sonmakpvc.com

\*Machine's serial number\*Date of purchase\*Machine model\*Average daily operation period\*Voltage and freguency\*Description of the machine fault\*Name of dealer where machine was purchased

#### 2. MACHINE DESCRIPTION AND TECHNICAL INFORMATION

#### **2.1 DESCRIPTION OF THE MACHINE**

Welding machine for PVC profiles are designed for corner joints.

#### **2.2 TECHNICAL SPECIFICATIONS**

#### **2.1. MACHINE'S DESCRIPTION**

Machine is designed for the joining of PVC profiles though corner welding.

\* Capable of adjusting the clamp and welding pressure according to the profile type.

\* Equipped with a timer for melting and welding time. Capable of welding at angels between  $30^{\circ} - 180^{\circ}$ 

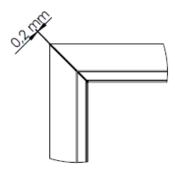
- \* Profiles are clamped one by one via foot pedal
- \* After clamping the profiles, the welding is carried out automatically.
- \* The thermostat is electronic and can be adjusted in a temperature range between 0°-260°
- \* Profiles compacted after the welding process is completed automatically.
- \* The machine is designed in accordance with CE standards.
- \* Profile support bracket is available.

TECHNICAL FEATURES		h b a°	BAR	Hav tük . Air	H W WxLxH	
DWS 200	220V 50Hz	max.h = 200 mm $max.b = 160 mm (45^{\circ})$ $\alpha = 15^{\circ} - 180^{\circ}$	6-8 Bar	70 Lt./dak. Lt./min.	4220x770 mm	550 kg.

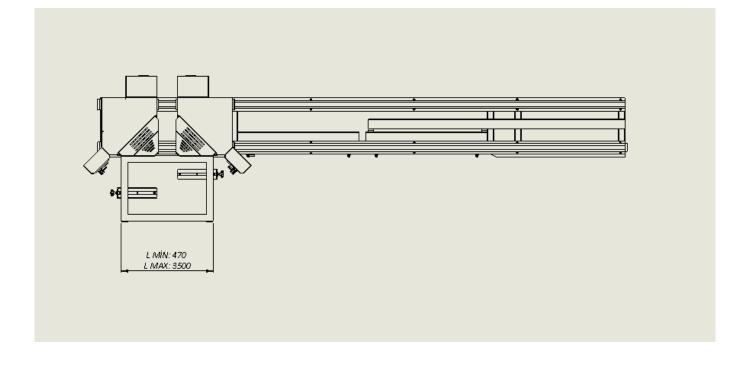
#### 2.1.3 DIFFERENCES BETWEEN WELDING MACHINES

#### **DWS-200**

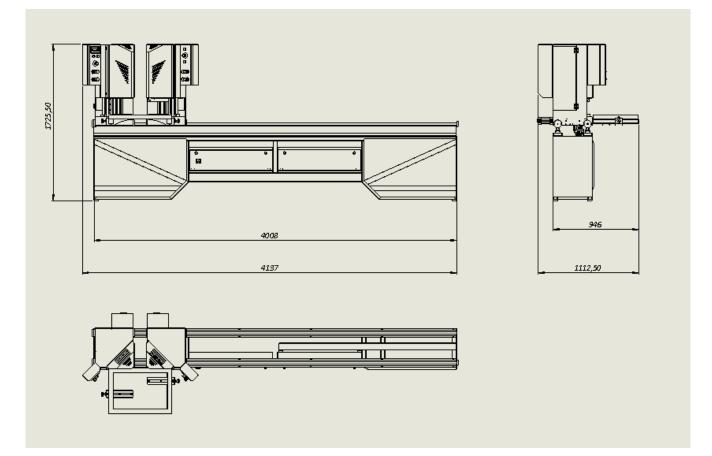
# 1- Distance from weld 0,2mm



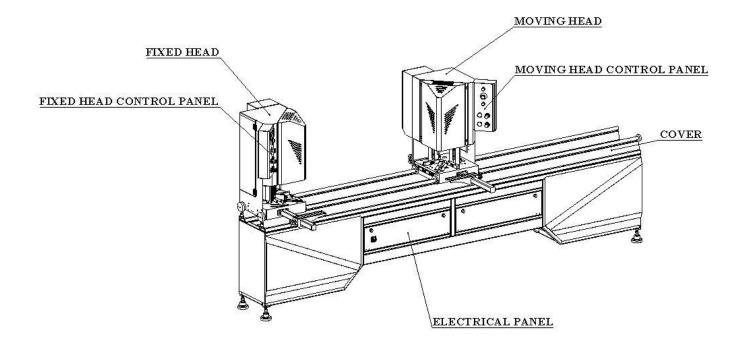
## 2.4. RESOURCE CAPACITY LENGTH



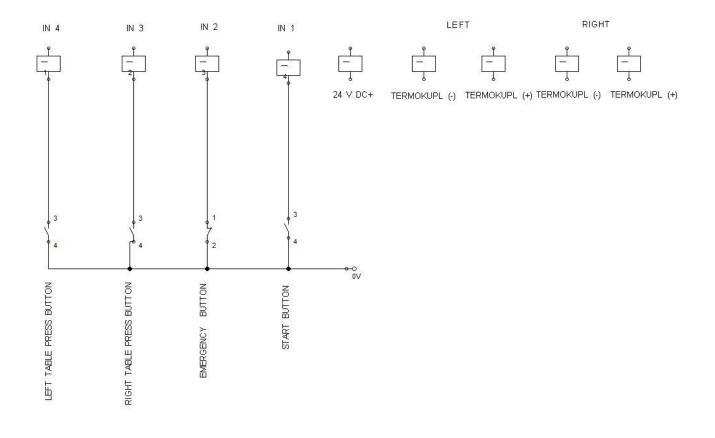
# 2.5. DIMMENSIONS



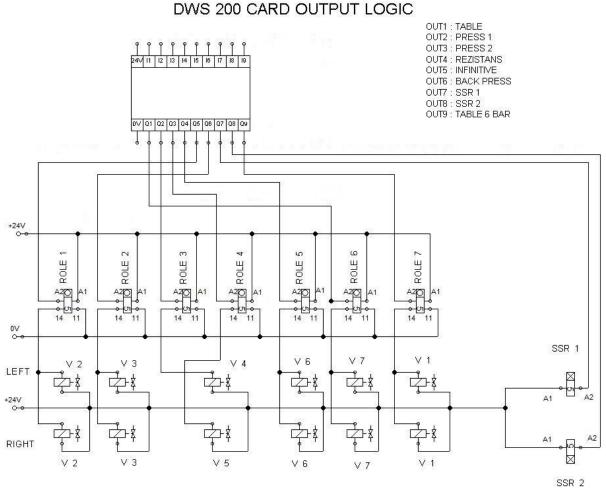
# 2.6. PART LIST AND TECHNICAL DRAWINGS

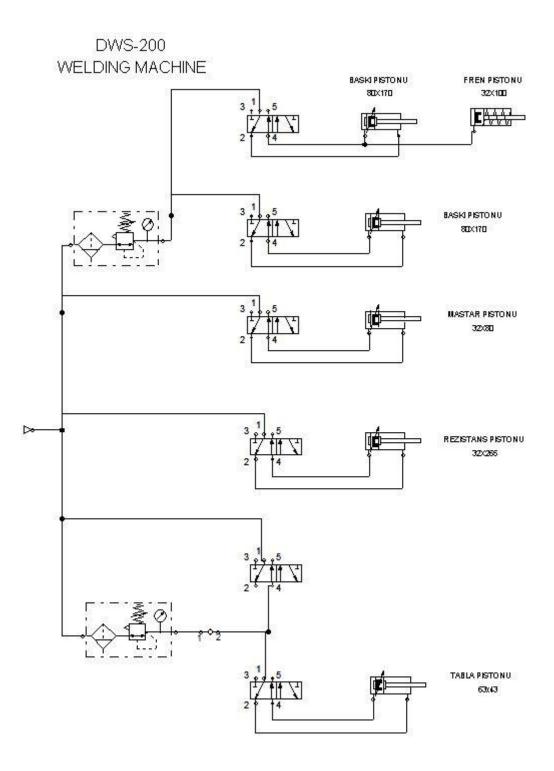


# **DWS-200 -- ELECTRICAL SHEME**



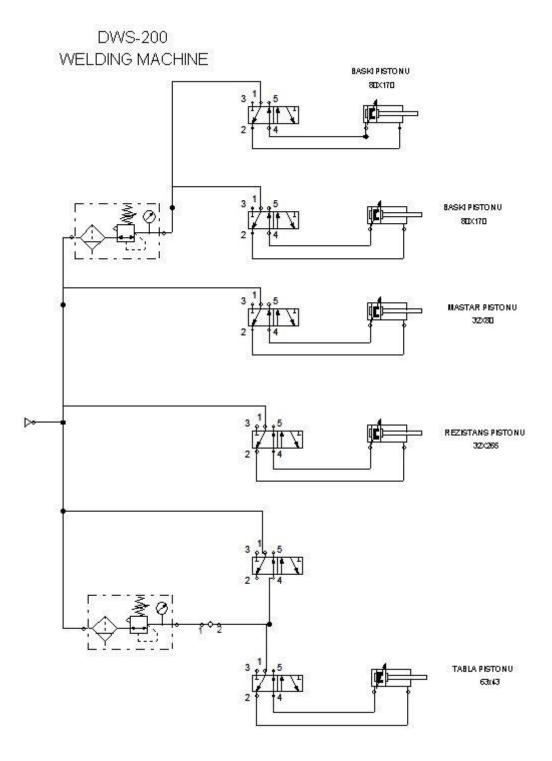
DWS 200 CARD INPUT LOGIC





## **DWS-200 PNEUMATIC SHEME**

#### FIXED TABLE





## **3. SAFETY**

## **3.1SAFETY INFORMATION**

The symbols shown hereunder are necessary to be read with special attention. Not reading or observing of them may cause damage to the equipment or personal injury.

IMPORTANT

The IMPORTANT symbol above is one telling to apply special care and to be careful at carrying out the specifie operation.

CAUTION !

The CAUTION! Symbol above warns you against specific dangers, and requires to read the text. Not observing may cause damage to the equipment.



The above symbol DANGER WARNING, warns you against specific dangers, and you have definitely to read them. Negligance may cause damage to the equipment and bodily injury.

Read the user's manual carefully before using the machine or carrying out maintenance works.



**3.2. ACCIDENT PREVENTION** 

3.2.1. Our machines are manufactured in accordance with EN 60204-1 and EN 292-2 CE safety directives, which cover national and international safety directives.

3.2.2. 2 It is the task of the employer to warn his staff against accident risks, to train them on prevention of accidents, to provide for necessary safety equipment and devices for the operator's safety.

3.2.3. Before starting to work with the machine, the operator should check the features of the machine, learn all details of the machine's operation.

3.2.4. Machine should be operated only by staff members, who have read and understood the contents of this manual.

3.2.5. All directives, recommendations and general safety rules contained in this manual have to be observed fully. The machine cannot be operated in any way for purposes other than those described herein. Otherwise, the manufacturer shall not be deemed responsible for any damages or injuries. And such circumstances would lead to the termination of the warranty.

#### **3.3. GENERAL SAFETY INFORMATION**

3.3.1. The power cable should be led in such a way that nobody can step on it or nothing can be plased on it. Special care has to be taken regarding the and outlet sockets.



3.3.2. If the power cable should be damaged operation, don't touch and unplug it. Never use damaged power cables

3.3.3. Don't overload machines for drilling and cutting. Your machine will operate more safely with power supply in accordance with the stipulated valued..

3.3.4. Don't plase your hands between parts in motion



3.3.5. Use correct illumination fort he safety of the operator. ( ISO 8995-89 Standart The lighting of indoor work system )

3.3.6. Use protective eye glassses and car plugs. Don't wear aversize clothes and jewerllery. These can be caught by movin parts





3.3.7. Don't use any materials other than those recommended by the manufacturer for welding operations on the machine

- 3.3.8. Ensure that the work piece is clamped appropriately by the machine's clamp or vice.
- 3.3.9. Ensure safe working position, always keep your balance

3.3.10. Don't leave anything on the machine



3.3.11. Keep your working plase always clean, dry and tidy for accident prevention and operation

3.3.12. Keep your machine always clean for safe operation.Follow the instructions at maintenanceand replacement of accessories.Check the plug and cable regularly.If damaged,let replace by a qualified electrian.Keep handles and grips free of any oil and grease.

3.3.13. Unplug first, before conducting and maintenance Works

3.3.14. Ensure that any keys or adjument tools have been removed before operating the machine.

3.3.15. If you are required to operate the machine outside, use only appropriate extension cables.

3.3.16. Repairs should be carried out by qualified techniccians only. Otherwise, accidients may occur 3.3.17. Before starting a new operation, check the appropriate function of protective devices and tools, ensure that they work properly. All conditions have to be fulfilled in order to ensure proper operation of your machine. Damaged protective parts and equipment have to be replaced or repaired properly (by the manufacturer or dealer)..

3.3.18. Don't use machines with improper functioning buttons and switches.

3.3.19. Don't keep flammable, combustive liquids and materials next to the machine and electric connections

IMPORTANT

## 4. SAFE TRANSPORT OF THE MACHINE

\* The transport should be done by qualified personnel only.

4.1. The machine should be transported by lifting with proper equipment (not

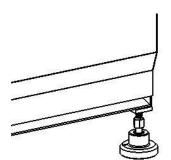
touching the ground during the transport).

4.2. The Machine is delivered wrapped in nylon as packaging, unless other form of packing is agreed upon with the customer.

4.3. For the weight and overall dimensions of the machine see Technical Features.

#### 5. INSTALLATION OF THE MACHINE

#### 5.1. INSTALLATION OF THE MACHINE



Before starting up the machine handling, loading, etc. to make sure you will not lose any part stages is recommended for general control.

Be put into the machine surface hard, flat ground and the machine must be qualified to carry the weight. Position of the machine should be at least 50 cm distance from the rear Wall

Make sure the feet to protect the stability of the machine weighs. If necessary, make adjustments in the feet with adjustment screws.

#### **5.2. PREPARATION**

Before starting the machine is used for the detection of moving the systems running and stopping disconnecting the electrical and pneumatic connections Do not bolt.

#### 5.3. SECURE THE MACHINE CONNECTING THE POWER SOURCE

#### 5.3.1. ELECTRICAL CONNECTION

5.3.2. Electrical connections must be performed by a licensed electrician. Apply the power cord from the machine using a cable with CE standards H07RNF.

5.3.3 Please check the machine before connecting power input energy.

#### 6. PRECISION WELDING SET

Welding machines can be operated in two different ways.

# 6.1. Welding Time Settings

• Click the menu button until the welding time.





• Set the welding time with up and down button



• Confirm the time with the ok key.

# 6.2. Melting Time Settings

• Click the menu button until the melting time.





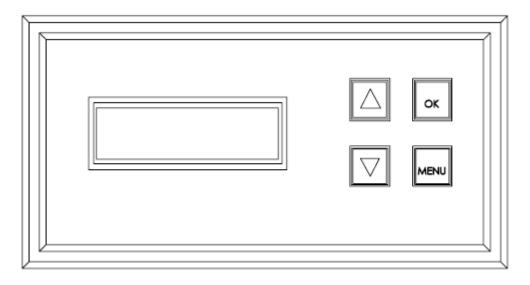
• Set the welding time with up and down button



• Confirm the time with the ok key.

## 7. PARAMETERS INPUT

## **USE OF ELECTRONIC CARD**



**UP** arrow key to change the parameter values in the display 2 row value changes.

**Down** arrow key to change the parameter values in the display 2 row value changes.



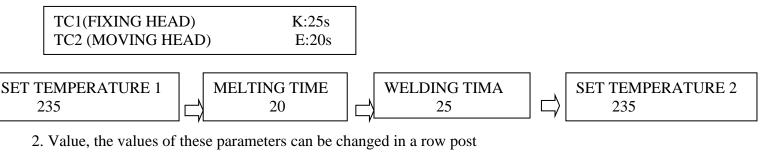
MENU

The menu button is used to change the parameters. 1 is pressed the display The value changes in the row.

**OK** key is used to enter the menus.

#### **USER MENU**

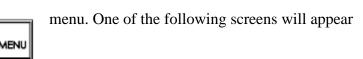
- 1. SET TEMP line is typed values, thawing times, TIME SOURCE user replaceable parameters.
- 2.



USE:

Press the button to enter the user when you press this key.





Push Button and choose parametes as needed. Teser parameter values SET TEMPERATURE centigrad celcius and can be changet 1 centigrad celcius interval. MELTING TIME is second and can be chagent 1 second interval WELDING TIME is second and be

changed 1 secund interval. Using



## 7.1. IMPUT PARAMETRES

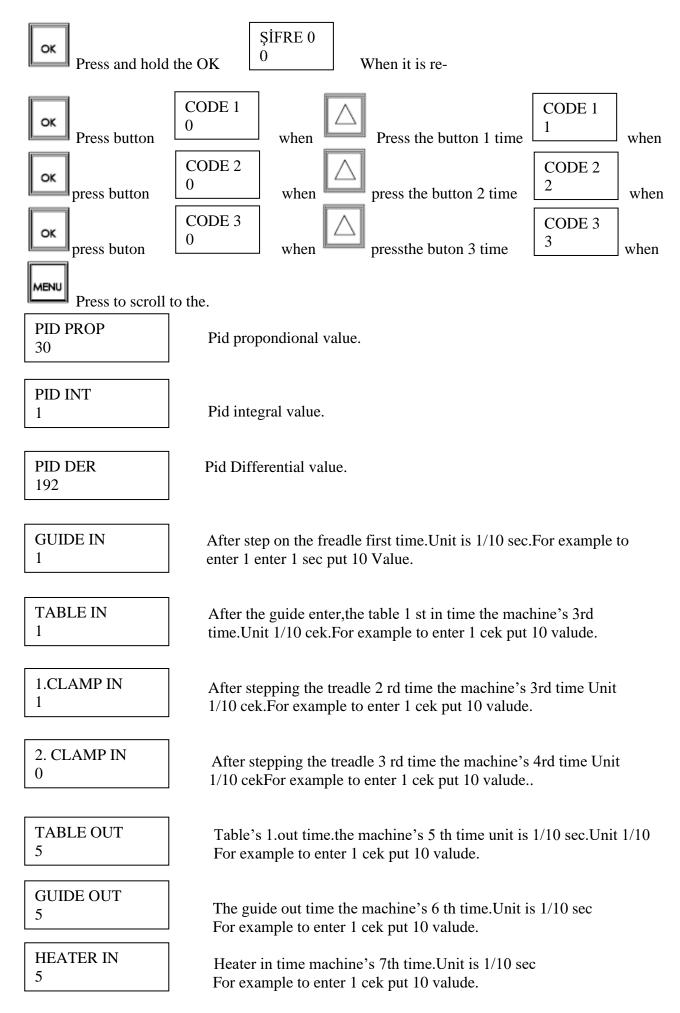


TABLE IN	J
11	

TABLE OUT 2 5

HEATER OUT 5

TABLE IN 3 10

WELDING TIME 20

TABLE OUT 3 0

2.CLAMP OUT 0

1.CLAMP OUT 5

OFFSET TEMP 0

EMERGENCY STOP NO

LANGUAGE ENGLISH

FİLTER 0 Table's 2.time in time machine's 8th time. Unit is 1/10 sec For example to enter 1 cek put 10 valude

Table's 2.time in time machine's 10 th time. Unit is 1/10 sec For example to enter 1 cek put 10 valude.

The heater out time machine's 11th time. The unit is 1/10 sec. For example to enter 1 cek put 10 valude.

The table's 3rd in time the machines 12th time unit is 1/10 sec. For example to enter 1 sec put 10 value.

When the table closed profiles adhesion time the machine's 13th time. unit is sec.For example for 1 sec enter 1 value.This time counts down from set value to zero.

Tables 3rd out time the machine's 16th time and the last time and Step.For example to enter 1 sec put 10 value.

The 2nd clamp out time the machines 14th time unit is 1/10 sec. For example to enter 1 sec put 10 value.

1 st clamp out time the machine's. For example to enter 1 sec put 10 value

This value for downing real temperature – down and for calibration For example if you enter 10 and the realtemperature is 220 you see 210 on the display. This value limited with 20.

If you use NCcontact for emergency buton enter NC if you have. NO fort he emergency buton enter NO.

This parameter changes language standart languages are Turkish.English and Russian.Optional you can have Romanian, French and Spanish versions available when you change language all menu Messages change..

It is display temperature fitler, device working 1 celcius centigrade if yu enter 1 this value you don't see temperatur changes.

READY TO RUN ALWAYS

This parameter is ready to run, if you choose 'always' device permit all temperature values for running machine. If you choose 'in set value' temperature set values over 5 degrees or lower 5 degrees you can run in other cases it is not possible to run

TYPE MACHINE ZERO WELDING NORMAL WELDING

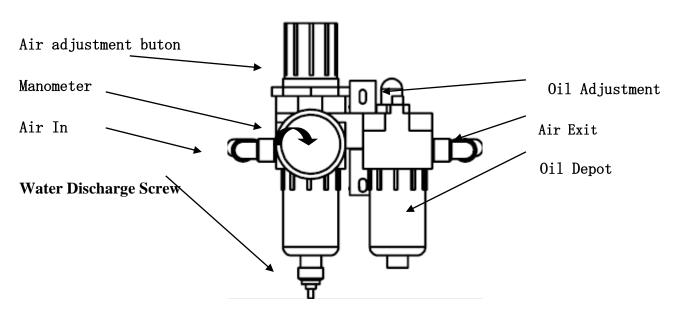
Select this machine.

# 7.2 CAUTIONS AND FEATURES INTENDED ATTENTION

TC ERROR	Termocouple error, if you connect termocouple wrong or broken you see this warning
230 C E25s K25s STEP OF TREADLE	On the display secong line of you see this step on treadle you can run machine if you choose from fine tunning menyu ready to work option always you see step on treadle
240 C E20s K20s WAIT!NOT READY	If you see this warning you can not run the machine you should wayt temperature to come cloose to the set temperature value, when you see step on treadle you can run
240 C E20s K20s MACHINE STOPING	When the machine is running if you push the emergency buton you see machine stoping warning.When the machine stops you see. Emergency Stop Warning
240 C E20s K20s EMERGENCY STOP	If you push emergency button first you see machine stoping then you see emergency stop. If you turn to emergency button normal end you still see this warning chek the wirings
240 C E20s K20s TABLE OUT	When the machine working on the display second line you see the running procces on the machine at that moment

#### **8. AIR PRESSURE ADJUSTMENT**

Pneumatic systems should be 6-8 bar air pressure to function as healthy. Machine to operate at pressures lower than 6 cups. Conditioner to adjust the air pressure to control and read on the manometer. (FIGURE 8)



- 8.1- Increasing the pressure adjustment knob clockwise direction is flipped, rotated in the opposite direction pressure Decrease
- 8.2- Once you read 6-8 Bar on the manometer, push the adjustment button of the conditioner down and lock it in that position

8.3- The conditioner unit collects the water within the air system in a receptacle in order to prevent damage to the pneumatic system components. Discharge this water periodically (at the end of the working day) by pressing or opening the button under the conditioner.

8.4 The manufacturer recommends to use the following oils with the conditioner: TELLLUS C 10 / BP ENERGOL HLP 10/ MOBIL DTE LIGHT / PETROL OFISI SPINDURA 10

#### 9. MACHINE SAFETY INFORMATION

9.1. Protective safety equipment, such as by removing the top caps and it is forbidden to work 230V 50Hz 9.2 machine should be used. The electrical wiring done by a licensed electrician

9.3 lift the machine, insert, electrical and pneumatic qualified and authorized personnel should be used for maintenance work.

9.4 Routine maintenance work scheduled maintenance by authorized and qualified personnel should be made after deactivation electric and pneumatic power sources.

9.5 Cleaning the machine before working on the machine, make sure that the test being made and maintained.

9.6 Safety equipment and moving parts of electrical power cable ediniz. Safety routinely checked to fulfill the functions of equipment or parts with new ones if you see no harm in changing the machine operate.

9.7 Foreign objects within the area of operation at 9.7, Do not put your hands between the moving parts .

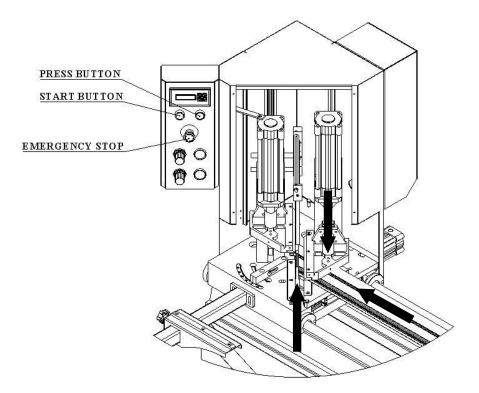
IMPORTANT

To prevent loss or damage to equipment safety information above. Please read the safety instructions carefully and always keep in mind the information.

#### **10. OPERATION**

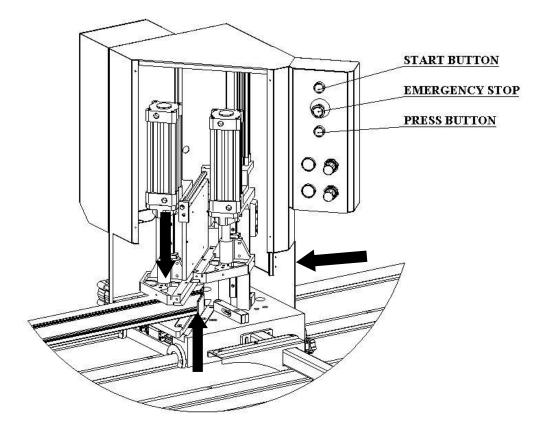
#### **10. DOUBLE CORNER WELDING**

- 10.1. Carry out the electrical and air connections.
- 10.2. Open manometer.
- 10.3. Deactivate the emergency stop buttons
- 10.4. Source of light to come on board and wait for heating resistances.
- 10.5. Press the start button to turn off the tray fixed head go up and provide the template.
- 10.6. Place the profile on the back surface.
- 10.7. Press start button and the head of the press presses provide a fixed compression profile.



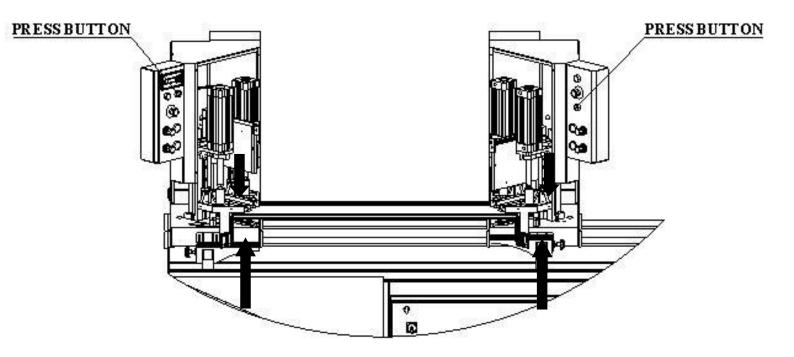
10.8. Press the start button to remove the gauge. Pull the movable head until the profile sticks to the gauge.

10.9. Press start button and the head of the press presses provide a fixed compression profile.



10.10. Place left profile and press button.

10.11. Place right profile and press button.



10.12. Pressed the last time the machine will automatically set after pressing operations will end by welding process

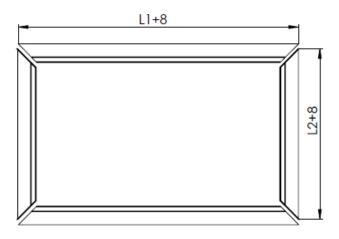
\* Gauge \* Resistance goes down goes down \* Tables \* Tables turn off pop-up

\* Resistance touch the surfaces of the side surfaces of the frame side by the melting temperature and time allows. After the melting process (time varies according to climate conditions);

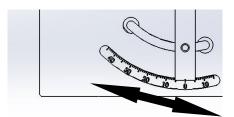
- \* Resistance \* Moving tables pops up automatically closes
- \* The specified resource profiles will remain stable during the period of bonding.
- \* The upper and lower blades clean source dross. (HC-500, not shown)
- \* At the end of the welding process presses the moving plates will lift automatically pop up left and right.
- 10.13 Get the source profile.

## **11. PROFILE CUTTING AND ANGLE ADJUSTMENT**

11.1. Measure within a certain cut PVC profiles, the two parts are joined together by melting heating. If this is over 4 mm during the merge profiles from a total of 8 mm meltdown. So, the PVC profiles welded custom-made size 8 mm larger than the full cut can be done.

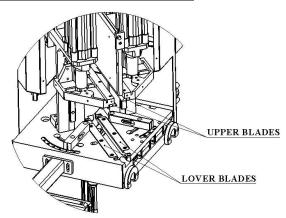


11.2. resources required to run a stand-alone cases, a fixed-angle head. Use the arrow keys on the fender tops with fixed head angle indicators will need to bring the desired angles. For it;



Use the arrow keys on the table and set the desired angle by loosening the screws on the sides of the trench hex bolts by tightening the fasteners.

**12. KNIVES REPLACEMENT** 



12.1. Be sure to unplug the machine.

12.2. Open the lid of the upper casing.

12.3. Remove and replace the screws with cross recess hex key pitfall blades. Make sure that the blades are parallel and tightly connected.

# **13. MAINTENANCE**



## **13.1. ROUTINE CHECKS**

13.1.1. Before any maintenance or cleaning operation, the emergency stop button must be in the 0 position and the Location of sartel.

13.1.2. Affecting the upper table, and use make sure that all materials are clean and dry.

13.1.3. Blades set on the table before every use and vice wear, warping, cracking and check against breakage. If the blades are damaged or replace damaged blades.

13.1.4.Distribution filters and check the oil level air pressure. If the missing amount of fat which is low. (FIG. 8)

## **13.2. MAINTENANCE AT THE END OF WORKING DAY**

13.2.1. Keep running as clean as possible and periodically parts of the Teflon sheet dirt, oil, and be sure to check for corruptions.

13.2.2. Avoid materials that harm the paint cleaning the machine

13.2.3. Periodically check the air setting unit, the system to prevent entry of water into the air, check the oil level distribution.

## **13.3. GENERAL LUBRICATION**

13.3.1. The machine is equipped with a special lubricant-free bearings do not require lubrication or greasing. Periodically check the oil level in the conditioner pneumatic system. For the oil to be used (see Article 9)

# **13.4. SPECIAL PRECAUTIONS**

13.4.1. Not work beyond a few days in case the machine is non-painted surfaces to prevent oxidation of the grease. Clean layer of fat in case of working again

13.4.2. The machine will stay out of the long-term use;

- sartel position 0
- Close the pneumatic system

# **14. TROUBLESHOOTING GUIDE**

#### POSSIBLE ERRORS AND REMOVAL

Emergency proposals to eliminate the problems below. If the fault can not be eliminated or encounter a malfunction other than those recommended below, please consult the technical service

TROUBLES	CAUSES	REMEDY
	No power supply to the	Check the fuse, plug and socket.
	machine	
	The thermocouple	Connect the thermocouple wire.
	connection wire is	
The resistance does	displaced.	
not heat		Check the temperature display adjustment (245°)
	The temperature display	
	needs to be set.	
	Card may be the problem.	Call for Assistance.
	The air pressure is too low.	Check the air hose connections of the machine.
		Adjust the air pressure at the conditioner.
The heating plate		

does not move.	Valve failure	Replace Valve.
		Call for Assistance.
	Card may be the problem.	
	The profiles were cut in	Check the angles of the profile ends.
Machine does not	different angles.	The saw blade might need to be sharpened.
weld or the welding	_	
is not clean.	The Teflon is dirty or torn.	The Teflon should be cleaned or replaced.
	Card may be the problem	Call for Assistance.
The heating plate	Valve failure	Replace Valve.
does not move.		-
Energy does the machine.	If the power supply light is off	Power supply light is not on
May be a connection error.	Insurance, plugs, sockets, etc Check that.	
One or more of the features that should be running on the machine.	Electronic resource card failure.	Call for Assistance

# **15. WARRANTY CONDITIONS**

1. The warranty period is 2 years from the delivery date of the machine.

2.All parts of the machine are under the warranty of our company.

3.If the machine has a defect within the warranty period, the warranty period is extended by the repair period. The repair period of the machine is max. 30 working days. This period begins with the date of notofication of the defect to the service station, or if there is no service station, to the authorized dealer, representative, agent, importer or manufacturer. If the defect cannot be repaired within 15 working days, the manufacturer or importer has to deliver the customer another machine with similar features until the repair has been completed.

4.If the machine has a defect due to material, workmanship and assembly fault, the repair will be carried out without any charge for parts, labor or any other charges.

5. The customer can request the replacement of the machine, or the return of the

purchase price or discount in proportion with the fault if;

- the same defect occurs more than twice within the stipulated warranty period after the delivery, or in case of more than four different defects within the stipulated warranty period., or if the total defects of different defects exceeds six defects, and makes the machine unusable,

-the repair period for the machine is extended,

- it is determined with a report of the service station, or in case that there is no service station, by the dealer, representative, agent, importer or manufacturer, that a repair of the machine is not possible,

6.Defects due to use of the machine in contrary with the features described in the machine's user's manual are excluded from the warranty.

7. In connection with any issues of the warranty certificate the customer may contact the General Directorate of the Consumer and Competition Protection of the Ministry of Industry and Trade