

ZETA-02 A AUTOMATIC DOUBLE GLAZING BEAD SAW

User's Manual



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

1.2. DISTRIBUTOR

ATech Machine, Inc. 309 Ridgemont Ave., Rockville, MD 20850 USA Phone: +1-240-505-1967 Fax: +1-301-560-6627 Website: www.ATechMachinery.com E-mail: info@ATechMachinery.com

In case of any technical problem please contact your nearest ATECH dealer, or ATECH 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.



TECHNICAL FEATURES

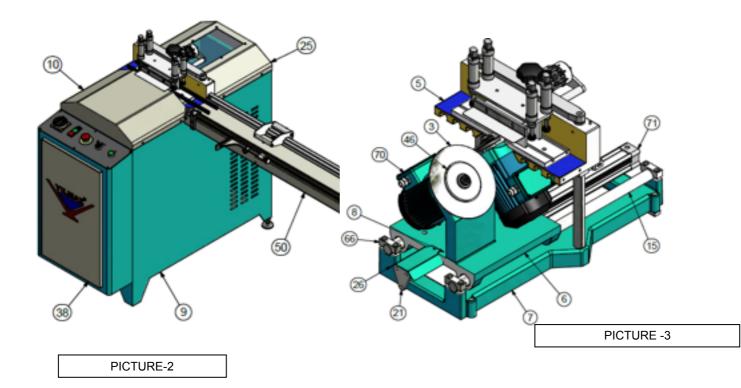
									kg/lbs	kg/lbs
ZE	ETA-02 A	1200 W x 2 50 Hz 220/440V AC 3 P PE	800 W x 2 50 Hz 230 V AC P N PE	3000 RPM	D ₁ = 110 mm D ₂ =200 mm d = 30-32 mm	6/8 Bar 90-120 psi	35 Lt/min	W = 54 L = 113 H = 124	134 295	168 370

OVERALL DIMENSIONS

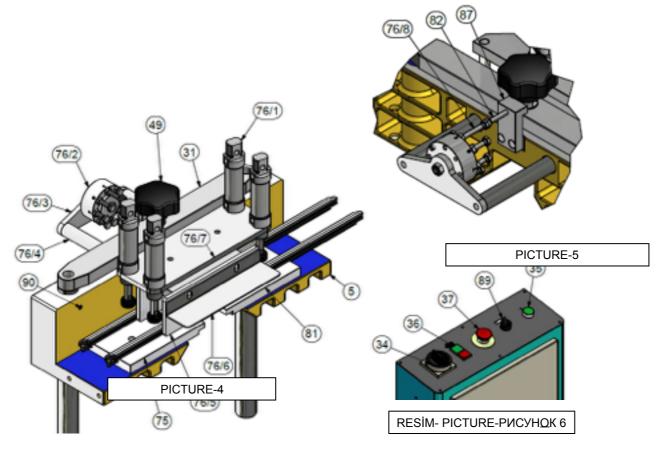


PARTS LIST

PICTURE-1







NO	STOCK CODE	QTY	NO	STOCK CODE	QTY
3	1SK010000-0001	1	76	2TU012210-1016	1
5	2TU012510-0392	1	76/1	1PN020000-0191	1
6	2TU012510-0308	1	76/2	2TU011110-1135	1
8	2TU012510-0311	2	76/3	2TU011441-0720	1
9	1SA010000-0051	1	76/4	2TU014010-0198	1
10	1SA030000-0091	1	76/5	2TU011441-0709	2
15	2TU014010-0093	2	76/6	2TU011441-0719	1
21	2TU011441-0289	1	81	2TU012310-0103	1
25	1SA030000-0090	1	87	2TU012210-1047	1
26	1SA050000-0152	1			
31	2TU012210-0906	1			
38	1SA020000-0026	1			
46	1SK010000-0008	1			
49	1PL020000-0008	1			
50	3UA010030-0097	1			



66	2TU011210-0643:	4		
70	3UA730030-0008	2		
71	1PN020000-0122	1		

	SPARE PART LIST						
PART NO	PICTURE	CODE	PART NAME				
1		1EL090000-0003	START BUTTON				
2		1EL090000-0001	EMERGENCY STOP BUTTON				
3		1EL050000-0027	RELAY(SCHRACK) RT 424024 24V DC 2 C/0 8-10A				
4		1EL040000-0405	ASL09-30-10-81 (24V DC 50-60) CONTACTOR				
5		1EL090000-0016	XB4-BW73731B5(24V AC/DC LED) DOUBLE BUTTON				
6		1EL090000-0033	ZBA 710 DOUBLE BUTTON COVER				



ENGLISH

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1.GENERAL INFORMATION

1. Introduction

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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.

2. Service Information

In case of any technical problem please contact your nearest ATech dealer, or ATech 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



2. SAFETY

1. Safety Symbols and Their Meanings

	Read the user guide	$\textcircled{\begin{subarray}{c} \begin{subarray}{c} \b$	Ensure safe working position, always keep your balance.
0	Wear ear protectors		Elektrical excitation
Θ	Wear safety goggles	\triangle	Don't place your hands between parts in motion
	If the power cable should be damaged dur- ing operation, don't touch and unplug it. Never use damaged power cables.		High temperature warning
	During saw blade change operations, use protective gloves	\triangle	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

1. Accidents Prevention

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

2. General Safety Information

- 1. 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
- 2. Don't overload machines for drilling and cutting. Your machine will operate more safely with power supply in accordance with the stipulated values.



- B. Use correct illumination for the safety of the operator. (ISO 8995-89 Standard The lighting of indoor work system)
- 4. Use correct illumination for the safety of the operator. (ISO 8995-89 Standard The lighting of indoor work system)

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

- 6. Ensure that the work piece is clamped appropriately by the machine's clamp or vice
- 7. Ensure safe working position, always keep your balance.
- 8. 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.
- 9. Unplug first, before conducting and maintenance works.
- 10. Ensure that any keys or adjustment tools have been removed before operating the machine..
- **11.** If you are required to operate the machine outside, use only appropriate extension cables.
- **12.** Repairs should be carried out by qualified technicians only. Otherwise, accidents may occur.
- **13.** 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).
- 14. Don't use machines with improper functioning buttons and switches
- **15.** Don't keep flammable, combustive liquids and materials next to the machine and electric connections.

3. MACHINE'S DESCRIPTION

Cut the PVC window lath profiles for 45 degree.profiles

>Clamping system is pneumatic, while cutting is automatic.

- >Cutting speed is adjustable.
- >After finishing the cutting operation the saw blades return to their original position automatically.
- >Allows to cut 8 different bar profiles by using single mold

>Allows cutting 2 similar bar profiles at one attempt...

>The machine is designed according to the CE, UL and CSA safety directives.

STANDARD ACCESSORIES	OPTIONAL ACCESSORIES
Ø200 / Ø110 mm. x 2 Circular Saw Blades	Automatic Positioner (SKN301)
Air Gun	
Conveyor (KN 152)	
User's manual	



4. TRANSPORT OF THE MACHINE

IMPORTANT 1

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

2. The machine should be transported by lifting with proper equipment (not touching the ground during the transport).

- 3. Unless customer requests the contrary, the machine will be delivered with wooden packaging.
- 4. Movable parts on the machine should be fixed before carrying out the transport.
- 5. The machine size and weight measurements, given the technical specification sheet.

5. INSTALLATION OF THE MACHINE

1.Preparation

- 1. 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
- 2. The machine should be located approx. 50 cm away from the rear wall
- 3. You can provide the balance of the machine with adjustable counterforts in the bottom part.
- 4. Fasten KN 152 material supply conveyor given as Standard accessory onto the cutting unit to the right side surface of the machine as seen in the PICTURE 2 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.

2. Connecting to Power Source

- 1. The Electrical connection must be made by a licensed electrician
- 2. The power outlet socket on the machine should be available.
- **3.** Plug the machine to a grounded socket.



- Main voltage of the machine is optional as 220 V 50/60 Hz or 440 V 50/60 Hz.
 - Check the power source voltage. It has to be in accordance with the values stipulated on the machine's type label
- 6. 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. MACHINE SAFETY INFORMATION

1.Lifting, installation, electric maintenance of the machine should be carried out by qualified personnel only.

2. Routine maintenance and scheduled maintenance should be carried out by qualified personnel after unplugging the machine and disconnecting the air supply first.

3. Ensure that the machine has been cleaned, tested and maintain before starting to operate.

4.Check the safety devices, power cable and moving parts regularly. Don't operate the machine before having r e p l a c e d defective safety devices or faulty parts.

5. Never replace the milling cutters before unplugging first.



6

Keep foreign materials away from the working area of the machine, keep away from the machine's moving parts

7.Do not work on the machine by removing the protective parts





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. OPERATION

1

1. Preparation

Clean the glazing bead mould channels from any burr and foreign materials. Ensure especially that the glazing bead moulds are clean.

2. Clean all surfaces of the machine from chip and foreign particles. Use eye glasses for protection.

3. The CK 412 Automatic Glazing Bead Saw has been designed for cutting of aluminum and PVC glazing beads at 45° angle for making 90° corner joining..

- 4. Control whether cutting tools are inserted safely to their places.
- 5. Control cutting tools against corrosion, distortion and fractions. If cutting tools are damaged, change them.
- 6. Cutting tool must process on the part after machine is operated and cycled.
- 7. Do not process the profile before clamping (PICTURE 4 NO.76/7) the work piece properly.
- 8. Up-Down adjustment of glazing bead mould can be performed by adjustment part on the machine. (PICTURE 4 NO.49) First loosen the set square fixing set screws (PICTURE 4 NO.5). Make the adjustment by turning the knob up/down. Then again tighten the set screws and nut.

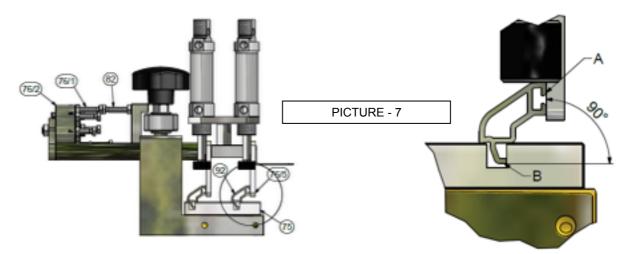
2. Operation

- 1. Switch the system start switch to "1" (PICTURE 6 NO.34)
- 2. Place bar profile to be cut as shown in PICTURE 7.
- 3. Align supporting plate (PICTURE 7 NO. 76/5) on the gasket side of bar profile by moving forth and back
- 4. Clench the profile by rotating the clamp handle

NOTE: In order to have a correct measurement and cut, imaginary lines passing through A and B should be perpendicular to each other as shown in PICTURE 7

5. After aligning the profile with the plate, place the bolt, which is on the scaled measurement section (PICTURE 7 NO: 76) on to the bolt, which is provided with a preset value on set square (PICTURE 7, NO. 82). Then, squeeze the nuts by using a wrench and tighten the mold.

NOTE: By using the scales on the measurement (PICTURE 7 NO 76/2), height of the bolt can be adjusted (PICTURE 7 NO. 76), and 8 different bar profiles are able to be cut at single mold.





- 6. Adjust the cutting length of the bead using the measuring tape and bead support plate.(PICTURE 7)
- 7. Start the electrical motor by pressing the motor start button. (PICTURE 6 NO.36)
- 8. Begin the cutting operation by pressing the cutting start button (PICTURE 6 NO.35). The machine automatically performs cutting operation and returns back to its starting position. Stop the electrical motor by pressing the motor stop button. (PICTURE 6 NO 36)



NOTE: Remove the pressure on the cutting buttons in a possible hazard, or press the emergency stop button.

9. Switch the system start switch to "1" (PICTURE 6 NO.34)

3. Use of the KA 200 easy measuring apparatus

- 1. With the KA 200 Easy Measuring apparatus (PICTURE 8) it is possible to apply two different distance measurements serially.
- 2. Press the measurement adjustment part against the upper inner section of the frame, which you want to take the reference measurement from
- 3. Press the part Support 1 against the lower inner section of the frame, where you want to take the reference measurement from, by loosening and moving the tightening handle. Tighten the handle again to fix the position.
- 4. You may repeat the above described operation for the part Support 2 as well to use it for the second reference measurement.



8. MAINTENANCE, SERVICE AND REPAIR

- 1. Maintenance
 - 1. Cut the electric and pneumatic power connections of the machine.
 - 2. 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.
 - 3. When cleaning the machine, do not use materials that may damage the dye.
 - 4. Control cutting tools against corrosion, distortion and fractions. If cutting tools are damaged, change them..
 - 5. 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.
 - 6. If the saw teeth are blunt, replace immediately with a new / sharpened saw blade.
 - 7. Sharpen with proper sharpening machines by taking the angular value of the saw into consideration.

2. Changing the cutting tool

1.



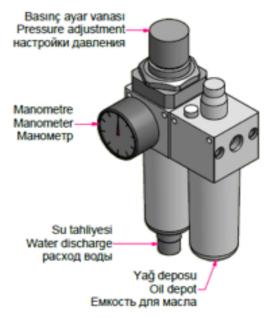
- Use protective gloves when replacing Saw
- Cut the electric connection of the machine.
- 3. Open the upper protection covers.



Take out the nuts by using 8mm allen wrench and 22 mm. wrench as shown at the photo



- 5. Remove the connection parts of cutting set in the right order.
- 6. Remove the saw carefully
- 7. Mount the saw by being sure that the rotation direction onto the axle is true. NOTE: Ensure that the saw blades rotate in correct direction (the correct direction has been marked on the machine's upper cover)
- 8. Replace all removed parts in the same order.
- 9. The saw selection should be made proper to EN 847-1 Standard.
- 3. Adjust the air pressure (pneumatic systems)
 - 1. 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.
 - 2. 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 OFISI SPINDURA 10.



9. NOISE EMISSION VALUES

Material	PVC (Glass bead profile	LwA	80 dB (Measured Value)
Lenght	2000 mm.	LpA	93 dB (Average Sound Pressure Value
Width	22 mm.	К	2 dB (Uncertainity in the Measurements)
Height	20 mm.		



The values given fort he noise are the emission level and it does not show that it 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 affects 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.

Machine Characterist	ic Information	Saw Characteristic Information		
Rotation 3000 rpm Motor Power 1.2 kW x 2		Saw Blade Size	200 mm (8") 2.2 mm	
		Saw Blade Thickness		
Nominal Voltage	220V	Saw Shaft Thickness	1.8 mm	
		Saw Progress Speed	7.4 m / min.	

10. WARRANTY CONDITIONS

ATech 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).

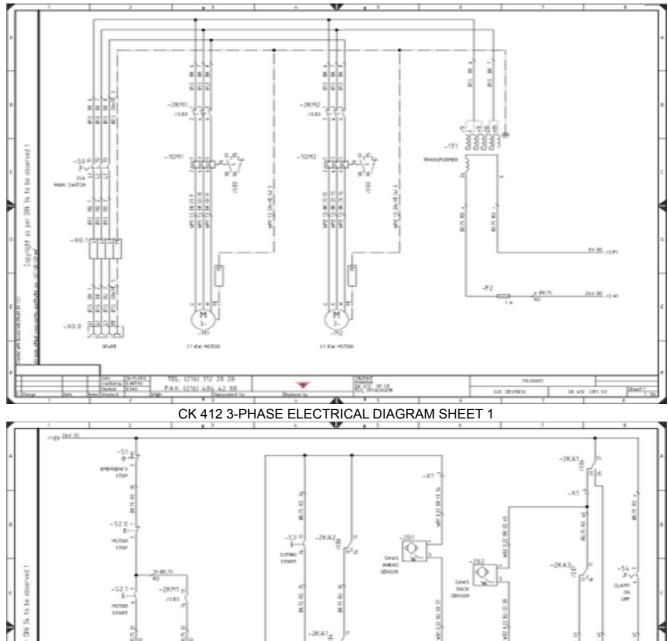
- For repair and replacement effected by our technician at the customer's site, we will invoice only the travel and lodging costs for our technician.

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)

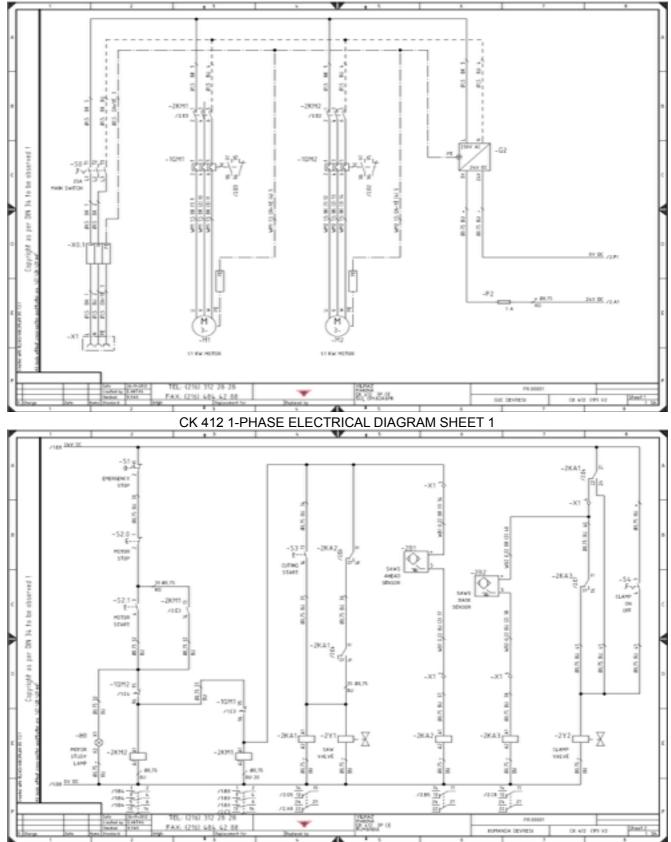
The warranty does not cover, in any case, damages caused by the malfunction of the Machine





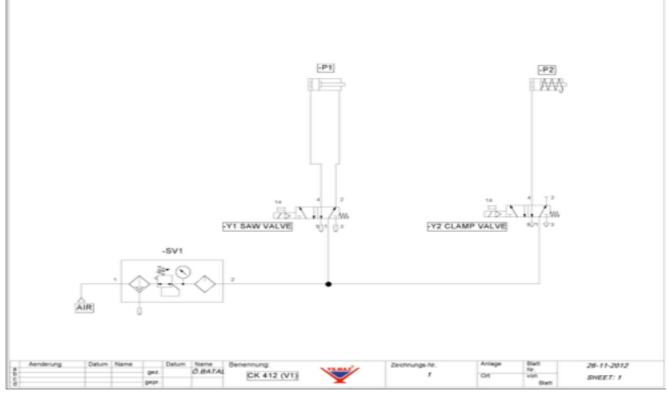
CK 412 3-PHASE ELECTRICAL DIAGRAM SHEET 2





CK 412 1-PHASE ELECTRICAL DIAGRAM SHEET 2





CK 412 PNEUMATIC DIAGRAM SHEET 1