ROUND BENDING MACHINE

Model: RBM30



Operation Manual

SAVE THIS MANUAL: You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Read all instructions before using this tool!

I. SAFETY INSTRUCTIONS

- 1. **Keep work area clean.** Cluttered areas invite injuries.
- 2. **Observe work area conditions**. Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
- 3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
- 4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- 5. **Do not force tool.** It will do the job better and more safety at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
- Use the right tool for the job. Do not attempt to force a small tool or attachment to do the work of a large industrial tool. Do not use a tool for a purpose for which it was not intended.
- 7. **Dress properly.** Do not wear loose clothing of jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
- 8. **Use eye and ear protection.** Always wear ISO approved impact safety goggles. Wear a full-face shield if you are producing metal filings or wood chips. Wear an ISO approved dust mask or respirator when working around metal, and chemical dusts and mists.
- 9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machine.
- 10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. The handles must be kept clean, dry, and free from oil and grease at all times.
- 11. **Stay alert.** Watch what you are doing; use common sense. Do not operate any tool when you are tried.
- 12. Check for damaged parts. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
- **13. Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
- 14. Replacement parts and accessories. When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from the distributor.

- 15. Do not operate tool if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment of reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
- 16. **Don't leave machine** until it comes to a complete stop.
- 17. Make sure machine is disconnected from power supply while making maintenance, adjustment or repair
- 18. Always keep hands and fingers away from the rollers.
- 19. **Avoid accidental starting.** Make sure switch is in "**OFF**" position before plugging in power cord
- 20. **Ground all machines.** Always make sure your machine is well connected to the earth. It may reduce electric shock hazards.
- 21. **Don't use in dangerous environment**. Don't use power machine in damp or wet locations, or expose them to rain. Keep work area well lighted
- 22. Stop machine before servicing and when changing accessories such as rollers, etc
- 23. **General Electrical Cautions**: This machine should be grounded in accordance with the National Electrical Code and local codes and ordinances. This work should be done by a qualified electrician. The machine should be grounded to protect the user from electrical shock.

24. LABOUR PROTECTION RULES for Round bending machine

- —Take the machine from the mains for any repair of intervention.
- —It is forbidden to intervene to the gears during operation. They are protected by guards.
- —Check the fasting of the bending rollers on the shafts before starting the machine.
- —Do not use pinched or cracked bending rollers.

Note: The warning and instructions contained in this instruction manual cannot cover all possible conditions and situations that may occur when using this product. It must be understood that common sense and caution are factors, which cannot be built into this product. These factors must be supplied by the person whom operating this piece of equipment.

II. GENERALS USAGE

RBM30 Motorized Circle Bender is a special appliance, which can be used singly as a primary tool. Being combined with other tools, it can also be used as on-line equipment. The Circling Bender enables you to make, from the square, round metal shapes or pipe mill and the flat stocks, pretty and practical ornamental objects as well as the metal structure crafts for industrial use. The tool can widely be applied in the fields of architecture, decoration, furniture-making and municipal gardening. It is also an ideal tool for home workers.

By adjusting the upper screw taps in accordance with your design, you can make various curvatures, curve lines and can process spiral metal pipes and rod work pieces. Your tool is attached with relevant circling wheels for processing the metal materials in different

sizes. Non-standard circling wheels can be made and supplied by us in case you have to process the stocks in exceeding sizes.

- 1. Read and understands this manual. Mount your tool securely to your workbench, make sure that you have a sufficient work space.
- 2. Before operating, wipe off the anti-rust coat and dirt and grease the moving parts, if necessary.
- 3. Connect the tool to the power socket and the earth wire. Check for the condition of all parts before test.
- 4. Always process the stocks in the recommended sizes and check for the hardness of the stock to be worked on.

III. MAIN SPECIFICATION

Max capacity (mm)	Pipe steel	φ 30x1	
	Square tube steel	30x30x1	
	Round steel	φ 16	
	Flat steel	30X10	
Diameter of roller shaft	φ 30mm		
Rotate speed	9rpm		
Motor Power	1.1kW		
Packing dimension	85X62X126CM		
Weight	270kg		

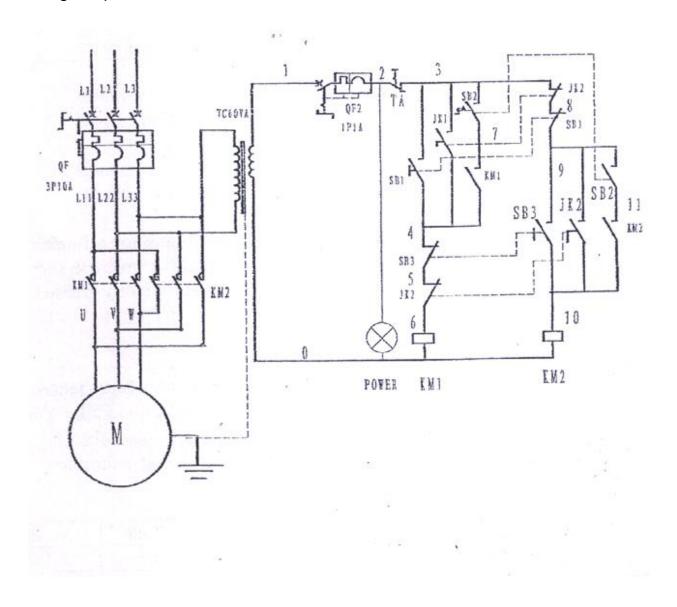
Note: The above-shown parameters and capacity are for mild steel only.

IV. ELECTRIC SYSTEMS

Your tool takes the unidirectional A.C. power source of 3 phase, 400V, 50HZ, and 1phase 220V, 60HZ (the model of electric supply for the products to your clients aboard can be modified on their request.) the electric controllers are mounted to the inside of the panel while the controlling button is on the panel.

NO.	SYMBOLS	NAMES, SPECIFICATIONS	REMARKS
		AND MODELS	
1	QF1 QF2	15A-1A Breaker	
2	KM1, KM2	JZC1-44E A.C. Contactor	
3	SB1 SB2 SB3	LAY3-A Button	
4	SB4	Emergency Stop	
5	JK1, JK2	EKW-5A Pedal Switch	
6	TC	15A-5A Socket	

The diagram shown illustrates the fundamentals of the electric appliances using the power source of 400V.



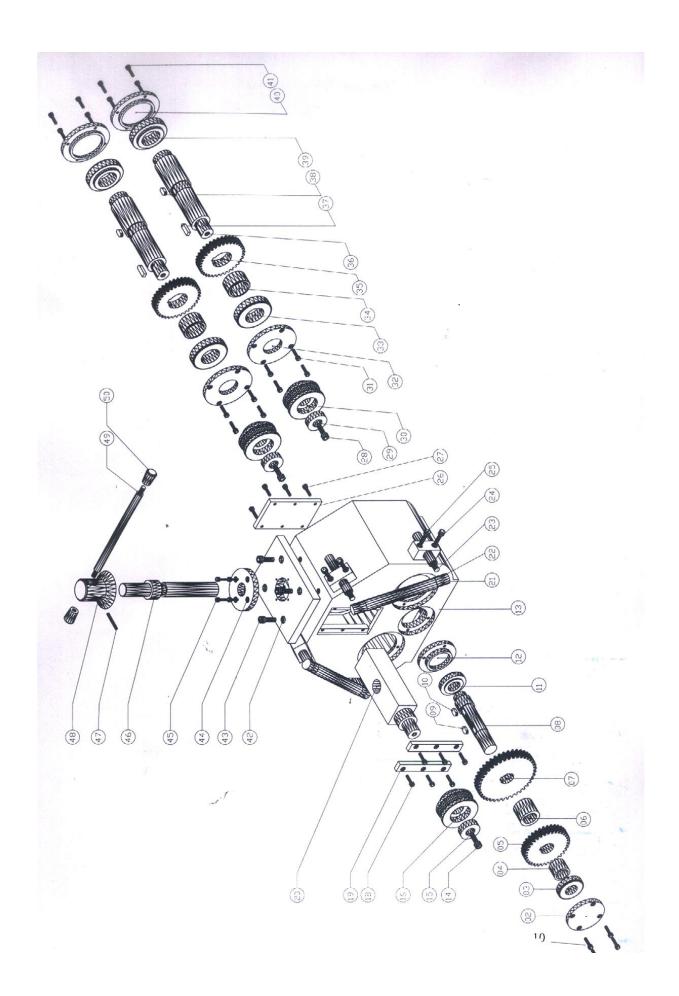
V. LUBRICATION & MAINTENANCE

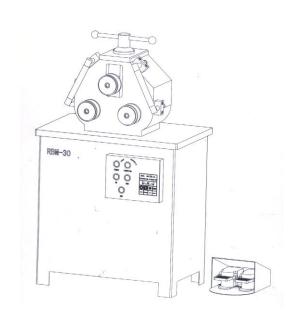
Before operating, remove the back cover, check oil-tank for oil meter and timely fill in the #20 lubricating oil from the upper filler hole. Be sure that the oil is changed for every 6 months to have gears sufficiently greased.

VI. INSTALLATION

Before using, adjust the fixtures near the machine wheels to secure the machine properly so that no movement will be caused by vibration during operation.

VII. PARTS DRAWING and PARTS LIST





Part #	Description	Q'ty	Part #	Description	Q'ty
1	Hex bolt	4	26	Back plate	1
2	Cover plate for bearing	1	27	Hex bolt	6
3	Ball bearing	1	28	Hex bolt	2
4	Sheet	1	29	Washer	2
5	Gear	1	30	Roller die	2
6	Bushing	1	31	Hex bolt	8
7	Gear	1	32	Cover plate for bearing	2
8	Shaft	1	33	Bearing	2
9	Fat key	1	34	Bushing	2
10	Fat key	1	35	Gear	2
11	Ball bearing	1	36	Shaft	2
12	Cover for bearing	1	37	Flat key	1
13	Body frame	1	38	Flat key	1
14	Hex Bolt	1	39	Bearing	2
15	Washer	1	40	Cover plate for bearing	2
16	Roller die	1	41	Hex bolt	8
17			42	Upper plate	1
18	Hex bolt	6	43	Hex bolt	4
19	Front Plate	12	44	Flange	1
20	Square Main shaft	1	45	Hex bolt	4
21	Fixed block	4	46	Screw shaft	1
22	Roller Shaft	2	47	Pin	1
23	Bolt	4	48	Scale	1
24	Supporting plate	4	49	Handle pole	1
25	Hex bolt	8	50	Sleeve for handle	2

