

GARANTİ BELGESİ

İMALATÇI FİRMA : YILMAZ MAKİNE SANAYİ VE TİCARET A.Ş.
ADRES : TAŞDELEN MH. ATABEY CD. No 9 34788 ÇEKMEKÖY
İSTANBUL-TÜRKİYE
TELEFON : 0216.312.28.28 PBX
TELEFAX : 0216.484.42.88
İMZA-KAŞE :

ÜRÜNÜN CİNSİ : OTOMATİK ÇİFT KAFA KESME MAKİNESİ
MARKASI : YILMAZ
MODEL KODU : DC 421
BANDROL/SERİ NO :
TESLİM TARİHİ :
GARANTİ SÜRESİ : 2 YIL
AZAMİ TAMİR SÜRESİ : 30 İŞ GÜNÜ

YETKİLİ SATICI FİRMA :
ADRES :

TELEFON :
TELEFAX :
İMZA-KAŞE :

CE AB Uygunluk Beyanı

İMALATÇI : YILMAZ MAKİNE SANAYİ ve TİCARET A.Ş
Taşdelen Mh. Atabey Cd. No9 Cekmeköy-İSTANBUL- TÜRKİYE
tel: +90 0216 312 2828 fax: +90 0216 484 42 88
yilmaz@yilmazmachine.com.tr

Sorumluluğumuz altında aşağıda bilgileri verilen ürünün;

DC 421 ÇİFT KAFA KESME MAKİNESİ

SERİ NO;

2006/42 AT Makine direktifleri yönetmeliği, 2014/35 EU Alçak gerilim direktifleri yönetmeliği, 2014/30 EU EMC direktifleri yönetmeliği temel gereksinimleri karşıladığını beyan ederiz

Yer Tarih

Yetkili

EC Declaration of Conformity

MANUFACTURER : YILMAZ MACHINERY INDUSTRY & TRADE CO
Taşdelen Mh. Atabey Cd. No9 Cekmeköy-İSTANBUL- TÜRKİYE
tel: +90 0216 312 2828 fax: +90 0216 484 42 88
yilmaz@yilmazmachine.com.tr

Declare on our own responsibility that ;

DC 421 DOUBLE MITRE SAW

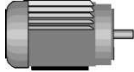

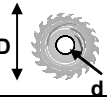



SERİAL NO;



Meets all the provisions of the 2006/42 EC Machinery Directive, 2014/35 EU Low Voltage Directive, and 2014/30 EU EMC Directive which apply to it.



Place / Date



Authorized

TEKNİK ÖZELLİKLER - TECHNICAL FEATURES - ТЕХНИЧЕСКИЕ ОСОБЕННОСТИ

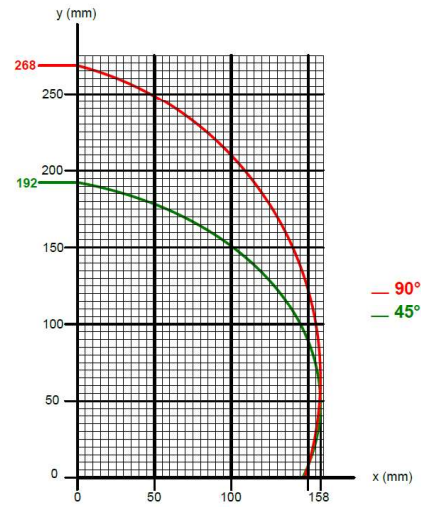
						
DC 421 M	2.2 kW 50 Hz X 2 400V AC 3P PE	3000 dev/dak. RPM	D = 420 mm d = 30 / 32 mm	6-8 BAR	40 Lt/dak. Lt/min.	W = 112 L = 468 H = 182 840 1090 kg kg
DC 421 P	2.2 kW 50 Hz X 2 + 0.25 kW 400V AC 3P PE	3000 dev/dak. RPM	D = 420 mm d = 30 / 32 mm	6-8 BAR	57 Lt/dak. Lt/min	W = 112 L = 468 H = 182 905 1155 kg kg
DC 421 PB	2.2 kW 50 Hz X 2 + 0.25 kW 400V AC 3P PE	3000 dev/dak. RPM	D = 420 mm d = 30 / 32 mm	6-8 BAR	57 Lt/dak. Lt/min	W = 112 L = 468 H = 182 930 1180 kg kg

 YILMAZ MAKİNE SANAYİ VE TİCARET A.Ş Turgut Özal Bulvarı No:173 Tasseleli 34788 Çekirgeci İSTANBUL-TÜRKİYE Tel: +90 (216) 312 28 28 (Pbx) Fax: +90 (216) 484 42 88 web : www.yilmazmachine.com.tr e-mail: yilmaz@yilmazmachine.com.tr					
MODEL TYPE MODEL	DC 421 M	RATED CURRENT NOMİNAL AKIM	7,3 A		
SERIAL NO SERİ NO		SAW DIAMETER TESTERE ÇAPİ	Ø420 x Ø30mm		
PROD DATE ÜRETİM TAR.		AIR CONSUMP. HAVA TÜKETİMİ	40 Lt/min		
TOTAL POWER TOPLAM GÜÇ	4440 KW	AIR PRESSURE HAVA BASINCI	6-8 BAR		
RATED VOLTAGE NOMİNAL GERİLİM	400V AC 3P PE	WEIGHT AĞIRLIK	840 KG.		

 YILMAZ MAKİNE SANAYİ VE TİCARET A.Ş Turgut Özal Bulvarı No:173 Tasseleli 34788 Çekirgeci İSTANBUL-TÜRKİYE Tel: +90 (216) 312 28 28 (Pbx) Fax: +90 (216) 484 42 88 web : www.yilmazmachine.com.tr e-mail: yilmaz@yilmazmachine.com.tr					
MODEL TYPE MODEL	DC 421 P	RATED CURRENT NOMİNAL AKIM	8,2 A		
SERIAL NO SERİ NO		SAW DIAMETER TESTERE ÇAPİ	Ø420 x Ø30mm		
PROD DATE ÜRETİM TAR.		AIR CONSUMP. HAVA TÜKETİMİ	57 Lt/min		
TOTAL POWER TOPLAM GÜÇ	4940 KW	AIR PRESSURE HAVA BASINCI	6-8 BAR		
RATED VOLTAGE NOMİNAL GERİLİM	400V AC 3P PE	WEIGHT AĞIRLIK	905 KG.		

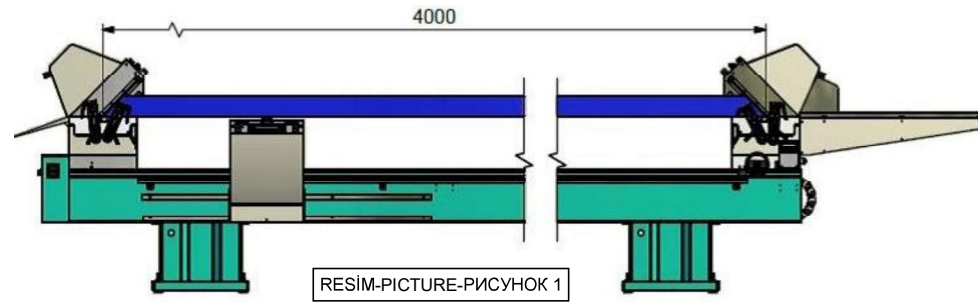
 YILMAZ MAKİNE SANAYİ VE TİCARET A.Ş Turgut Özal Bulvarı No:173 Tasseleli 34788 Çekirgeci İSTANBUL-TÜRKİYE Tel: +90 (216) 312 28 28 (Pbx) Fax: +90 (216) 484 42 88 web : www.yilmazmachine.com.tr e-mail: yilmaz@yilmazmachine.com.tr					
MODEL TYPE MODEL	DC 421 PB	RATED CURRENT NOMİNAL AKIM	8,2 A		
SERIAL NO SERİ NO		SAW DIAMETER TESTERE ÇAPİ	Ø420 x Ø30mm		
PROD DATE ÜRETİM TAR.		AIR CONSUMP. HAVA TÜKETİMİ	57 Lt/min		
TOTAL POWER TOPLAM GÜÇ	4940 KW	AIR PRESSURE HAVA BASINCI	6-8 BAR		
RATED VOLTAGE NOMİNAL GERİLİM	400V AC 3P PE	WEIGHT AĞIRLIK	930 KG.		

KESME DİYAGRAMI – CUTTING DIAGRAM – ДИАГРАММА ВЫПИЛИВАНИЯ



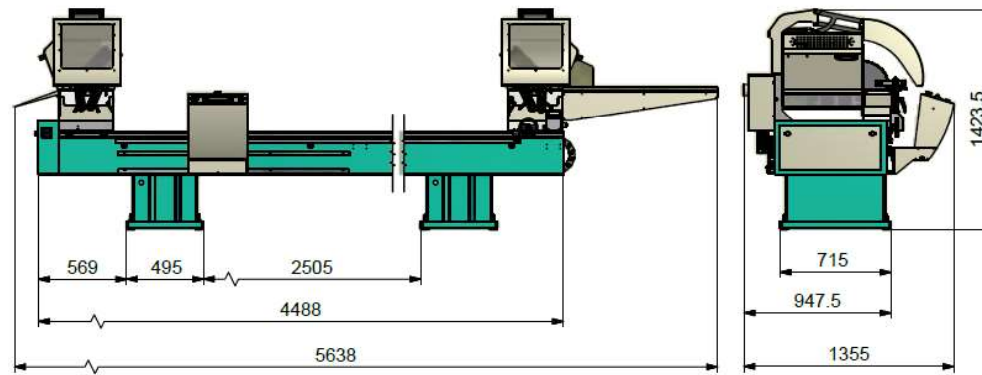
90°
Min = 360 mm.
Max = 4000 mm.

45°
Min = 430 mm.
Max = 4000 mm.



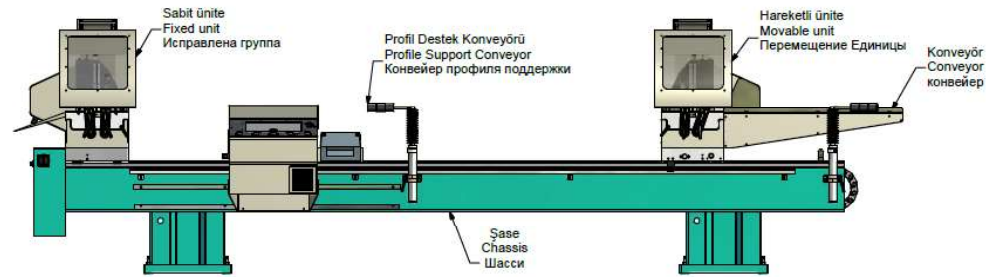
RESİM-PICTURE-РИСУНОК 1

BOYUTLAR – DIMENSIONS – РАЗМЕРЫ

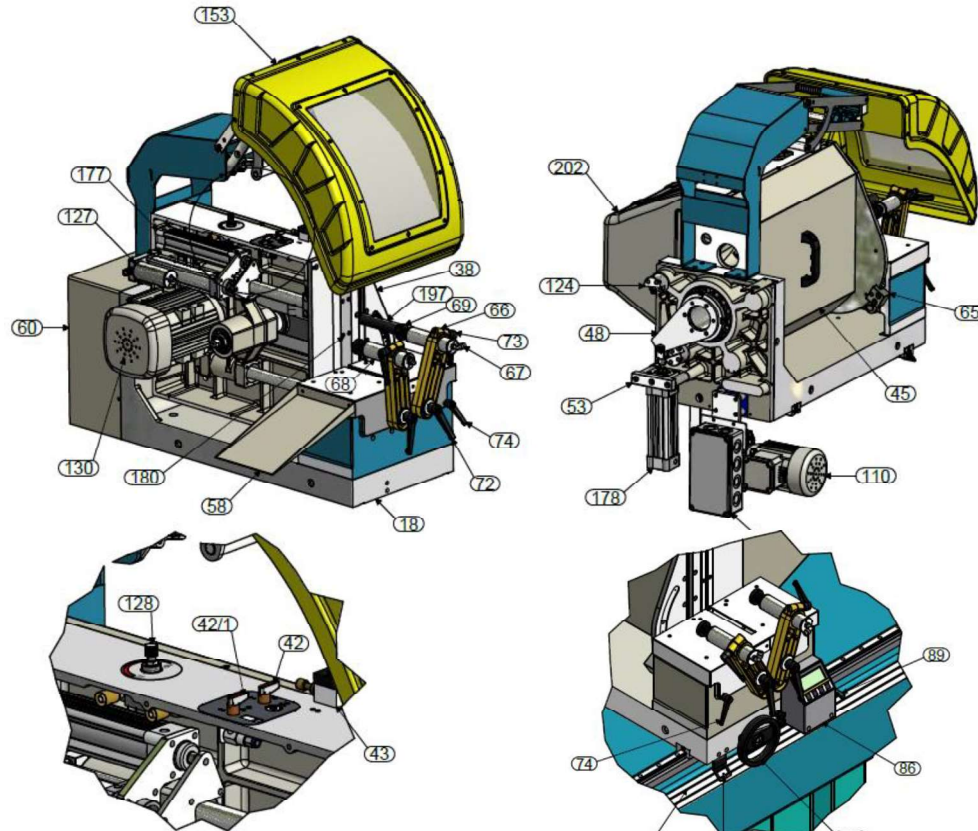


RESİM-PICTURE-РИСУНОК 2

PARÇA LİSTESİ - PART LIST - ПЕРЕЧЕНЬ ДЕТАЛЕЙ

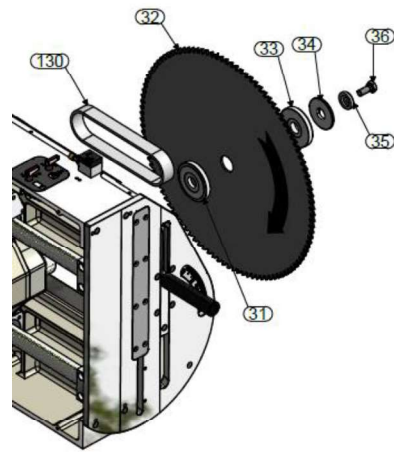


RESİM-PİCTURE-РИСУНОК 3

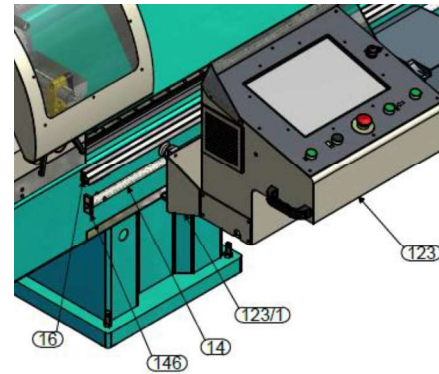


RESİM-PİCTURE-РИСУНОК 4

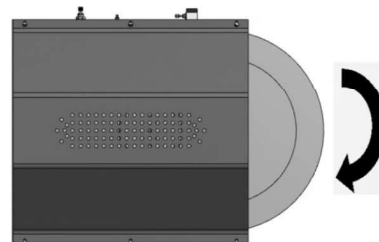
RESİM-PİCTURE-РИСУНОК 5



RESIM-PICTURE-РИСУНОК 6



RESIM-PICTURE-РИСУНОК 7

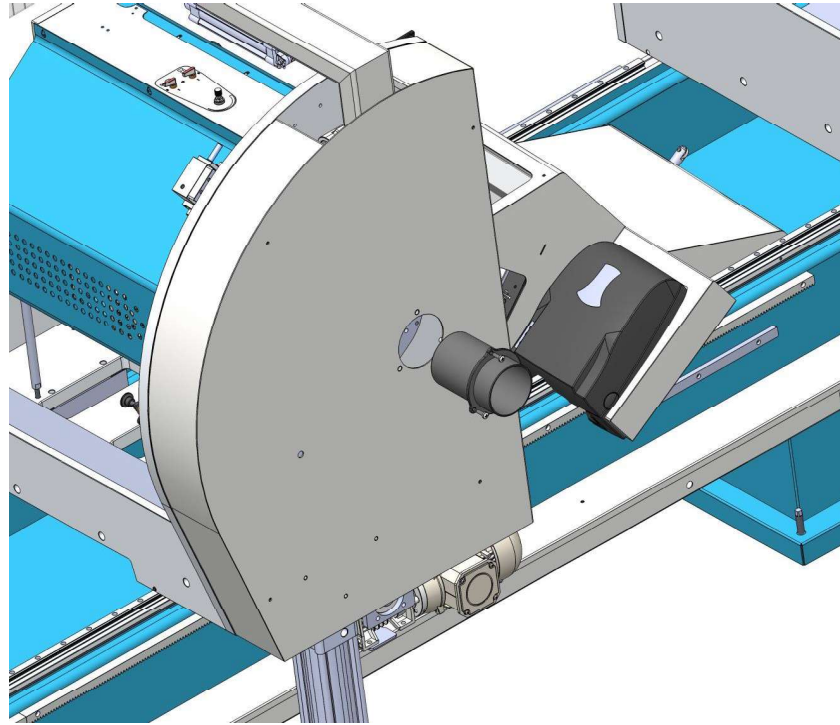


RESIM-PICTURE-РИСУНОК 8

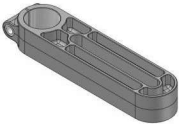








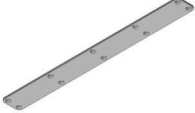
NO номер	STOK KODU / CODE ПОРЯДОК КОД	ADET / QTY КОЛИЧЕСТВО	NO номер	STOK KODU / CODE ПОРЯДОК КОД	ADET / QTY КОЛИЧЕСТВО
6	1SR080000-0034	4	65	2TU011210-0723	2
14	2TU014010-0182	1	72	3UA060030-0004	4
16	2TU012310-0071	1	74	3UA040030-0021	2
31	2TU011110-0422	2	85	2TU011441-0641	1
33	2TU011110-0423	2	86	2TU012510-0388	1
34	2TU011441-0016	2	110	1EL070001-0011 *	1
35	2TU011110-0203	2	123	1SA020000-0053 **	1
36	1SC021000-0003	2	123/1	2TU011441-0628 *	1
38	2TU011410-0082	1	124	2TU011110-1105	4
202	1PL010000-0060	1	127	3UA050030-0020	2
45	2TU011441-0643	1	130	1EL070001-0001	2
48	2TU011441-0637	2	132	3UA690030-0125	1
53	2TU011210-0303	2	153	1PL010000-0061	2
177	1PN020000-0172	2	146	2TU011210-0087	2
58	1SA050000-0228	1			
60	1SA030000-0080	1			

*DC 421 P

** DC 421 PB

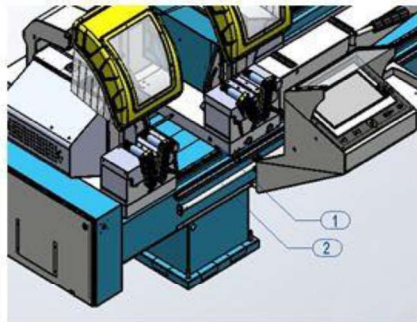
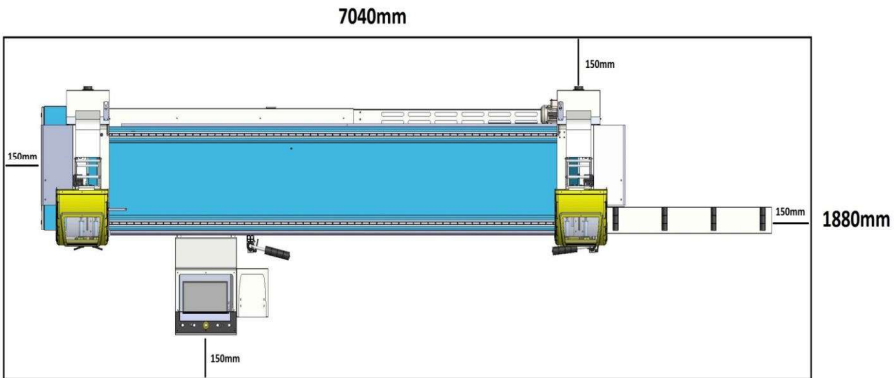


TALAŞ FLANŞI BAĞLANTI METODU - MOUNTING METHOD OF SWARF FLANGE

YEDEK PARÇA LİSTESİ / SPARE PART LIST / СПИСОК ЗАПАСНЫХ ЧАСТЕЙ			
PARÇA NO PART NO НОМЕР	RESİM PICTURE РИСУНОК	STOK KODU / CODE ПОРЯДОК КОД	PARÇA ADI – PART NAME НАИМЕНОВАНИЕ ДЕТАЛИ
66		2TU012610-0044	MENGENE PİSTONU BAĞLANTISI PISTON CLAMP CONNECTION
68		3UA060030-0004	PNÖMATİK MENGENE PNEUMATIC CLAMP
67		1PN140000-0005	1/8-6 REKOR 1/8-6 FITTING
73		3UA040030-0007	M8x32 PİPO M8x32 HANDLE
72		3UA040030-0001	M12*60 PİPO M12*60 HANDLE
74		3UA040030-0021	M12*35 PİPO M12*35 HANDLE
32		1SK010000-0046	Ø 550 TESTERE Ø 550 SAW
130		1SR070000-0015	MOTOR KAYIŞI MOTOR BELT PJ483*24,5 (11 Kanal)
43		1PN010000-0012	SPRAYER SU PÜSKÜRTME VALF WATER SPRAY VALVE
180		2TU011441-0014	TESTERE KANAL LAMASI SAW CHUTE PLATE

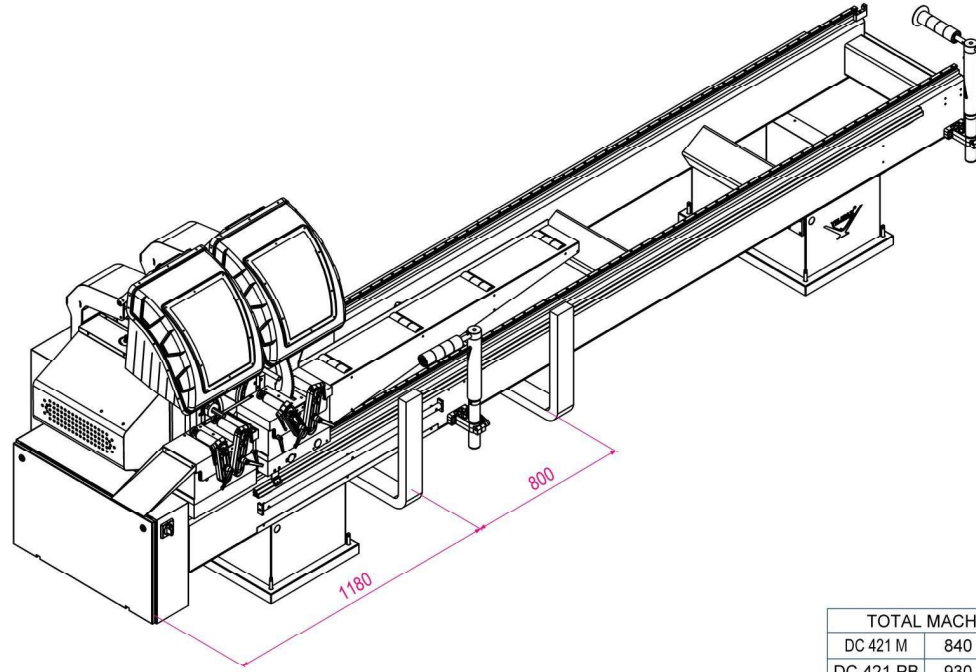
69		1PL010000-0033	MENGENE PABUCU CLAMP FEET
130		1EL070001-0002 400V-415V (3P 50 Hz)	MOTOR MOTOR
132		2TU010010-0011	VOLAND KOLU

MACHINE SAFETY ZONE



NO.	MATERIAL		
1			MONTHLY
2			WEEKLY

MAINTENANCE SCHEDULE



TOTAL MACHINE WEIGHT		
DC 421 M	840 KG	1910 Lbs
DC 421 PB	930 KG	2115 Lbs

TAŞIMA BİLGİLERİ- TRANSPORT OF THE MACHINE- ТРАНСПОРТИРОВКА МЕХАНИЗМА

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- 3. Machine's Description**
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- 5. Installation of the Machine**
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 - 5.2. Connecting to Power Source
- 6. Machine's Safety Information**
- 7. Operation**
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 - 7.2. DC 421 M Working Information
 - 7.3. Display counter reset
 - 7.4. Changing display parameters
 - 7.5. Calibration of display
 - 7.6. Changing the initial values
 - 7.7. Replacing the battery on the display
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- 9.0 Language selection**
- 10.0 Creating cutting list on display**
- 11.0 Cutting Process**
- 12.0 Slicing operation**
- 13.0 Moving Machine units**
- 14.0 Calibration of machine**
- 15.0 mm / Inc selection**
- 16.0 DC 421PB Working Information**
- 17.0 Manual cutting page**
- 18.0 Cutting from the list**
- 19.0 Slicing page**
- 20.0 Language selection**
- 21.0 Manual action pages**
- 22.0 Service pages**
- 23.0 PLC Software Update**
- 24.0 Solving the screen errors**
- 25.0 Maintenance, Service and Repair**
- 26.0 Noise Emission Values**
- 27.0 Trouble shooting guide**
- 28.0 Warranty conditions**

1.0 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 the instructions contained in this manual. The technical drawings and details contained in this manual constitute a guide for the operator.

1.2. Service Information

In case of any technical problem please contact your nearest YILMAZ dealer, or YILMAZ head office through the above mentioned phone, fax or e-mail address.

Technical labels with the model description of the machine are fixed onto the front side of each machine.














The machine's serial number and manufacturing year are stipulated on the technical label.

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

<u>AUTHORIZED TECHNICAL SERVICE CENTER ADDRESS</u>	
TAŞDELEN MH. ATABEY CD. No 9 34788 ÇEKMEKÖY – İSTANBUL / TÜRKİYE	
Tel	0216 312 28 28 Pbx.
Fax	0216 484 42 88
E-mail	service@yilmazmachine.com.tr
Web	www.yilmazmachine.com.tr
For minimize the documantation, It is wery necessary to mention below details at the agreements signed with suppliers and dealers of the purchased machines	
• Machine model	• Voltage and frequency
• Machine's serial number	• Date of purchase
• Description of the machine fault	• Name of dealer where machine was purchased
• Average daily operation period	• Sending the or video of the machine part which creates problem

2.0 SAFETY

2.1. Safety Symbols and Their Meanings

	Read the user guide		Ensure safe working position, always keep your balance.
	Wear ear protectors 		Electrical excitation
	Wear safety goggles		Don't place your hands between parts in motion..
	If the power cable should be damaged during operation, don't touch and unplug it. Never use damaged power cables.		High temperature warning
	During saw blade change operations, use protective gloves		Keep your fingers clear of the movable parts of the glide arm.
	The above symbol DANGER WARNING , warns you against specific dangers, and you have definitely to read them..		The IMPORTANT symbol above is one telling to apply special care and to be careful at carrying out the specified operation

2.2. Accidents Prevention

- Our machines are manufactured in accordance with CE safety directives, which cover national and international safety directives.
- 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.
- 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.
- Machine should be operated only by staff members, who have read and understood the contents of this manual.
- 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

2.3. General Safety Information

- The power cable should be led in such a way that nobody can step on it or nothing can be placed on it. Special care has to be taken regarding the inlet and outlet sockets
- Don't overload machines for drilling and cutting. Your machine will operate more safely with power supply in accordance with the stipulated values.
- Use correct illumination for the safety of the operator. (ISO 8995-89 Standard The lighting of indoor work system)
- Do not leave any things on the machine.
- Don't use any materials other than those recommended by the manufacturer for cutting operations on the machine.
- Ensure that the work piece is clamped appropriately by the machine's clamp or vice
- Ensure safe working position, always keep your balance.
- Keep your machine always clean for safe operation. Follow the instructions at maintenance and replacement of accessories. Check the plug and cable regularly. If damaged, let it replace by a qualified electrician. Keep handles and grips free of any oil and grease.
- Unplug first, before conducting and maintenance works.
- Ensure that any keys or adjustment tools have been removed before operating the machine..

- If you are required to operate the machine outside, use only appropriate extension cables.
- Repairs should be carried out by qualified technicians only. Otherwise, accidents may occur.
- 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).
- Don't use machines with improper functioning buttons and switches
- Don't keep flammable, combustive liquids and materials next to the machine and electric connections.

3.0 MACHINE'S DESCRIPTION

Ø420 mm Double Mitre Saws designed for straight and angle cutting of PVC and Aluminium profiles.

- Left cutting unit is fixed, right cutting unit is mobile.
- 45-90 automatic angle selection, cutting units can be adjusted manually in other intermediate cut free.
- Right mobile cutting unit is equipped with conveyor system attached on it.
- Working safety is provided thanks to moving protective cover on each cutting unit
- To ensure worker's safety double hand controlling is provided
- Pneumatic brake system exists on mobile right cutting unit; it fixes mobile unit at the beginning of cutting process pneumatically.
- Saw movements during cutting processes are controlled via hydraulic / pneumatically, thus required movement speed according to material type can be adjusted precisely.
- Profile support system is available
- The machine is designed according to CE Directives.

3.1 DC 421 M SEMI AUTOMATIC DOUBLE HEAD CUTTING MACHINE

- Cutting can be performed by setting cutting units to any angle manually.
- Digital length display exists on mobile cutting unit.
- Easiness of setting right mobile cutting unit to desired length quickly by hand is provided.
- Profile support system is manual

3.2 DC 421 P AUTOMATIC DOUBLE HEAD CUTTING MACHINE

- For cutting in 45° and 90° angles, both cutting unit will automatically set positions. Free cutting can be performed with the cutting heads adjusted manually to intermediate angles.
- Frenleme sistemi otomatiktir
- Cutting amount can be entered and programmed through entering data on the screen.
- There is stroke of feeder. Multiple stroke adjustment is possible up to a minimum length of 9999 mm.(Min 10 mm.)
- Profile support system is pneumatic.

3.3 DC 421 PB AUTOMATIC DOUBLE HEAD CUTTING MACHINE (COMPUTER CONTROLLED)

- Computerized system exists. (Windows based operating system)
- It is possible to transfer profile specifications from the program with the aid of an USB memory.
- There is stroke of feeder. Multiple stroke adjustment is possible up to a minimum length of 9999 mm.(Min.10 mm.)
- Barcode printer
- Opportunity to update PLC software by one button
- Online technical support
- Cutting list can be made manually on screen.
- Profile support system is pneumatic.

<u>STANDARD ACCESSORIES</u>	<u>OPTIONAL ACCESSORIES</u>
2 x 420 mm Diamond Tipped Circular Saw	Spray Cooling system
Conveyor	Upper clamping system
Profile support conveyor	
Barcode Print System (DC 421 PB)	
Manual book	

4.0 TRANSPORT OF THE MACHINE

IMPORTANT

4.1. The transport should be done by qualified personnel only.

- The machine should be transported by lifting with proper equipment (not touching the ground during the transport).
- Unless customer requests the contrary, the machine will be delivered with wooden packaging.
- Movable parts on the machine should be fixed before carrying out the transport. (fixing plate)
- The machine size and weight measurements, given the technical specification sheet.
- In order to get more stability when hanging the machine in case of move it, hang it from bottom insofar. Move the machine without shaking it in slow movements. Be sure to take care of persons in dangerous places.

5.0 INSTALLATION OF THE MACHINE

5.1 Preparation

- The machine size and weight measurements, given the technical specification sheet. The ground, where the machine will be placed, should be even, solid enough to bear the weight of the machine.
- The machine should be located approx. 100 cm away from the rear wall. On the backside of the machine you will find connection tube for the collection of burr and swarf, hydro-pneumatic system, cable channels, power supply connection plug.
- You can provide the balance of the machine with adjustable counterforts in the bottom part.
- The control board (PICTURE 7 NO.123) is delivered disassembly not to be damaged during the transfer. Install the panel as shown in the figure. Remove the piece (PICTURE 7 NO.146) attached to the panel actuating spindle (PICTURE 7 NO.14) in order to place the panel to its location. Replace the piece that you have removed after carefully inserting the panel pulleys onto the spindle.
- Fasten material supply conveyor given as Standard accesory onto the cutting unit to the right side surface of the machine as seen in the PICTURE 3 by using the screws on the machine. Provide the conveyor bobbins and machine top surface to be the same parallelism by using a sensitive and calibrated water gauge.
- To use shaving manifolde, the absorbtion flowrate of air for dry chips has to be thought min.20m/sec. 28 m/sec absorbtion flowrate of air wet chips ($\geq 18\%$ humidity) can be decided to operate the manifolde

5.2 Connecting to Power Source

- Electrical connection must be made by a licensed electrician
- The power outlet socket on the machine should be available.
- Plug the machine to a grounded socket.
- Mains voltage of the machine is optional as 400 V 50 Hz.



Check the supply voltage. **The source voltage must be in accordance with the data on the machine's label.**

- After electrical connection is made, machine must be operated in idle running and it must be controlled whether rotation directions of cutting tools are correct or not and if the rotation direction is wrong, appropriate connection must be made.

6.0 MACHINE'S SAFETY INFORMATION

- Lifting, installation, electric maintenance of the machine should be carried out by qualified personnel only.
- Routine maintenance and scheduled maintenance should be carried out by qualified personnel after unplugging the machine first.
- Ensure that the machine has been cleaned, tested and maintained before starting to operate it.
- Check the safety devices, power cable and moving parts regularly. Don't operate the machine before having replaced defective safety devices or faulty parts.
- Never replace the cutting tools before unplugging first.
- Keep foreign materials away from the working area of the machine, keep away from the machine's moving parts.
- Do not work on the machine by removing the protective parts

IMPORTANT

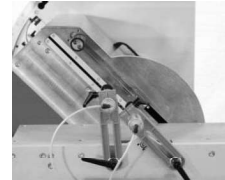
The safety data have been defined above. In order to prevent physical damage or damage to the equipment, please read the safety information carefully and keep the manual always in an easy accessible place.

7.0 OPERATION**7.1 Preparation**

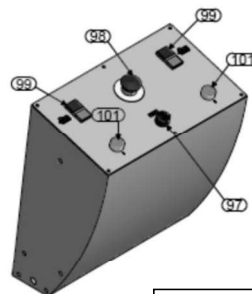
- Degrease and dry the machine table. Especially ensure that the holding grips and handles are clean and dry
- Clean all surfaces of the machine from chip and foreign particles. Use eye glasses for protection.
- This machine can process on products manufactured from rigid plastic and aluminum materials that don't include iron alloy.
- Control whether cutting tools (PICTURE 6 NO.32) are inserted safely to their places.
- Control cutting tools against corrosion, distortion and fractions. If cutting tools are damaged, change them.
- Cutting tool must process on the part after machine is operated and cycled.
- Absolutely control the direction of rotation of the saw.(PICTURE 8)
- **Do not process the profile before clamping the work piece properly.**
- Adjust the reducer speed adjustment screw (See Figure-11) by rotating in the direction of clockwise until providing the desired progress if the saw group cutting progress is fast. Make the opposite of the above action if the saw group cutting progress is slow.
- According to the type and shape of the material to be cut it can be adjusted by controlling the clamp speed.



Ensure that the pneumatic clamps are outside the cutting range of the saw blade after adjusting the desired angle.



PICTURE 9

7.2 DC 421M WORKING INFORMATION

PICTURE 10

Deactivate the brake by turning the brake button on the movable cutting head.(see Figure 18)

Move the movable cutting head via the hand wheel (PICTURE 5 NO.132) to the cutting start point using the measuring tape (PICTURE 5 NO.16) on the machine frame and the magnifier

Make the precise and final (+ / - 0.3) length adjustment by turning the hand wheel to the right or left.

After adjusting the cutting length, fix the movable head by activating the brake on the movable head (by turning the ON/OFF brake switch). PICTURE 5 NO.89)



Note: for the operator's safety, the clamps will not work and the cutting head will not move before the braking system on the movable head has been activated.

Loosen the head-fastening bend to adjust the head angle. (PICTURE 5 NO. 74).

By using the degree scale found on the front plate, manually set the cutting unit to the desired angle and fix the degrees by securely tightening the head-fastening bend.

Move the profile section support conveyor such as to support from below the part to be cut and tighten it with the fastening bend. (PICTURE 3)

Push the profile or material to be cut from the direction of the movable head to the direction of the fixed head. Fix the profile by using the clamp switch (PICTURE 10 NO.97)

Operate the saw blades by pressing the Motor Start buttons on the control panel (PICTURE 10 NO.99)

Provide the saw to come forward by pressing simultaneously the double hands safety modul buttons and then continue to press the buttons until the working part is cut. (When pressing the double hands buttons, the top protection will be closed automatically.(PICTURE 10 NO.101)

After the end of cutting action, remove the hand pressure on the button. Both of the saws will come to the initial position.

After the end of cutting action, remove the hand pressure on the button

Use the motor stop button to stop the saw rotation. Move the main switch to "0" position



NOT: Remove the pressure on the cutting buttons in a possible hazard, or press the emergency stop button

7.3 Display counter reset



Move the movable head so that it touches the fixed head (Ensure that the movable head touches the adjustment bolt on the fixed head.)

Reset the measurement by simultaneously pressing the **F** and **SET** buttons on the display. You should read the measurement **360**. If the cutting measurement is wrong, adjust it by turning the adjustment bolt to the right or left.

ADJUSTMENT OF DISPLAY UNIT FOR THE CUTTING OF 45 AND 90 DEGREES

7.3.3: In order to cut at an angle of 45 degree, offset is turned on by pressing the * button on the display once and its value becomes 1. When cutting angle is changed to 90 degree, offset is turned off by pressing the * button three times, consecutively, and its value disappears on the screen. Calibration values for 45 and 90 degree cuts are provided preloaded in factory settings.

If the length of the profiles which are cut in 45° and 90° are different from each other For example:

The length of the first profile which is cut in 90° is 1000mm and

The length of the second profile which is cut in 45° is 1000,7 mm

Press and hold on "F" key for 3 seconds.

Go on "P10" parameters by means of "F" key

Press "F" key one time to activate the P10 parameter and write down the offset value as 00000,7

Press "*" key to approve this value

Exit from the parameters menu by pressing &holding on 'F' key.

Press "*" key and see OFFSET 1 on the display.

Take the moveable head of the machine through the fixed head by manual operation and touch it.

Press and hold on 'F' and 'SET' keys at the same time to transfer the actual positions of the both heads to the display.

After adjustment processes it will be appeared 360 mm in 90° cuttings on the display when pressed on 'F' key

If you press "*" key, it will be appeared OFFSET 1 value as 360,7 on the display

If the length of the first profile which is cut in 90° is 1000mm and the length of the second profile which is cut in 45° is 999,7 mm Please apply the directives below

Press and hold on "F" key for 3 seconds.

Go on "P10" parameters by means of "F" key,

Press "F" key one time to activate the P10 parameter and write down the offset value as - 0,00003

Press "*" key to approve this value

Exit from the parameters menu by pressing &holding on the 'F' key.

Press "*" key and see OFFSET 1 on the display.

Take the moveable head of the machine through the fixed head by the manual operation and touch it.

Press and hold on 'F' and 'SET' keys at the same time to transfer the actual positions of the both heads to the display

Press 'F' and 'SET' keys at the same time to bring the adjusted parameters on the display

After adjustment processes it will be appeared 360 mm in 90° cuttings on the display when pressed on 'F' key If you press "*" key, it will be appeared OFFSET 1 value as 359,7 on the display



45 DERECE KESİMLERDE * TUŞUNA BASINIZ & KULLANMA KİAVUZUNU OKUYUNUZ!

FOR 45 DEGREE CUTTING OPERATION * PRESS BUTTON & READ THE USER MANUAL !

НА 45 ГРАДУСОВ НАЖМИТЕ * КНОПКА & ПРОЧИТАЙТЕ ИНСТРУКЦИЮ ПО ЭКСПЛУАТАЦИИ !

7.4 hanging display parameters

Parameter list :

Initial values Yilmaz values

Program Number:

P01: A	X X		00	01
		0 = Countung direction (+)		
		1 = Countung direction (-)		
		0 = mm Mode		
		1 = Inch (0.001) Accuary		
P02: A		Screen mode (symbols, only in screen)	0	0
P03: A		Point of decimals 0...3 (only in mm mode)	2	1
P 05: A		Button functions		
	X X			
		0 = Set Button aktive	000	001
		1 = Set Button inactive		
		0 = Incremental Button aktive		
		1 = Incremental Button inactive		
P 07: A		Decision : V1.50 start with firmware	0	1
P 08: A		Coefficent (value of factor)	1,0000	1,0000
P 09: A		Reference point	000000,0	000360,0
P10:		Offset 1	0	0
P11:		Offset 1	0	0
P12:		Offset 1	0	0
P13: A		Ofset 1 Configuration offset	3	3
P 90:		No function	0	0
P 99:		Software version		

When **F + Set** buttons are pressed simultaneously the value of reference point appears (360 mm)

7.5 Calibration of display

In case of a trouble in the cutting dimensions of the machine, make the reference screws of the mobile cutting unit and of the fixed unit reference contact each other. Fix the mobile unit by activating the brake piston. Cut a profile section and note its measure before changing the reference position. (Factory reference measure is 360 mm.) Measure the cut profile section by using a calibrated device (like a callipers or a meter). If the obtained measure is, for example, 361 mm while it had to be 360 mm, then, the value of the P 09 parameter should be changed to 000361,0 rather than being 000360,0. If the cut value is found to be less than 360 mm, change the value by reducing the value of 000200.0.

Cut another profile section to 4000 mm length after this operation. Measure the cut profile similarly by using a calibrated device and note the measured value. For example, if the cut profile is measured to be 4001 mm instead of 4000 mm, change the P 08 coefficient value to 1,0003 rather than being 1,0000.



Note : Cut accuracy on display is 0.2 mm.

7.6 Changing the initial values

Press and hold **E** button for 3 seconds, Parameter P 01 will appear on the display.

Pressing **E** button for once parameter value of P 01 will appear, if it is pressed again one can pass to parameter P 03, and it can be changed. (Other parameters could also be passed through P 05, P 08, P 09... etc.)

For example: When P 01 parameter appears the first digit flashes, inc/abs button (blinking) changes the value. Passing to the second digit can be accomplished by pressing Set button. This time second digit flashes, inc/abs button changes the value. This procedure can be used to change all other parameter values.

7.7 Replacing the battery on the display

The life of the display battery is one year. Replace the display battery after one year. To replace the battery.

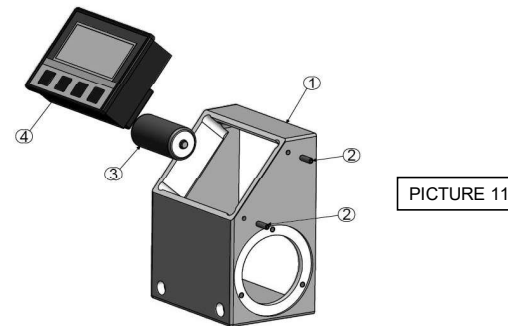
Loosen the hexagonal head screws numbered with 5 by turning them counter-clockwise.

Hold the display numbered with 2, and take it out from the protection box numbered 1.

Remove the old battery, place the new battery (pay attention to + and – poles).

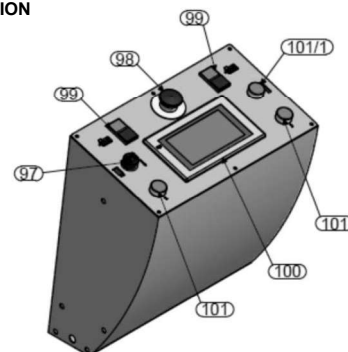
Position the display numbered 2, tighten the screws applying little force.

As the power to the Display was temporarily interrupted during replacing the battery, you have to reset the device



PICTURE 11

8.0 DC 421P WORKING INFORMATION



PICTURE 12

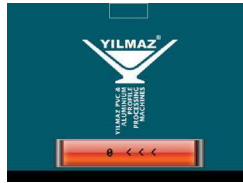
Electronic positioning system operates via touchscreen (FIGURE 12 NO. 100)

Set the system power switch position to "1". **YILMAZ MACHINE** caption appears on Program Terminal screen. Proceed to reference screen by clicking on any point on display (FIGURE 13.)



PICTURE 13

While clamps are in open position, machine moves to reference location by clicking on the button shown below. After the reference determination, main screen appears automatically (FIGURE 14).



PICTURE 14

This is the main screen in which the process options are displayed. Machine runs the operation which is selected in this screen (FIGURE 15).



PICTURE 15

9.0 SELECTION OF LANGUAGE

Language is selected in this screen. If the machine is switched on for the first time after procurement, select the user interface language (FIGURE 16).

Click on  button on main screen.

Select the language you want to use. Language is chosen only once, and afterwards, user interface displays in the selected language at each time machine turns on.



PICTURE 16

10.0 CREATING CUTTING LIST ON DISPLAY




Using the up- down arrows in figure, choose the number of program that you want to edit.

Enter length.

Enter the required left and right angle.

Enter the requested quantity to be cut.

Press  button. When you click on save button, the entered values are stored under the chosen program number.

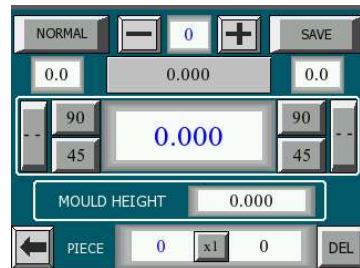
Further values are saved to programs by selecting next program and following the same procedure described above.

Machine allows to store 800 programs.

11.0 CUTTING PROCESS

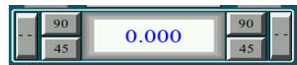
11.1 Cutting at Manually Entered Dimension

- Click on "Cutting" button on main screen




PICTURE 17

- Press on the button at the upper left corner. "NORMAL" label appears on the button.



- Enter the desired cutting length.



- Choose the cutting angle by pressing on  buttons for both left and right heads.
- In case cutting angle is between 45- 90 degree;



- Click on "Other Angle" button.

- Adjust head angle manually.

- Fix the angle by using the pipe in front of head.




- Enter the required number of pieces to be cut. On the left hand side, the number of pieces that is required to be cut, and on the right hand side, the number of pieces that have already been cut is displayed. In case a pair of profile is mounted, pair cutting is activated by using the button in the middle of figure.

- Click on "Go to Position" button, and allow the machine move to requested position.
- When machine reaches the required position, it automatically locks the brake.
- Place profile on machine table.
- Tighten the clamps by clicking on "Close the Clamp" button.
- Run left and right engines.
- Press on left and right cutting buttons on panel at the same time.


- Keep buttons pressed until cutting operation is completed. In case buttons are released, machine stops cutting and withdraws the saws.
- Machine starts to count the number of processed pieces, after the saw goes back completely.
- Enter new dimension to cut new pieces and follow the same procedure for the next operation.

Cutting Manually by Using Stored Dimension

- By using the  buttons, display the dimensions at which it is required to cut.
- Click on "Go to Position"
- Mount profile on the machine.
- When machine reaches the required position, tighten the clamps by clicking on "Close Clamp" button
- Turn on the engines.
- Start cutting process by pressing on two-hand cutting buttons.


Cutting Automatically by Using Stored Dimension


- To cut the pieces automatically, first of all, values need to be stored on the list.
- Press on the button at the upper left corner. "AUTOMATIC" label appears on the button. .

- By using the  buttons, display the dimensions at which it is required to cut. The displayed program is the initial cutting routine to start automatic operation.
- Click on "Go to Position" and allow the machine reaches to position only for the first time.
- Place profile on machine and squeeze clamps.
- Start cutting by using two- hand buttons.
- After processing the first program, machine proceeds to next program automatically, and goes to requested position by itself.

After each cutting process, the number of program increases by 1 and cutting operation continues until all stored programs are run. If the length value of the program is "0", automatic cutting operation stops

General Information about Cutting Operation

- In all cutting modes, single and double profile cutting operation is activated by  button. If x1 is written on button, single cutting and x2 is written double cutting is active. In case double cutting operation is active, machine increases the number of processed profile by 2 after completing each double cut.

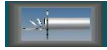
- If a mold is used in all cutting modes, the height of mold should be entered into . Machine automatically adjusts the dimension depending on the value entered in this section.

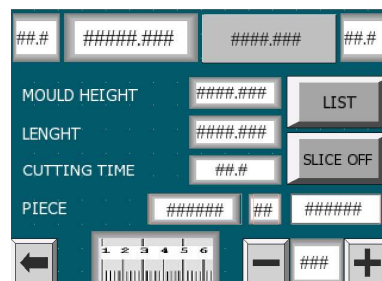
- In all cutting operations, process starts when door is closed. Doors are closed automatically when two- hand buttons are pressed.
- For the safety of operator, cutting process is controlled by two hands. In single head cutting operation, the working head can move but the other cutting unit remains fixed.
- After cutting at medium range angle which is between 45 and 90 degree, do not leave the holding bolt fixed.

12.0 SLICING OPERATION

Profiles, mounted on the machine, can be cut as slices of a fixed angle. Slicing can be performed either at an angle stored in program or at a fixed angle entered manually as detailed below.

Manuel Slicing

- When  button is pressed in main screen, slicing screen is appeared (FIGURE 15).
- Click on the **SLICE ON** button at the bottom right corner of screen to activate DLM ON.
- Click on the **MANUAL** button at the bottom right corner of screen to activate MANUAL.



PICTURE-18

- Enter the length of profile, mounted on machine, into the area indicated by red rectangle.

0.0	0.000	0.000	0.0
-----	-------	-------	-----

For instance, enter 3500.

- Cutting angles of the profile to be sliced are entered into the area indicated by red rectangles. Left angle is entered into left and right angle written on right section. Acceptable angle values are 45 and 90 degree. For example, enter 90 degree

0.0	0.000	0.000	0.0
-----	-------	-------	-----

into both sides.

0.0

- Enter the required length of cutting in **LENGHT** . For instance enter 500.

- The total amount of time to cut and withdrawal of saw is written in **CUTTING TIME** section. For example, enter 5.




- Enter the number of pieces to be processed into **PIECE**

- Press on "Go to Position" or click on "Move" button on screen.
- When the machine reaches the dimensions, lamp on "Move" button lights.
- Mount the profile to be sliced on the machine.
- Squeeze the clamps.
- Press on two- hand buttons once, and at the same time; and then release. Slicing process starts afterwards.
- Slicing stops when all the number of pieces entered into machine is cut or there remain not enough pieces to continue cutting.

NOTE: When the values, given as example, are entered into machine, the profile of 3500 mm length slices into equal pieces of 500 mm length. In this case, slicing process stops when all the number of pieces entered into machine is cut or there remain not enough pieces to continue cutting.

Automatic Slicing

- First of all a cutting list should be created. (Refer to "creating cutting list") In the list, left and right angles should be same for each item. During slicing, head angle remain same. For example if a list from 10 programs is created, all left and right angles should be 90 degree.

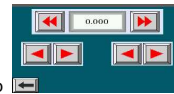
- When  button is pressed in main screen, slicing screen is appeared (FIGURE 15).
- Click on the  button at the bottom right corner of screen to activate DLM ON.
- Click on the  button at the bottom right corner of screen to activate MANUAL operation.
- Enter the length of profile mounted on machine into the area indicated by red rectangle.

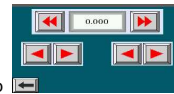
0.0	0.000	0.000	0.0
-----	-------	-------	-----

- Press on "Go to Position" and allow machine reach the position.
- Press on two- hand buttons once, and at the same time; and then release. Slicing process starts afterwards.
- For example when slicing starts with the program number 1, first all number of pieces to be cut defined in Program 1 is processed and then, machine proceeds to slice about the values defined in Program 2. This operation continues until there remains no profile to slice or all stored programs are run.

13.0 MOVING MACHINE UNITS

- Click on  button on main screen.



- Units can be moved by using the arrow buttons in popped up  screen. The position of units is also available on the screen.


14.0 CALIBRATION OF MACHINE

Calibration of 90 Degree Cut

- First of all, calibration of machine should be performed at 90 degree.
- Run cutting operation at which both angles are 90 degree and length is 600 mm.
- Measure the dimensions of processed profile.
- For example, in case the dimension of profile is 1mm longer than desired length;


- Click on  button on main screen

- Press on  button on popped up screen.

- Password screen  appeared to open edit screen. Enter (1234) as password.

- Calibration screen is displayed.


- Increase the value shown in  section about 1 mm. For instance, if 580 are written as offset value, edit as 581 mm.

- Click on  button to determination of reference point.
- Have a trial cut to verify the calibrated value.
- Similar to have longer length, in case the dimension of profile is 1 mm shorter than desired length, decrease the offset by 1 mm. For instance, if 580 are written as offset value, edit as 579 mm.


Calibration of 45 Degree Cut

Having completed the calibration of 90 degree cut, it is required to calibrate cutting at 45 degree as described below.


- Cut a 600 mm long piece whose angles are both 45 degree.
- Measure the processed profile.
- In case sample piece is 1 mm longer than the required length;


- Click on  button on main screen.

- Click on  button in pop up screen.

- Password screen  appeared, to open edit screen. Enter (1234) as password.
- Calibration screen is displayed.

- Enter (0.5) both left and right sections of 

- Click on  button for the determination of reference point.
- Have a trial cut to verify the calibrated value.

- Similar to have longer length, in case the dimension of profile is 1 mm shorter than desired length, enter (- 0.5) both left and right sections of 

NOTE All calibration adjustments mentioned above are done by YILMAZ MAKİNE and machine shipped as calibrated. In case it is required to change calibration, it can be changed taking into account the above mentioned issues.

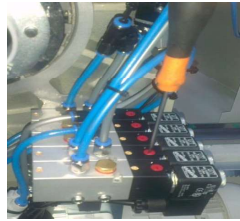
Calibration of Cutting Angles

- In case cutting angles are not perigon, calibration equipment's of this angle are situated behind the machine.
- Open the rear cover of head which is behind the machine. The adjusting equipment's are under the cover (FIGURE 19).



PICTURE 19

- Remove the saw valve, behind the head, and be careful that engines are turned off, dismount manual saw by using thin screwdriver (FIGURE 20).



PICTURE 20

- Obtain a miter to adjust 90 degree (FIGURE 20).
- Check that the angle between machine table and saw is 90 degree. In case that the angle is different than 90 degree, adjust the angle by using bolts as shown below figure (FIGURE 22).



PICTURE 21



PICTURE 22

- The help of a miter slightly tighten or loosen the bolts, in the red marked area, to adjust the angle with the help of a miter (FIGURE 22).
- Having completed the 90 degree adjustments, set the head angle to 45 degree using valves situated behind the machine (FIGURE 20).
- Obtain a miter to adjust 45 degree (FIGURE 23)






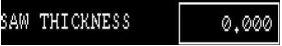


PICTURE 23

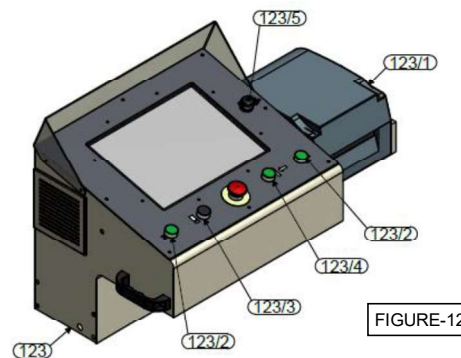
- Check that the angle between machine table and saw is 90 degree. In case angle is different than 90 degree, adjust the angle as described in 90 degree adjustment (FIGURE 22).
- After angle adjustments, check cutting dimensions.



15.0 SELECTION OF UNIT (MM/ INC):

- Click on  button on the main menu screen.
- Press on  button on the pop-up screen.
- Enter password (1234) to appeared screen .
- In the displayed screen, if  button is pressed, then  becomes effective. In case "inch" is active and the button is pressed then, "mm" becomes active.
- The width of saw , which is mounted on machine, is needed to be entered in this screen.

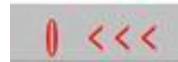
16.0 DC 421 PB MODEL OPERATIONAL INFORMATION



- When the program is started after the machine is turned on, the page shown in the picture is displayed (Figure 13). The machine must be sent to the reference when this page is opened. When the reference operation is completed, this page automatically closes and the menu page opens. (FIGURE 14)
- Note:** The vices must be in the open position when moving the unit to reference.



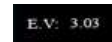
FIGURE- 13



By pushing this button, the machine is sent to the reference.



If this button is pressed, the program is closed.



It shows the screen version number.



It displays the PLC version number.

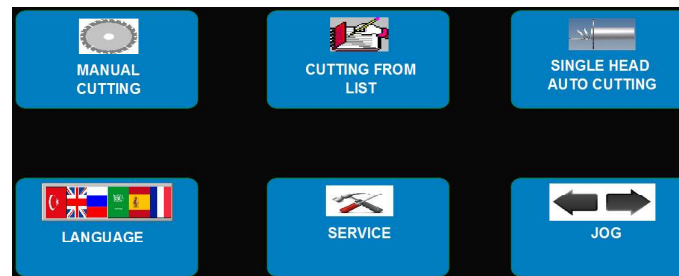


FIGURE- 14

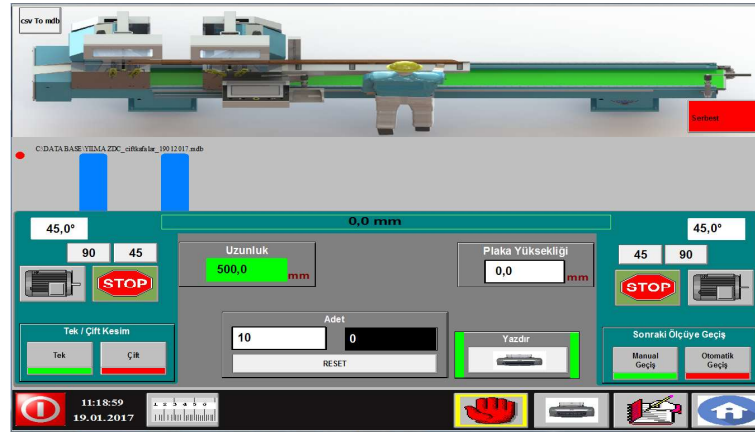
- When the reference operation is completed, the menu page automatically opens. (FIGURE 14)
- The desired operation mode is selected via the main menu. There are 3 different operating modes. These are manual cutting, list cutting and slicing modes.
- Language selection, service settings and manual movement pages are accessed via the main menu.

17.0 MANUAL CUTTING PAGE

General Properties

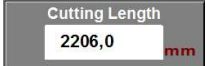



- When the manual cutting button is pressed, the following page appears. (FIGURE 15)
- In manual cutting mode, the desired part size and cutting angles are entered manually.




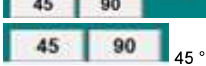
Cutting length and angle setting


FIGURE- 15

- 

The length of the part to be cut is entered in the length field.
- 

For fixed head angle adjustment, the angle settings on the left side of the screen are used.
- 

For moving head angle adjustment, the angle settings on the right side of the screen are used.
- 

45 ° and 90 ° cutting angles can be entered by pressing the ready buttons on the screen.
- For example; if you want to cut a piece of length 2206 mm by 45 °, the length value is entered as shown below (FIGURE 16), the left side is set to 45 ° and the right side is set to 45 °.
- 

Press the go button to measure button on the screen or go to Measure button (Figure 12 - 123/4) on the control panel to send the machine to the cutting dimension.



FIGURE- 16

Operation of the motors in free cutting

In free operation, the motors are operated manually as shown in the picture below (FIGURE 17).



It is activated by pushing the buttons with the engine images and when the engine is running this button is green.



When the cutting operation is completed, the engines are stopped by pressing the Stop button.

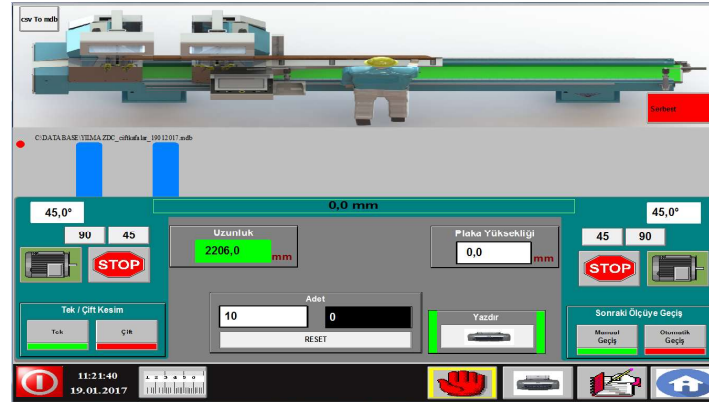


FIGURE-17

Single Cut Feature



The single button should be green. When single cut is selected, each piece is cut by one and the number increases. (FIGURE 18). When it reaches the desired number, it gives the "Pieces Completed" warning.

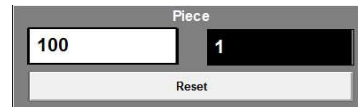


FIGURE-18

Double Cut Feature



Double button should be green. If double cutting is selected, each piece is cut by 2 pieces. (FIGURE 19) The number increases until reaching the desired number. When it reaches the desired number, it gives the "Pieces Completed" warning.

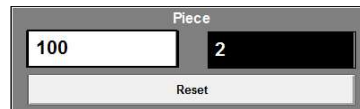


FIGURE-19

Entry of Plate Height

If plate is used under profile, this value should be entered on the screen. If the plate height is not entered on the screen, the cut length in angular cuts will be incorrect. For example; 50 mm. If a plate amplifier is used, this value should be entered on the display. (FIGURE 20) Automatic calculation is performed according to the entered value and in the angular section, this calculated value is added to the length to ensure the correctness of the cutting result.

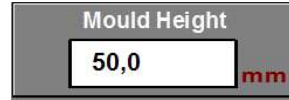


FIGURE- 20

Printer Settings



When you press the printer button located under the page, the barcode printer page opens.

(FIGURE 22)

Printer Manual / Auto Operation Setting

The printer manual-automatic operation setting is done from this page. (FIGURE 22)

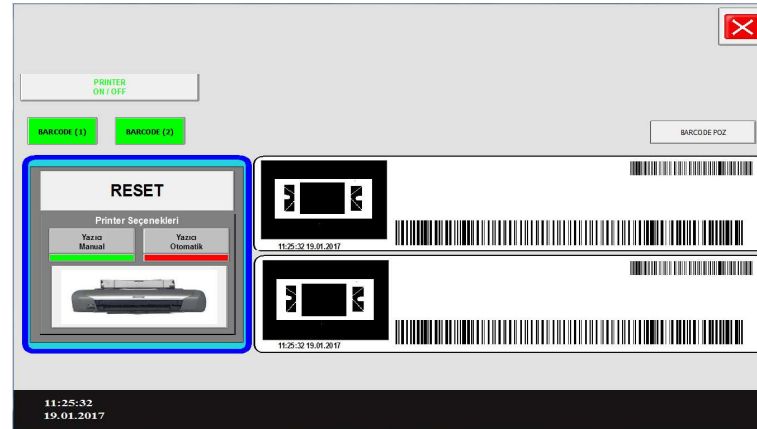


FIGURE- 22



- When the printer manual button is pressed, the printer does not work at the end of the cutting, and if desired, it can be manually printed at the end of the desired cutting with the print button



located on the manual cutting page.

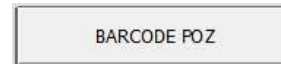


- The printer automatically runs at the end of the cut when the printer auto button is pressed. (FIGURE 23)



FIGURE- 23

Opening barcode position page



The following password page opens with the Barcode Exposure button (Figure 24)
Enter the password 1234 and then press the Enter button.

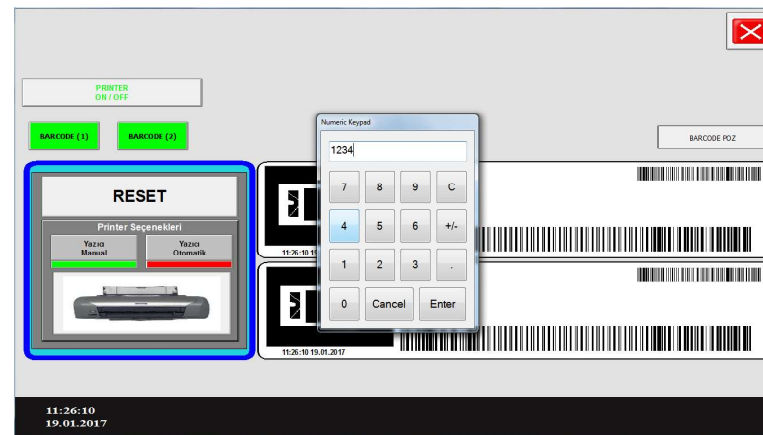


FIGURE- 24

Positioning of the information on the barcode

The barcode position page opens. (FIGURE 25) The positions of the information on the barcode can be changed from this screen.

	Horizontal	Vertical	Width	Height
Customer Name_	230	15	1	2
Customer Code_	470	15	1	1
Stock Name_	450	60	1	1
Stock Code_	225	60	1	1
Length_	360	120	2	2
Order_	225	135	1	1
Pos_	235	115	1	1
Explanation2_	225	90	1	1
Cart_	700	15	2	1
Place_	750	15	2	1
Direction_	800	100	1	1
Prg.No_	195	20	1	1
Date_	5	20	1	1
Hour_	110	20	1	1
Frame_	600	130	1	1
Picture_	6	40		
DISTRIBUTOR_	600	80	1	1

DEFAULT

APPLY

FIGURE- 25

Changing the positions on the barcode

Click on the value you want to change and enter the desired value and press Enter.

APPLY

The changes are saved by pressing the Apply button. (Figure 26)

DEFAULT

APPLY

FIGURE-26

18.0 CUTTING FROM THE LIST



When the cut button on the list on the main menu is pressed, the following page appears (FIGURE 27)

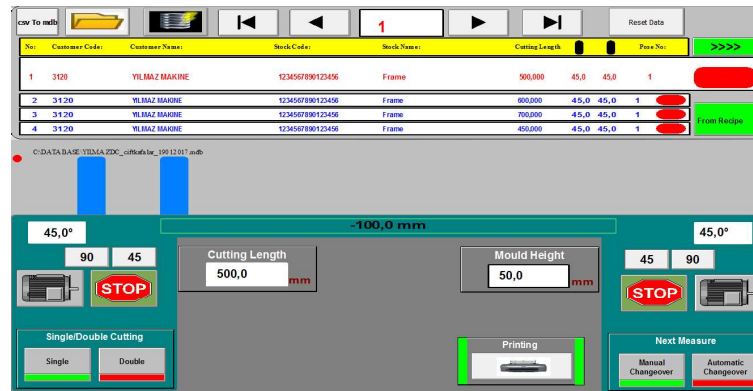


FIGURE- 27

- The length and angle values in the list come from the list.



- Go to the meter button on the panel (FIGURE 12 NO.123 / 4) or send the machine to the meter with the button on the screen.
- After the machine has arrived, the profile is placed, the motors are started and the cut is made with the double hand start button. (FIGURE 12 No. 123/2)

When cutting is done, the color of this button becomes green. The buttons of undesired profiles can be manually deactivated so that the next line is skipped automatically when the list is reached.



All data interrupted by the data reset button is reset and the operation is resumed by removing the cut off sign.



If manual switching is active, each profile in the list is cut off, the operator selects the next profile by itself and sends it manually to the measurement. Which one is green is active. For example, in the illustration, the manual transition is active. If a mode is desired to be activated, that button is pressed and activated.



If automatic switching is active, the machine will automatically go to the next measurement in the list after each profile cut is completed and wait for the cut to be made. Here the operator does not need to send the machine by hand.

Prescription Editing



To prescribe a prescription, press the recipe button and the following page opens. (FIGURE 28)

No	Customer Code	Customer Name	Stock Code	Stock Name	Cutting Length	Protection
1	3120	YILMAZ MAKINE	1234567890123456	Frame	500,000	45,0 45,0 1
2	3120	YILMAZ MAKINE	1234567890123456	Frame	600,000	45,0 45,0 1
3	3120	YILMAZ MAKINE	1234567890123456	Frame	700,000	45,0 45,0 1
4	3120	YILMAZ MAKINE	1234567890123456	Frame	450,000	45,0 45,0 1
5	3120	YILMAZ MAKINE	1234567890123456	Sash	700,000	45,0 45,0 1
6	3120	YILMAZ MAKINE	1234567890123456	Sash	800,000	45,0 45,0 1
7	3120	YILMAZ MAKINE	1234567890123456	Sash	800,000	45,0 45,0 1
8	3120	YILMAZ MAKINE	1234567890123456	Sash	1300,000	45,0 45,0 1
9	3120	YILMAZ MAKINE	1234567890123456	Multi	1500,000	0,0 0,0 1
0					0,000	0,0 0,0 0
0					0,000	0,0 0,0 0
0					0,000	0,0 0,0 0

FIGURE- 28

Activate / deactivate prescription protection



If prescription protection is active, it can not be changed.



If it is desired to change the recipe, the prescription protection must be in a passive state. (FIGURE 29)

No	Customer Code	Customer Name	Stock Code	Stock Name	Cutting Length	Protection
1	3120	YILMAZ MAKINE	1234567890123456	Frame	500,000	45,0 45,0 1
2	3120	YILMAZ MAKINE	1234567890123456	Frame	600,000	45,0 45,0 1
3	3120	YILMAZ MAKINE	1234567890123456	Frame	700,000	45,0 45,0 1
4	3120	YILMAZ MAKINE	1234567890123456	Frame	450,000	45,0 45,0 1

FIGURE- 29

Making changes to the recipe



With the help of the arrow keys you can switch between the lines on the recipe. The line at the top shows the line in the active state.

Click on the place you want to change, then enter the new value and press enter. For example, if length is desired as 2206, it is done as follows. (FIGURE 30)

Customer Name: < > Stock Code: < > [Refresh]

Navigation: [Previous] [Next] [1] [Delete] [Delete All] [Export] [Print]

Numeric keypad: 2206,000000

No	Customer Code	Customer Name	Stock	Cutting Length	Pass No	Protection		
1	3120	YILMAZ MAKINE	123	2206,000	45,0	45,0	1	>
2	3120	YILMAZ MAKINE	123	600,000	45,0	45,0	1	>
3	3120	YILMAZ MAKINE	123	700,000	45,0	45,0	1	>
4	3120	YILMAZ MAKINE	123	400,000	45,0	45,0	1	>
5	3120	YILMAZ MAKINE	123	800,000	45,0	45,0	1	>
6	3120	YILMAZ MAKINE	123	600,000	45,0	45,0	1	>
7	3120	YILMAZ MAKINE	123	800,000	45,0	45,0	1	>
8	3120	YILMAZ MAKINE	123	1300,000	45,0	45,0	1	>
9	3120	YILMAZ MAKINE	123	1500,000	0,0	0,0	1	>
10	3120	YILMAZ MAKINE	123	500,000	45,0	45,0	1	>
0				0,000	0,0	0,0	0	>
0				0,000	0,0	0,0	0	>
0				0,000	0,0	0,0	0	>

Protection is Passive

FIGURE- 30

> If you want to make more detailed changes, click the arrow button at the rightmost of the relevant line and the following page opens. (FIGURE.31) The changes made here are automatically saved and when the process is finished, the close page button is pressed to exit this page.

Protection is Passive

Navigation: [Previous] [Next] [First] [Last]

No:	1	Cart:	1
Customer Code:	3120	UNIT:	1
Customer Name:	YILMAZ MAKINE	Left Angle:	45,0
Stock Code:	1234567890123456	Right Angle:	45,0
Stock Name:	Frame	Direction:	Left
Order No:	61-103	Has cutting been performed?:	Cutting is not performed!
Explanation1:	1234567890	Height:	50,000
Explanation2:	ONLY SIMPLE	DIS INIBU TUR:	yilmaz bayil
Length:	500,000	Picture:	
MMINCH:	mm		2
FRAME X:	2200	Picture:	IMAGEa1.bmp
FRAME Y:	1600		
Pass No:	1		

FIGURE- 31

Adding New Row to Prescription

To add a new line, press the add button and the following page opens. (FIGURE 32) The necessary fields are filled in here and the page is closed by pressing the add button . Recording process is made automatically.

No:	10	Cart:	1
Customer Code:	3120	UNIT:	1
Customer Name:	YILMAZ MAKINE	Left Angle:	45,0
Stock Code:	1234567890123456	Right Angle:	45,0
Stock Name:	Frame	Direction:	Bottom
Order No:	81-193	Has cutting been performed L:	Cutting is not performed L
Explanation1:	1234567890	Height:	50,000
Explanation2:	ONLY SIMPLE	DISTRIBUTOR:	yilmaz bayil
Length:	2206,000	Picture:	
MMINCH:	mm		
FRAME X:	2200		
FRAME Y:	1500		
Pose No:	1		

FIGURE- 32

The 10th row of the list is the row added recently. The inserted line appears at the end of the list. (FIGURE 33)

No:	Customer Code:	Customer Name:	Stock Code:	Stock Name:	Cutting Length		Pose No:	
1	3120	YILMAZ MAKINE	1234567890123456	Frame	2206,000	45,0 45,0	1	
2	3120	YILMAZ MAKINE	1234567890123456	Frame	600,000	45,0 45,0	1	
3	3120	YILMAZ MAKINE	1234567890123456	Frame	700,000	45,0 45,0	1	
4	3120	YILMAZ MAKINE	1234567890123456	Frame	450,000	45,0 45,0	1	
5	3120	YILMAZ MAKINE	1234567890123476	Sash	800,000	45,0 45,0	1	
6	3120	YILMAZ MAKINE	1234567890123476	Sash	600,000	45,0 45,0	1	
7	3120	YILMAZ MAKINE	1234567890123476	Sash	800,000	45,0 45,0	1	
8	3120	YILMAZ MAKINE	1234567890123476	Sash	1306,000	45,0 45,0	1	
9	3120	YILMAZ MAKINE	1234567890123498	Mullion	1350,000	0,0 0,0	1	
10	3120	YILMAZ MAKINE	1234567890123456	Frame	2206,000	45,0 45,0	1	

FIGURE- 33

Removing row from the prescription

Delete

When the Delete button is pressed, the page for which confirmation from the operator is expected to delete the active line is opened. On the confirmation page that appears here, select yes and press the OK button.

SILINSIN MI?

Current State: HAYIR

Select New State:

☐ HAYIR

☒ EVET

OK

Cancel

Numeric keypad

0

7 8 9 C

4 5 6 +/-

1 2 3 .

0 Cancel Enter

This page will open after confirmation of deletion. If 1 is written and confirmed, only the selected record is deleted. If 2 is written and approved, the selected record and the one after it are deleted.

Delete All

If you press the Delete All button, you will be asked if you want to delete all the records stored on the machine. If yes is selected, all records will be deleted. If No is selected, deletion will be canceled.

19.0 SLICING PAGE



When the slicing button on the main menu is pressed, the following page appears (FIGURE 34).

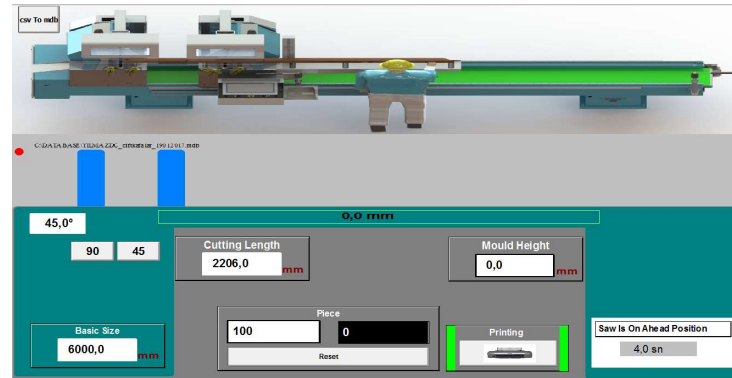
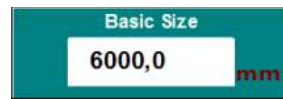
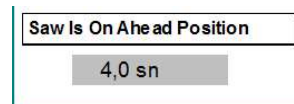


FIGURE- 34



The total profile size is written on the length of the raw material.



The timing of the saw's advance is written here. The value here may vary depending on the profile of the profile to be cut and the cutting feed rate.

Note: Other button features are described in the manual section. (See manual cutting)

- For example, let's write 45 degrees to the fixed head angle.
- Raw material should be written 6000 mm in length and 2206 mm in length.
- After these operations, press the Go to measure button on the control panel. (FIGURE 12 NO.123 / 4)
- After the machine goes to the meter, the color of the raw material will be green. We can understand that this is where the machine goes to.
- After going to the machine size, the slicing operation is started by pressing the double hand cutting buttons (Figure 12 NO.123 / 2).
- For example, when we enter the above values, 6000 mm of the profile attached to the machine will slice evenly at 2206 mm. This optional slicing operation either ends when the desired piece is completed or the profile connected to the machine is finished.

20.0 LANGUAGE SELECTION



When the language selection button on the main menu is pressed, the following page opens (Figure 36). To make a language selection, click on the desired flag to activate it. After you make a selection, the page automatically closes.

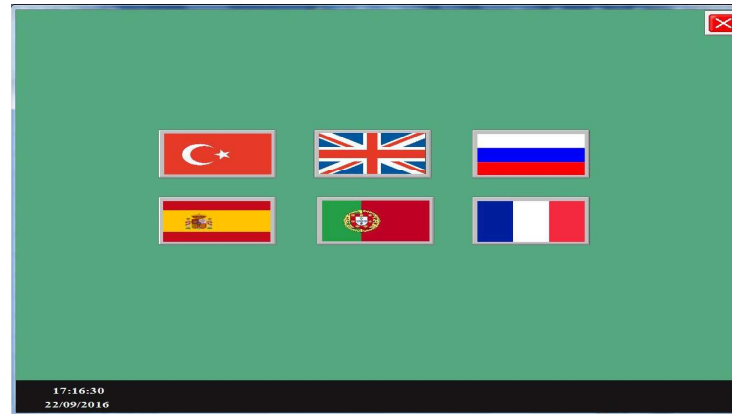


FIGURE-36

2.01 MANUAL ACTION PAGES



When the manual move button on the main menu is pressed, the following page opens (Figure 37). This page is used to move the machine's head angularly and send the moving head to the measure.

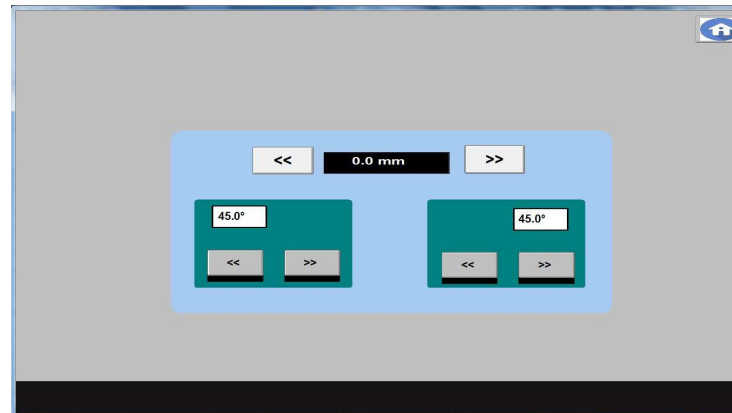


FIGURE- 37

22.0 SERVICE PAGES



Press the service button to access the settings page. The page shown is the page where the machine calibration and some settings are made. (FIG. 33)

FIGURE- 33

Position: The value shown here indicates the current position of the machine.

Positioning Offset: It indicates the position of the machine on the zero point. It is used during calibration of the machine. Calibration procedure is explained separately.

Saw Thickness: The tooth thickness of the saw installed to the machine is written here.

Saw Run-Out Value: If the saw installed on the machine causes run-out in the course of time, + or - values can be entered here to indicate the tolerance.

Com Port: Number of the port where the barcode printer is connected is entered here.

Font: It is intended only for reading purposes; no modifications are allowed.

Com Port On Off: Turns the port on or off where the barcode printer is connected. No barcodes can be printed when it is turned off. If necessary, USB can be plugged and this port can be turned off and the printer can be operated by means of the USB. Com port is used as factory setting.



Should the servo drives switch to alarm mode, the drives are reset by pressing this button.



It opens the page where factory settings are made. Access requires password and it is used by service personnel.



The machine will be moved to the reference point when this button is pressed.



It opens the page where angle offset settings are made. Password is required for that. Required password is (1234)

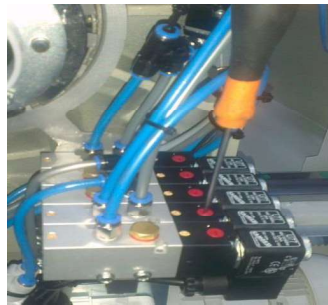
Calibration of Cutting Angles

- In case cutting angles are not perigon, calibration equipment's of this angle are situated behind the machine.
- Open the rear cover of head which is behind the machine. The adjusting equipment's are under the cover (FIGURE 19).



PICTURE 19

- Remove the saw valve, behind the head, and be careful that engines are turned off, dismount manual saw by using thin screwdriver (FIGURE 20).



PICTURE 20

- Obtain a miter to adjust 90 degree (FIGURE 21).
- Check that the angle between machine table and saw is 90 degree. In case that the angle is different than 90 degree, adjust the angle by using bolts as shown below figure (FIGURE 22).



PICTURE 21



PICTURE 22

- The help of a miter slightly tighten or loosen the bolts, in the red marked area, to adjust the angle with the help of a miter (FIGURE 21).
- Having completed the 90 degree adjustments, set the head angle to 45 degree using valves situated behind the machine (FIGURE 19).
- Obtain a miter to adjust 45 degree (FIGURE 23)



PICTURE 23

- Check that the angle between machine table and saw is 90 degree. In case angle is different than 90 degree, adjust the angle as described in 90 degree adjustment (FIGURE 21).
- After angle adjustments, check cutting dimensions.



Setting the Cutting Calibration of the Machine:

- Settings page is opened and the machine is moved to the resetting point by pressing the machine reference button
- The operation page is opened
- The position of the machine at the zero point that appear on the screen is entered in the length field and the head angles are set to 90 degrees; then "got to measure" button is pressed.
- A cut is performed at that position.
- Settings page is opened.
- The cut piece is measured and this is entered in the offset value in the settings page. In order to enter the value here, it is necessary to press the Password button and to enter the password by writing "1234". No values can be entered in the page without entering the password. When the measured value is entered for offset, calibration of the machine for 90 degrees is completed.
- Yet another method is: let us say that you made a cutting for 1000 mm but the output part was 999 mm. In such a case, the cutting calibration at 90 degrees is practically performed by reducing the value at offset by 1 mm.
- Or, let us say that you made a cutting for 1000 mm but the output part was 1001 mm. Then, in such a case, the offset value is increased by 1 mm.

Performing Calibration at 45 Degrees Length Measure (Fixed Head 45)

- If a difference occurs between the cuttings that are made at 90 degrees and at 45 degrees by the machine, proceed as follows to perform calibration: After 90 degree calibration is completed, the mobile unit head angle should be 90 degrees and the fixed head should be leaned to 45 degrees without changing the measure length.
- A cut is made in this position and the obtained part is measured. The difference between the cut made at 90 degrees and the cut made at 45 degrees on the left angle interior side is entered in the field of "Fixed Interior Angle Difference". For example: If the cut made at 90 degrees is 780 mm and the cut made at fixed head interior 45 degree is 780,4 mm, then, 0,4 mm is entered for the "Fixed Interior Angle Difference". If the difference is in the reverse direction then it is written with a minus sign

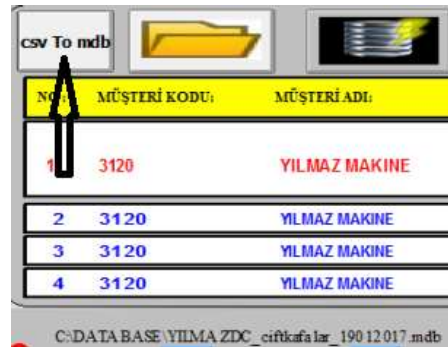
PerforminG Calibration at 45 Degrees Length Measure (Mobile Head 45)

- After 90 degree calibration is completed, the fixed unit head angle should be 90 degrees and the mobile head should be leaned to 45 degrees without changing the length measure.
- A cut is made in this position and the obtained part is measured. The difference between the cut made at 90 degrees and the cut made at 45 degrees on the right angle interior side is entered in the field of "Mobile Interior Angle Difference". For example: If the cut made at 90 degree is 780 mm and the cut made at mobile head interior 45 degree is 780,4 mm, then, 0,4

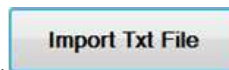
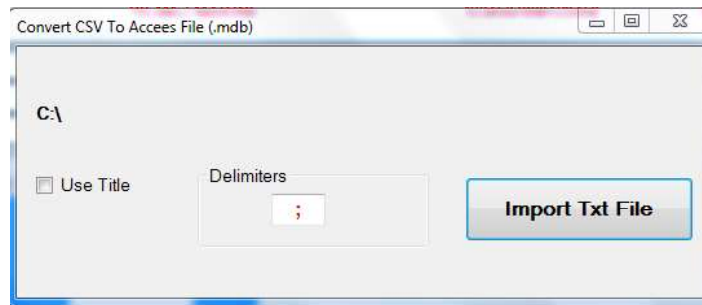
mm is entered for the "Mobile Interior Angle Difference". If the difference is in the reverse direction then it is written with a minus sign.

CSV to MDB conversion program

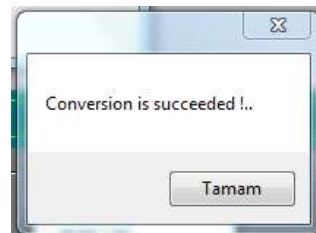
This program converts CSV (Microsoft Office Excel Comma Separated Values File) formatted file to MDB (Microsoft Office Access Database) format.



As shown in the picture above, the "csv to mdb" button is pressed. When this button is pressed, the following page opens.



Here, the button is pressed. The address of the CSV file to be converted is found and the conversion is done. When the conversion is successful, the following page appears on the screen.



23.0 PLC SOFTWARE UPDATE

Simply please copy the update software to be sent to you by the manufacturer when required to the system location specified to you.

Open the settings page by running the machine program.

Click on "Password" button and enter your password. (Password=5678.)

Click on "Plc_Stop" button. Text on the button turns green.

After the button is lit green, click on **"Download"** button. Once the button is pressed, machine will start to save the new program. Button will turn green once the loading of the program is completed.

After the download button turned green, click on **"Plc_Run"** button and wait the button turns green.

After this, computer will re-start. Once the computer is turned on again, update process is complete and ready to run.

24.0 SOLVING THE SCREEN ERRORS

	ERROR	CAUSE	SOLUTION
1	Emergency Stop is Pressed	<ul style="list-style-type: none"> Emergency stop button is pressed. Alarm is not reset. 	23 Release the emergency stop button. 24 Reset the alarm.
2	Quantity Completed	<ul style="list-style-type: none"> Quantity required to be cut is not completed. 	25 Enter new quantity or reset the quantity.
3	Low Pressure	<ul style="list-style-type: none"> Air pressure is low 	26 Check the air
4	Mobile Head Saw Cover is Open	<ul style="list-style-type: none"> The cover may not be resting to its seat well. The sensor may be defective. 	27 Close the cover if it is open. 28 Check the cover and correct it if it is not resting to its seat. 29 If all conditions are met then check the sensor.
5	Fixed Head Saw Cover is Open	<ul style="list-style-type: none"> The cover may not be resting to its seat well. The sensor may be defective. 	30 Close the cover if it is open. 31 Check the cover and correct it if it is not resting to its seat. 32 If all conditions are met then check the sensor.
6	Thermal Switch of the Fixed-Mobile Head Motor has Tripped	<ul style="list-style-type: none"> Motor thermal switch may have tripped. 	33 Check the thermal switch. Set the thermal switch to its normal position if it had tripped.
7	Inverter Alarm	<ul style="list-style-type: none"> Motor may have been overloaded. 	34 Shut down the computer and then turn off and then on the machine power.
8	Head 1 – Head 2 Saw Cover is Open	<ul style="list-style-type: none"> The saw cover is in open state 	35 Close the saw cover.
9	Clamps are Not Closed	<ul style="list-style-type: none"> Cutting is attempted while the clamps are open 	36 Close the clamps
10	Cut with Head 1	<ul style="list-style-type: none"> The measure intended to be cut is larger than the machine stroke. 	37 After the left saw motor starts to operate automatically, perform cutting on the right side of the profile by using double hand.
11	Cut with Head 2	<ul style="list-style-type: none"> The measure intended to be cut is larger than the machine stroke. 	38 After the right saw motor starts to operate automatically, perform cutting on the right side of the profile by using double hand.
12	Motors do not Operate	<ul style="list-style-type: none"> Cutting is attempted without starting the saw motors. 	39 Start the motors.
13	Enter the profile Height	<ul style="list-style-type: none"> This warning is displayed if exterior angle is selected on both heads. 	40 Write the profile height in the required field.
14	Measures are not at Their Locations	<ul style="list-style-type: none"> Cutting is attempted while the measures are not at their locations. 	41 Move the machine to the measure.
15	Check the Sensor of Head 1 - Head 2 Top Cover.	<ul style="list-style-type: none"> The top cover is not able to see the sensor while cutting is performed. 	42 Check the sensor.
16	Encoder Does Not Count	<ul style="list-style-type: none"> This alarm is displayed on the screen if the machine is moving and the encoder is not reading 	43 Check the gap of the encoder with a ruler. The gap must be 1 mm at most. Clean it if necessary.
17	Head 1 Saw in not in the Rear	<ul style="list-style-type: none"> The sensor on the saw piston is not able to see when the saw is in the rear 	44 Check the sensor. If the sensor is operating and this alarm is displayed, adjust the place of the sensor.
18	Servo drives alarm	<ul style="list-style-type: none"> The servo drives switch to alarm status due to strain or for any reason 	45 Turn the power off and on and reset the alarm.

25.0 MAINTENANCE, SERVICE AND REPAIR
Maintenance

Remove the electric and pneumatic (if any) power connections of the machine.

Clean all surfaces of the machine from burs, chips and foreign substances. If the machine will not be used for a long time, lubricate undyed parts with oil that prevents rusting.

When cleaning the machine, do not use materials that may damage the dye.

Control cutting tools against corrosion, distortion and fractions. If cutting tools are damaged, change them.
Before using cutting tool, operate the machine out of gear and control whether it is inserted correctly, it is without flexure and it is inserted appropriately. Do not use cutting tools that are damaged or lost its functionality.

Changing the saw blade



Use protective gloves when replacing Saw

Cut the electric connection of the machine.

Take the M10 screw (PICTURE 6 NO.36) outside by rotating in the direction of counter clockwise with 8mm Allen switch.
(Hold with 17 two-edged switch from the side in the saw axle of which switch edge is opened)

Remove the connection parts of cutting set in the right order... (PICTURE 6 NO.33 /34 / 35)

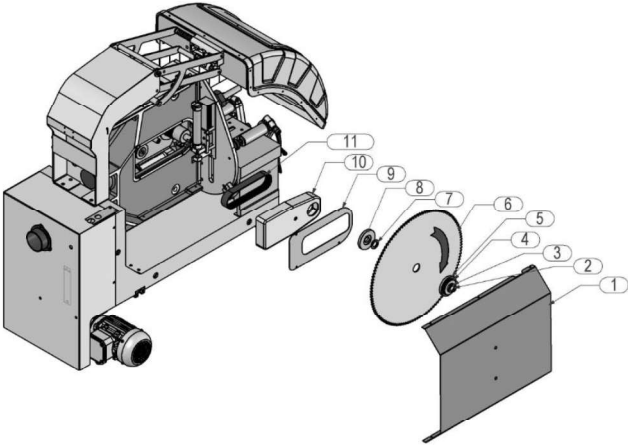
Remove the saw carefully

Mount the saw by being sure that the rotation direction onto the axle is true.

Replace all removed parts in the same order
By holding the M10 Allen screw by 8mm Allen switch and the saw axle simultaneously by 17 switches tighten in the direction of clockwise.

The saw selection should be made proper to EN 847-1 Standard

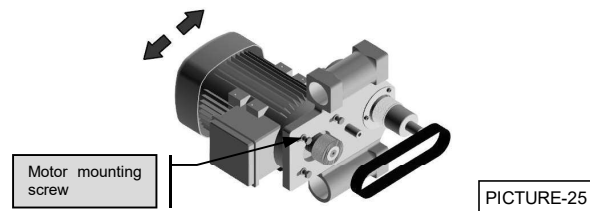
Replacing the Motor Belt



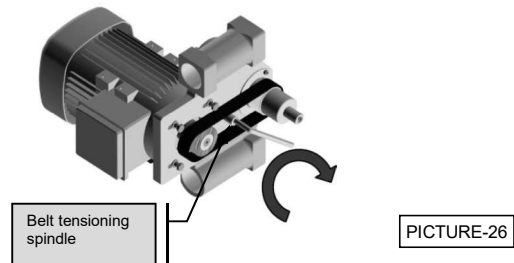
No	Order number
1	2TU011441-0643
2	1SC021000-0041
3	2TU011110-0203
4	2TU011441-0016
5	2TU011110-0423
6	1SK010000-0074
7	2TU011110-0122
8	2TU011110-0422
9	2TU011441-0661
10	2TU012510-0203
11	1SR070000-0015

PICTURE-24

- Loosen the motor mounting screws by using a wrench
- After the motor mounting screws are loosened, tension of the belt will be reduced by moving the motor forwards or backwards and then the belt will be removed.



- Install a new belt in place of one that you have removed.
- After installing the new belt, tighten the tensioning spindle by turning it clockwise by using a no. 8 allen wrench and tension the belt.
- Retighten the motor screws after tensioning the belt (PICTURE 25).
- Finally, complete belt replacement operation by fastening the belt housing cover



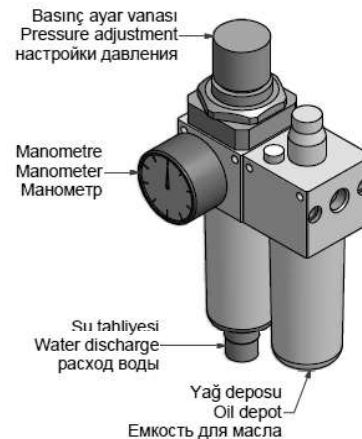
Adjust the air pressure (pneumatic systems)

Pull up pressure adjustment valve. Set adjustment valve to the desired value on manometer by turning it clockwise or counter clockwise. Then lock the valve by pressing it down.

Set the air pressure between 6 and 8 BAR. If air pressure drops below the stated values, accessories operating with pneumatic power do not work.

Conditioner unit accumulates the water in the air in the collection container so that it won't damage pneumatic components. At the end of the working day, empty the accumulated water by opening water discharge valve under the collection container.

In order to put oil to the oil tank, remove the reservoir by turning. Oils recommended by the manufacturer are; TELLUS C10 / BP ENERGOL HLP 10 / MOBIL DTE LIGHT / PETROL OFİSİ SPINDURA 10.



26.0 NOISY EMISSION VALUES

Material	Aluminyum	LwA	92 dB (Measured Value)
Lenght	1220 mm.	LpA	93 dB (Average Sound Pressure Value)
Width	70 mm.	K	4 dB (Uncertainty in the Measurements)
Height	50 mm.		
<p>The values given for the noise are the emission level and it does not show that it is in the safe working level. A connection between emission and exposure levels is available, however it is not used confidently for the determination whether these more advanced precautions are necessary or not. The factors that affect the real level of exposure, affecting the working power, are residence time, features of working place, in other words other noise resources, actions on other side and the number of the machines. Furthermore, the exposure level given permission can change from country to country. This informing, however, provides the machine user to evaluate the hazard and risks well.</p>			
Machine Characteristic Information		Saw Characteristic Information	
Rotation Speed of Saw	3000 rpm	Saw Size	420 mm
Motor Power	2.2 kW	Saw Thickness	4,2 mm
Nominal Voltage	400 V	Saw Shaft Thickness	3.2 mm
		Saw Progress Speed	64 / sn. (Aluminyum material)

27.0 TROUBLESHOOTING GUIDE

Here are some recommendations for solving urgent problems. If the trouble cannot be solved, or if you have a problem other than those described hereunder, please contact our technical service or your nearest dealer.

TROUBLE	CAUSES	REMEDY
Low surface quality (at aluminum and similar materials) : Rough surface, Large chip, Not homogenous surface, Saw blade traces visible	Not cooling the saw blade surfaces	Lubricating the saw blade cutting surfaces, Using of cooling liquid
	Using of damaged or blunt saw blade	Check the saw blade teeth. Replace if necessary.
	Saw blade moves too quick	The cutting speed is too high for the material. Decrease the cutting speed.
Motor does not work (Start button is pressed, not working)	No power supply to the machine.	Check the electric cable connections. Check the electric power sockets.
Motor is working but the saw blades don't move down.	Air supply connections missing or faulty	Check the air compressor connections Adjust the air pressure between 6-8 Bar on the conditioner.
	The brake system on the movable head has not been activated.	Activate the brake system button on the movable head .
The saw blade rotates in reverse direction.	The electric connection, the power cable or the connection at the panel is wrong.	Let the electric connections carry out by a qualified electrician.
Profile clamps don't work	Air supply connection missing or air pressure is too low	Check the air supply connections.
	The brake system on the movable head has not been activated .	Activate the brake system button on the movable head

28.0 WARRANTY CONDITIONS

YILMAZ Machine Industry and Trade Limited Company, guarantees that all machines have been tested and conform to the international standards.

The guarantee is valid 24 months from despatch date and does not cover the electrical parts of the machine.

During this period:

- Any repair and replacement effected at our workshop is completely free of charge (only transport costs are at customer's charge).
- For repair and replacement effected by our technician at the customer's site, we will invoice only the travel and lodging costs for our technician.

The guarantee does not cover damages caused by:

- not respect of the rules indicated in the manual instruction book
- not correct voltage
- improper use or use not in accordance with what the Machine has been designed for
- use of non original tooling
- programming errors
- lack of cleaning and of ordinary maintenance by the customer
- transport or displacement (even inside the workshop)
- natural events (lightings, fires, floods)

The warranty does not cover, in any case, damages caused by the malfunction of the Machine