

BULUCUT -3

AUTOMATIC / MANUAL ABRASIVE CUTTER



OPERATIONAL MANUAL

CE

1	SAFETY RULES	3
2	BULUCUT-3 AUTOMATIC ABRASIVE CUTTER	4
	2.1 Description	4
	2.2 Technical Specifications	4
	2.3 Standard Accessories	4
3	Main Pictures	5
4	PARTS LIST	8
5	MAIN SCREEN	8
	5.1 The panel on the Function Keys	9
6	UNPACKING.....	9
	6.1 Installation.....	9
	6.2 Installation Commissioning.....	9
	6.3 Plumbing	10
	6.4 Cutting Drive Installation	10
7	CARE INSTRUCTIONS.....	10
	7.1 Periodic Checks and Maintenance: (IMPORTANT)	10
	7.2 Daily Control and Treatments: (IMPORTANT).....	10
	7.2.1 Switch off the electrical connection to the device must be pre-maintenance and cleaning.....	10
	7.3 Monthly Control and Treatments: (IMPORTANT).....	11
8	CUTTING FLUID MANUAL	11
	8.1 First Time Filling of Reservoir Tank	11
	8.2 Adding cutting fluid after some period of usage.....	11
	8.3 Recommendations And Conditions to Be Avoided	11
9	INSTRUCTION	11
	9.1 Sample Fixing	11
	9.2 Cutting Operation	11
	9.2.1 Automatic Cutting	12

1 SAFETY RULES



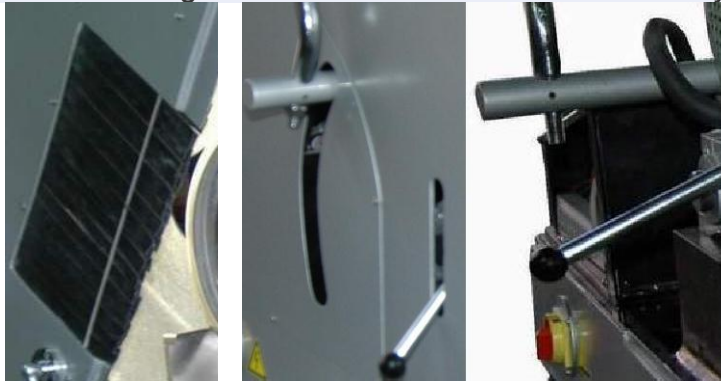
- ✓ The electrical connection is made sure the grounding.
- ✓ The machine main safety rules and standards adopted by the appropriate technical conditions should be installed and run. This time the machine complies with the requirements, employees and third parties whomay have some



- ✓ Device information by persons other than authorized personnel learned the use and maintenance - Do not allow cleaning tasks. Intervention in case of power failure the unit to others qualified electricians do not.



- ✓ Ensure the work area clean and tidy working environment. Scattered increases the risk of workplace accidents.
- ✓ The cover is closed it certainly does not work. Close the housing cover Do not open the device and definitely trying to cover.
- ✓ Cutting disc rotation of the engine for a few seconds after closing the certainly, do not open fully before the end of the process will continue to returnthe device cover.
- ✓ Use gloves when cutting the sample after the cut. Adequate lighting should be provided during work time. Ensure the device for replacing the lamp is broken immediately.
- ✓ The machine during operation or change in any danger at the time the emergency stops button (emergency) or by using the main switch off thedevice immediately.
- ✓ Cutting disc should be careful when installing. The disc is at risk of fracture and do not use cutting discs are definitely broken and deformed.
- ✓ Rubber components used to connect the machine long parts The purpose of a body affiliated with any protection against the risk of ejection. Rubber parts (particularly table bellows) aging change in the event.
- ✓ Complete and accurate periodic maintenance of the joint.
- ✓ To ensure the longevity of the machine's smooth operation and only the original Use of spare parts.
- ✓ Do not use cutting fluid device.
- ✓ Remove the power cord from the device when not in use.
- ✓ In the event of damage to the cab must be replaced with a new one. Cabin damaged while certainly not operate the machine.
- ✓ Long-time personnel required to wear a headset.
- ✓ Do not use the device outside of the intended use.
- ✓ This machine is running in the instructions for use must always be keep



...pic 1...

(do not insert the rotating parts with hand)

2 BULUCUT-3 AUTOMATIC ABRASIVE CUTTER

Metallographic sample is cut-off machine metals, ceramic type materials and minerals sector can do the parts of a cutting instrument, practical and ergonomic. Automatic cut-off device BULUCUT -3. steel, aluminum and so on. used for testing and analysis of samples is used to cut metal parts. Cutting-fiber plastic in the cabin in order to ensure a safe procedure, the cutting is done. Die cast aluminum with a solid structure so that the lower body of the device were obtained. To provide adequate illumination lamp in the cabin are insulated against water.

2.1 Description

Sturdy table model for sectioning Metals, Ceramic and mineral samples

Corrasion resistance GRP cover with see-through hood

Special Aluminum casted heavy robust base

Easy use twin cam actuated vises for holding samples

All inside parts made from stainless steel or chromium plated steel

Splash proof during cutting

Cooling by two high flow water jets to provide optimum cutting

Cutting action provided by moving motor on specimen

11W light illuminator protected from water in specially isolated cover fixed inside thecover to obtain safe and clear illumination on cutting area

Separately mounted recirculation coolant tank with large drain

57 ltr capacity coolant tank, suitable filtering part provided to filter the slugs formed during cutting.

2.2 Technical Specifications

Machine dimensions	900 X 980 700 mm
Case dimensions (coolant system included)	1400 X 1100 X 850
Weight (net/gross)	168 / 210 kg
Motor	3 KW, AC 380 Volt, Trifaze 2840 dev / min.
Cutting system	Automatic / Manual
Table dimensions	250 mm
Max. speed of sliding table	5,5 mm /sc
Maximum cutting speed	1 mm /sc
Size of table	200 X 150 mm
Cutting capacity	150 mm
Cutting wheel dim's	250X32X1,6 mm or 300X32X2 mm
Coolant pump	380 Volt, Trifaze, 0,12 KW
Coolant reservoir dimensions	600 x 400 x 300 mm, 57 ltr capacity

2.3 Standard Accessories

Complete cooling system (tank, recirculation pump and filter)

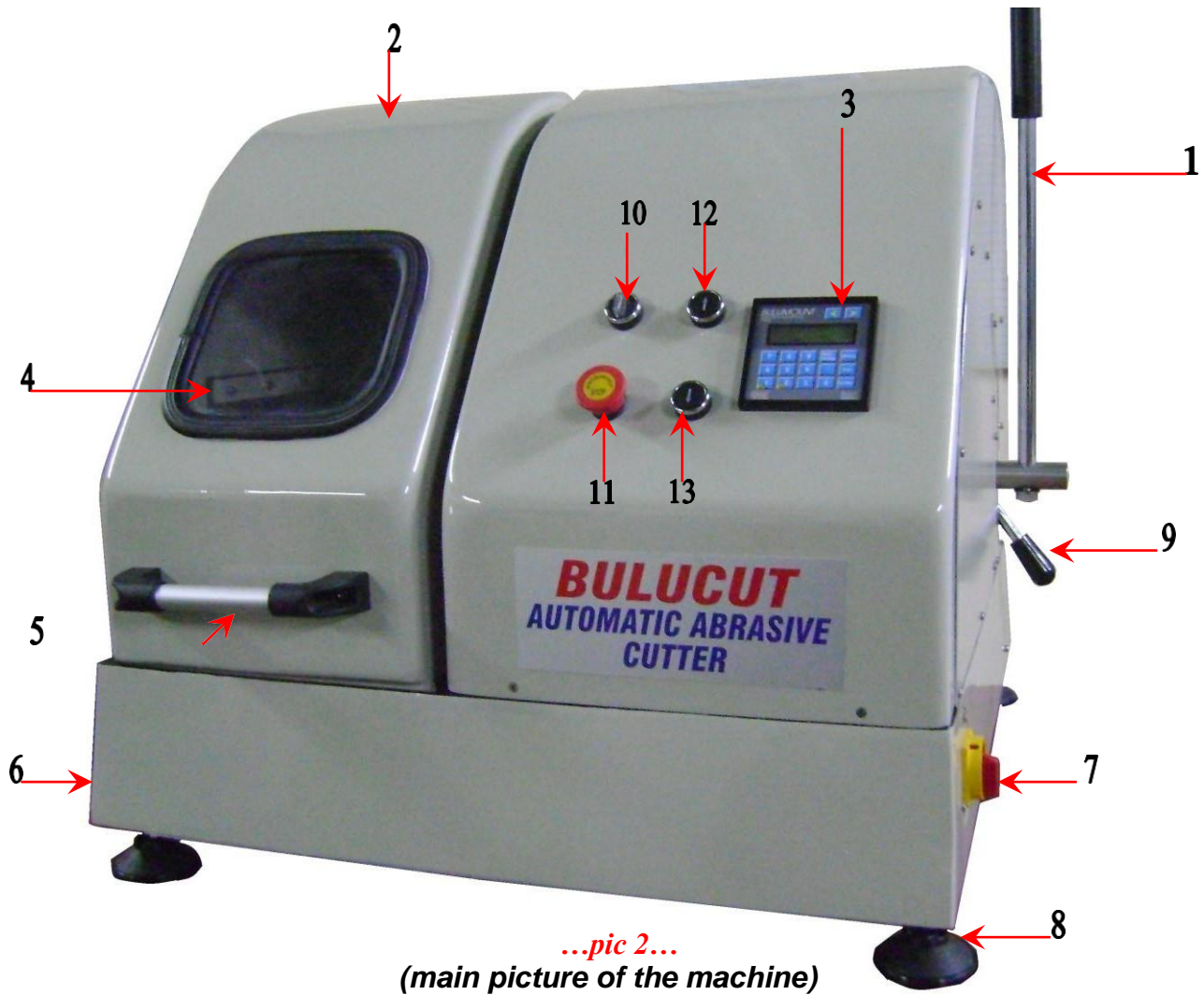
Cooling system hoses and clips

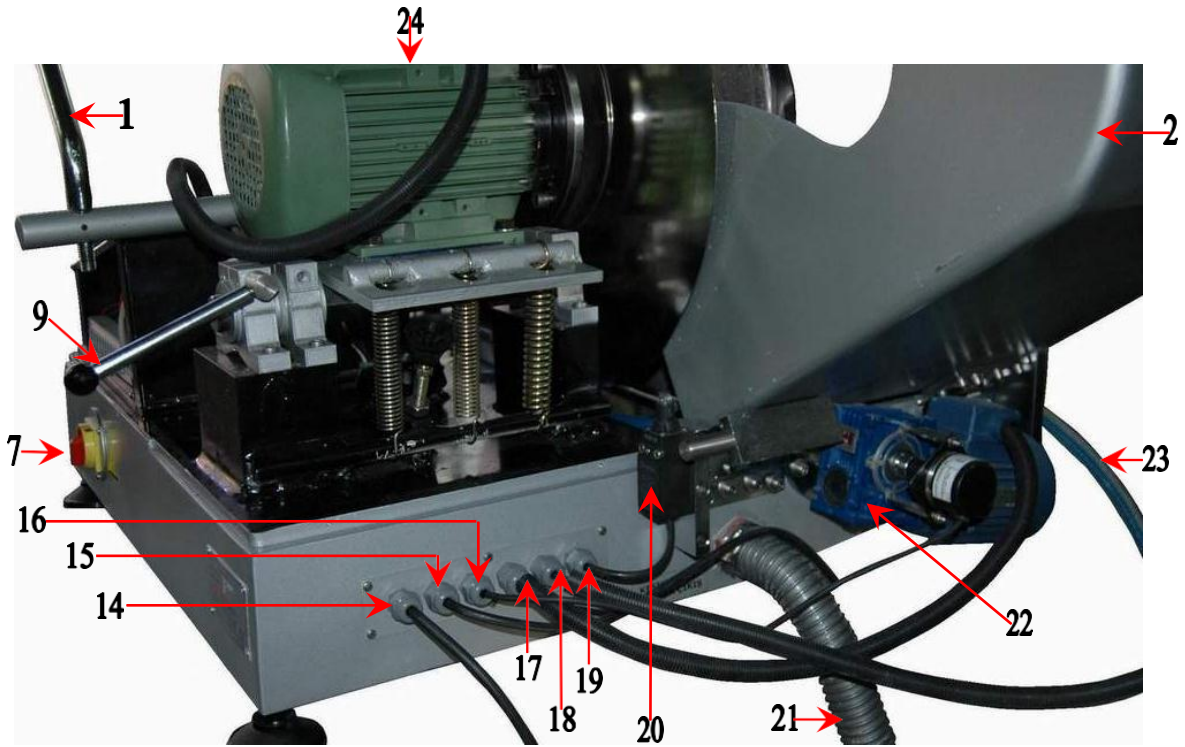
Flat wrench and tightening pin

250 mm (or 300 mm) cutting discs (5 pieces)

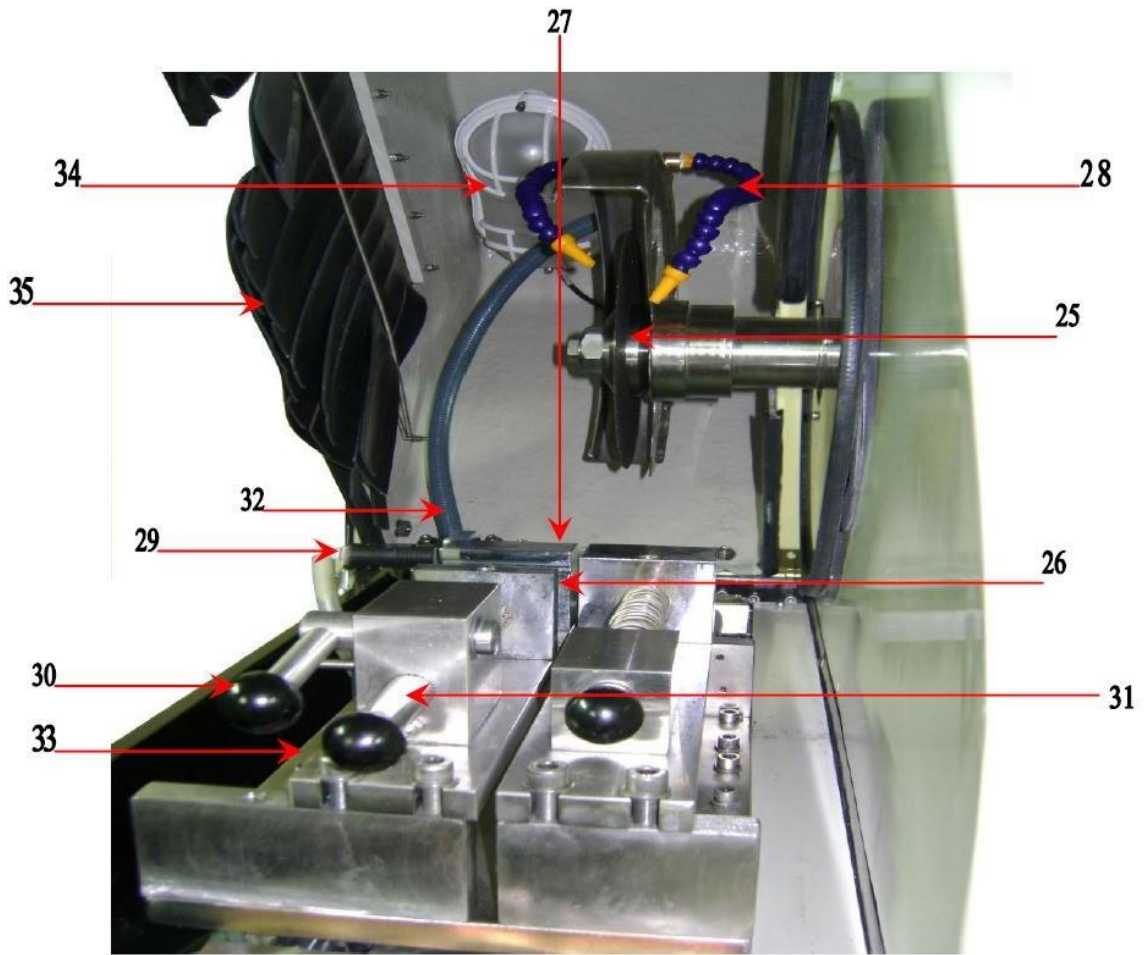
Cutting fluid (2 liters)

3 Main Pictures

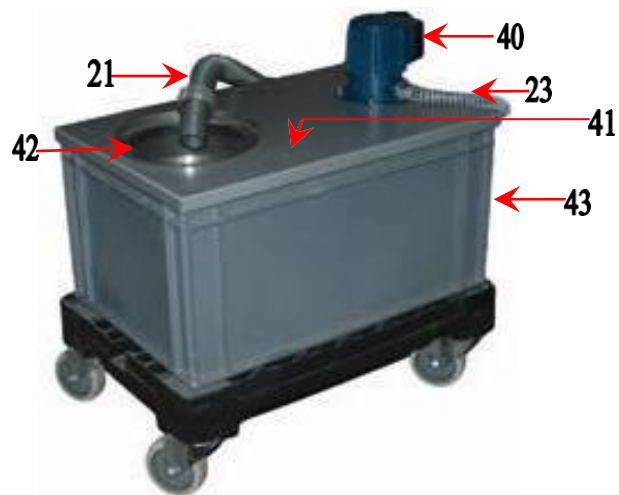




...pic. 3...
(water connection image)



*...pic 4...
(a view from the inside of the machine)*

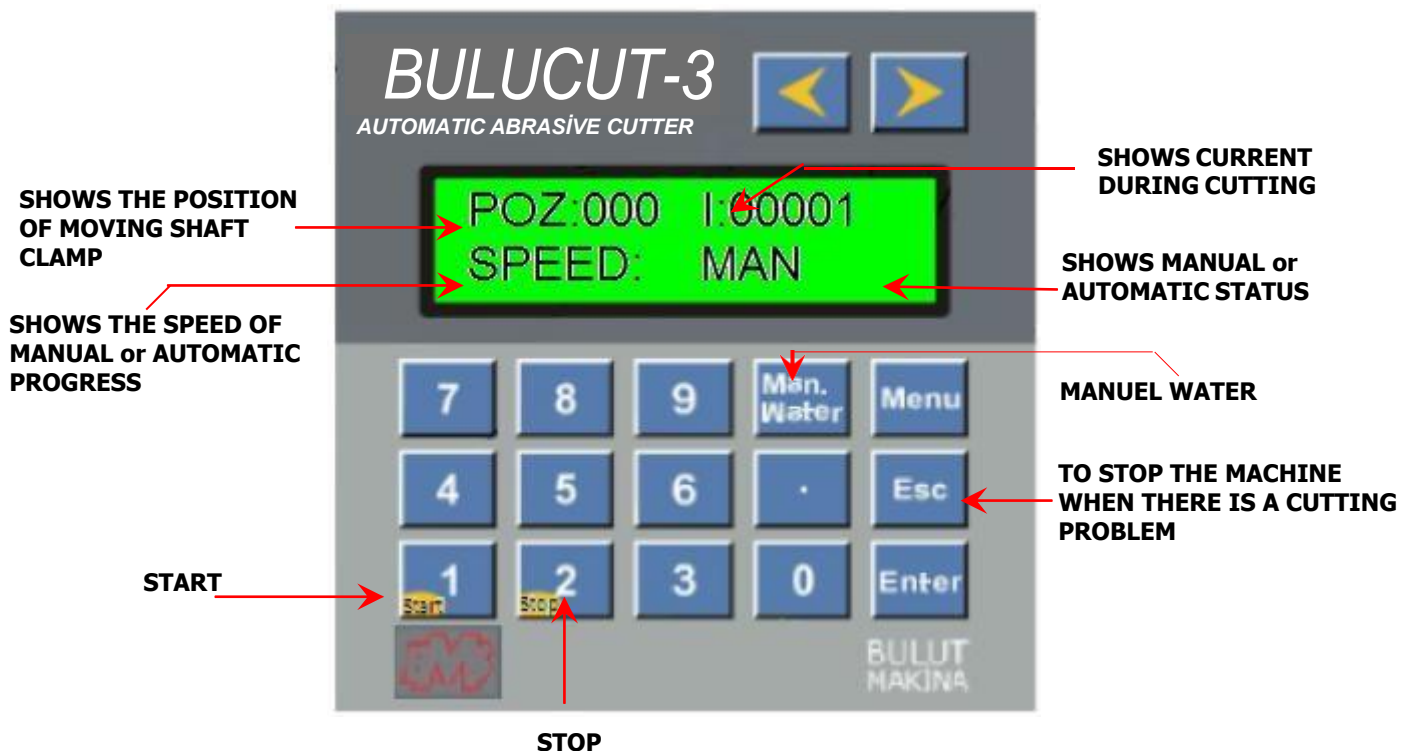


*...pic 5...
(Recirculation Coolant System)*

4 PARTS LIST

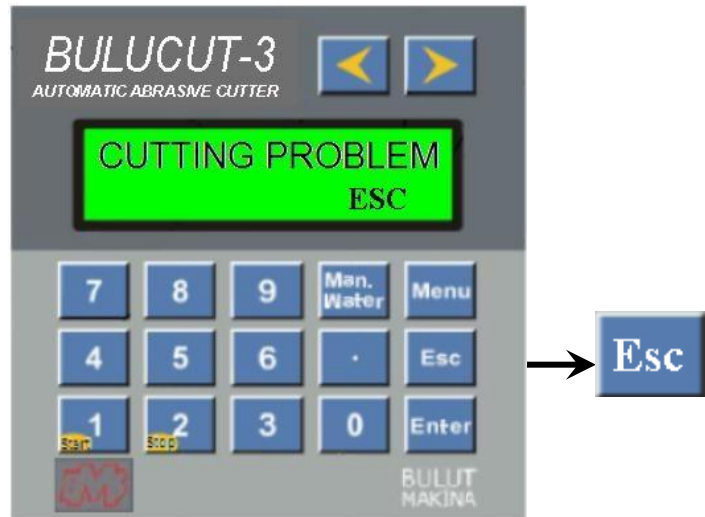
Part No	Name of the part	Part No	Name of the part
1	Manual cut-off and the motor position adjustment lever	23	The water inlet hose to Depot
2	Fiber cover	24	Motor
3	Digital panel	25	Cutting disc
4	Cutting plexiglass glass window to observe a moment of	26	Sample
5	Lid handle	27	A fixed jaw clamp
6	The body of the device	28	Vise bed
7	Main switch	29	Cutting fluid hose
8	Set screw	30	Optical reader
9	Manual cut-off position setting lever fixing lever (after setting up and removed, fixed in the down position.)	31	Vise clamping lever
10	Advanced cutting table	32	Clamping lever
11	Cutting back to table	33	Moving shaft clamp
12	Interior dome lamp button	34	Cutting fluid hose
13	Emergency button (Emergency)	35	Cutting fluid inlet hose
14	Energy input main cable	36	Moving platform bearing shaft
15	Cooling the motor cable	37	Protective aluminum pipe
16	encoder cable	38	Position shaft
17	Gearbox cable	39	Protective rubber
18	Light cable	40	Recirculation pump
19	Switch cable	41	Top cover
20	Switch	42	Filter
21	Water outlet hose to Depot	43	Cutting fluid reservoir
22	Reducer		

5 MAIN SCREEN



5.1 The panel on the Function Keys

Menu	Cutting height range is entered
Enter	Confirmation button
Man Water	Working pressure of 1 times 2 times the pressure stops
< >	Manuel / Automatic
↑ ↓	Cutting table forth Cutting table back
⊞	Turn lamb on button
● (Emergency)	



IMPORTANT: SAMPLE WARNING appears on the screen when the proper wheel is selected. (CUTTING PROBLEM) by pressing ESC TO STOP AND SAMPLEDEVICE SUITABLE FOR CUTTING Disc, or cutting discs connect the sample.

6 UNPACKING



Remove packing materials and lift out machine complete with baseboard. Remove 4 securing bolts that secures machine to baseboard

LEVELING BOLT

6.1 Installation

- ✓ Open cover. (01)
- ✓ Remove the shipping strap from the cutting head and push the cutting lever (26) to the rear to raise the cutting Wheel (18) as high as possible.
- ✓ Install the cutter on suitable table and secure alignment by means of adjusting positions of 4 secure leveling bolts. (03)
- ✓ Plug to mains 380-400V (3 phase) power and **check the turning position of cutter and ensure correct turning if necessary.**

6.2 Installation Commissioning

Check the machine's electrical connection is made before the electrical diagram. The machine needed to make the detection of the voltage and frequency. After making this determination, the machine outlet is provided in a suitable location with

Make a connection to the required fixing. Under normal conditions, the machine 380-400V / 50-60Hz (3P + N + GND) to work with. Make sure the grounding.

IMPORTANT: Electrical connection is made, then check the rotational direction of cooling the engine and cut the engine and changing the location of phase reversal Provide status 2.

IMPORTANT: All electrical work and electrical maintenance, repair and so on. by competent and qualified electrician to make your jobs..

6.3 Plumbing

- ✓ Locate recirculation pump on its table and bring it to the rear of cutter.
- ✓ Make recirculation pump electrical connections Connect 18 mm coolant supply hose to the rear of cutter and tighten the hose clamp. Locate the other end to recirculation pump and tighten the hose clamp.
- ✓ Connect the 40 mm Dia coolant return hose to rear of cutter and clip the hoseclamp. Locate other end of hose on filter of reservoir tank.
- ✓ Fill the reservoir tank with water (55 liter) and %5 (2 liter) of cutting fluid. Locate top cover on tank.
- ✓ Open the cover of cutter and press PUMP button and allow pump to run a few minutes. This procedure ensures adequate mixing of coolant solution. (PUMP button is not used when the cover is closed.)

6.4 Cutting Drive Installation

- ✓ When installing the electrical connection to the cutting disc for sure. When inserting the cutting disc pay close attention. (For broken)
- ✓ NOTE: 300 mm diameter and 3 mm thick discs do not use more.
- ✓ Cover (2) Lift up. Tightening bolt, shaft sleeve hole takın. 36 mm Loosen the clamping nut wrench (the motor shaft sleeve female left tooth.) instead of cutting discs and place the appropriate manner.
- ✓ At the same operations, in accordance with the tightening of the disk and do other cutting.
- ✓ Squeezing pin should never be left on the motor shaft sleeve. Cutting disc surface is clean on both sides and make sure that the hive.

7 CARE INSTRUCTIONS

7.1 Periodic Checks and Maintenance: (IMPORTANT)

All maintenance periods by authorized and qualified personnel properly please. Part of SAFETY RULES Please refer at all times.

Any maintenance, parts replacement should be discontinued before carrying out the electrical and related parties should be informed. Installation of the machine should be checked regularly and any illegal connections or when a state of emergency must be reported to occur and should be remedied by giving notice to authorized persons. After the cleaning process is completely finished all the fluid control valves, bolt connections should be checked.

7.2 Daily Control and Treatments: (IMPORTANT)

- ✓ Use Device, cleaning out the water. (PLC screen Man. Water)
- ✓ Cutting disc on a regular basis due to product residue, and the parts remains clean. After the cutting process is completed, clean the accumulated dust of iron.
- ✓ Make sure the seals while cleaning and definitely aggressive, plotters feature does not use the material.
- ✓ Disconnect the power plug after use necessarily.

7.2.1 Switch off the electrical connection to the device must be pre-maintenance and cleaning.

7.3 Monthly Control and Treatments: (IMPORTANT)

8 CUTTING FLUID MANUAL

Cutting fluid while cutting iron to the continuous bypass hose or hose is clogged with the dust of cutting fluid. Clean the hoses. Fluid application to avoid any problems with the machine store completely replace the fluid once a month. During the renewal of the liquid in the tank clean of all elements of pollution. Please check store cutting fluid. In case of reduction (not only water and cutting fluid is water), stirring the mixture with 4% cutting fluid & water tank to be added. The machine used for a long time, the iron powder in the device, cutting fluid, hoses, water tank, filter, and input-output hoses with clean water and carefully wipe with a damp cloth and keep for later.

8.1 First Time Filling of Reservoir Tank

- 1)- Obtain separate tank for mixing. (For example, 25 ltr. plastic tank)
- 2)- Fill tank with water. (For example, 20 ltr) Later, add, %5 CIMSTAR 506 cutting fluids (or its compatible) (1 ltr for 20 ltr water)
- 3)- While adding, cutting fluid to water slowly, mix well
- 4)- Put this mixed fluid to reservoir tank.

8.2 Adding cutting fluid after some period of usage

- 1)- In case of requirement of adding cutting fluid after first time filing, followings to be considered.
- 2)- Fill plastic tank with water. (For example, 20 ltr.) Later, add %3 CIMSTAR 506 Cutting fluid (For 20 ltr water 0.6 ltr cutting fluid)
- 3)- While adding, cutting fluid to water slowly, mix well
- 4)- Put this mixed fluid to reservoir tank. After each month of usage, we recommend you to clean reservoir tank and add new cutting fluid as first-time filling.

8.3 Recommendations And Conditions to Be Avoided

- 1 -) May be possible, should be used as a good-quality water
- 2 -) Mixture preparation, cutting fluid, the mixture is poured into the water should not be.
- 3 -) The machine store, only the addition of water, or just cutting fluid should not be done any time. Continuous addition of the mixture should be made.
- 4 -) Machine store the mixture, using a refractometer measurement of the ratio coefficient of 1.4 according to the fluid should be considered canceled. Refractometer with the rate control, the machine should be made at the level of the liquid tank is full.

9 INSTRUCTION

9.1 Sample Fixing

Two wises positioned at our works for general purpose of cutting. When required for larger samples, it can be necessary to reposition the wises nearer to the front of the machine. For this purpose, loosen 4 bolts of fixing plate of holding fixture. Locate the sample on fixed jaw (07) and push forward clamping jaw (08) against sample. Use a suitable pressure and push clamping lever (13) tightly. Do not over clamp

9.2 Cutting Operation

- ✓ Be sure sample is clamped and jaws tighter well.
- ✓ Close the cover. (The cutter will not operate unless the cover is completely closed)

- ✓ Start cutting and pump motors by pressing **START** button. (Do not start motors when cutting lever is in mid position and be sure cutting wheel is not touching the sample)
- ✓ Check the flow of coolant and adjust the flow of water jets if required
- ✓ Slowly feed the cutter wheel on sample by pulling cutting lever. (17)
- ✓ To reach constant cutting range maintain pressure as required. (Excessive force may cause motor overload and damage cutter wheel.)
- ✓ When cutting procedure is completely finished, bring the cutting lever to its starting position.
- ✓ **Cutter wheel rotates for several seconds after pushing STOP button or opening cover. In case of opening cover, Please be sure cutter wheel completely stopped.**

9.2.1 Automatic Cutting

The position of cutting stone, according to a sample tray and placed in the try manual cutting lever (1) Set the help. Position setting it up toward fixing up his arm lock it.

In the PLC, press MENU to select the cut-off length in mm. Get to the memory by pressing ENTER. Return to the main screen by pressing MENU. Automatic cut-off position to select the right arrow key. (For this operation, the lid must be closed.) By pressing the START button to start cutting. Moving table, cutting the engine and the water at the same time the engine runs. The device, moving table, until you see the optical reader goes to maximum speed. Optical reader sees, table speed, reducing the cutting speed, makes the cutting process. As for the length of the selected cut-off, the table automatically returns to the starting point.

