

Welcome to use our products



CG1-30 Flame Linear Cutting Mach



CG2-600 1000割圆机



磁力管道切割机



magnetic pipeline welding trolley



Internal expansion type beveling machine



Hand-operated flame cutting machine



External clamp-type cutting bevel machine



Welding rod dryer

# ISO-38/45/63/76/114 Series User Manual for Au- tomatic Pipeline Bevel Machine

Before use, please read the instructions carefully and store the product properly for future reference.



**Do not operate the switch!!!**

## warn !

1. When replacing the blade, please unplug the power cord; otherwise, it may cause injury to the human body.
2. The motor can only rotate in the forward direction (the forward/reverse switch is pre-set to the forward direction before shipment).

The motor should not be operated in wet and rainy conditions.

**Lihong (Shanghai) Electric Co., Ltd.**

Thank you for choosing our company's products. If you have any suggestions regarding our products during use, please let us know promptly. We will strive to make improvements until you are satisfied. Thank you!

### Machine Description

The machinery of our company is the result of years of research conducted by our team of experienced engineering and technical professionals. The machines are designed based on ergonomic principles, manufactured using the latest technologies and optimal materials, and only products that pass stringent quality control, rigorous inspection, and testing procedures are approved for shipment.

The optimized design, precision manufacturing, and comprehensive functionality of the machine have enhanced users' work efficiency, reduced labor intensity, and improved work quality. This has delivered direct economic benefits to users and earned unanimous acclaim from them.

We have selected the internationally renowned Metabo motor, originally manufactured in Germany, as the power source. This motor boasts high torque, extended service life, and superior efficiency, featuring a dual-insulation safety structure. Users can adjust the motor's rotational speed according to their specific processing requirements. The motor is certified with CCC/CE marks, ensuring its safe and reliable operation.

This product is widely used in pipeline processing and beveling applications across industries such as power generation, shipbuilding, petroleum, and chemical engineering. It also finds extensive application in maintenance and servicing tasks.

### Matters Need Attention

**This machine is suitable for machining pipe bevels.**

**Before using our product, please read the instruction manual carefully. Do not operate the machine without specialized training or professional knowledge to avoid personal injury.**

This machine is powered by a 220V electrical supply. Before and after machining operations as well as when adjusting the tool, the power plug must be unplugged and the power supply disconnected. During machine operation, do not extend your hands into the machining area.

This machine is a metal-cutting tool. During operation, select the appropriate accessories based on the steel pipe diameter, adjust the tool position, and determine the cutting speed. Only with an optimal combination can the work efficiency be maximized while minimizing resource waste.

Before starting the machine, inspect the motor, power cord, switch, and adjustment knob to ensure they are functioning properly and in the correct positions. Any abnormalities may cause damage to the machine.

During operation, monitor for any abnormal sounds, overheating, smoking, vibration, excessive motor sparks, or other irregularities. If any of these conditions occur, immediately shut down the device for inspection and notify a professional for further examination.

The motor can only rotate in the forward direction (the forward/reverse switch is pre-set to the forward direction before shipment). The motor must not operate in humid or rainy conditions.

For machines that have not been used for a long time, check that the insulation resistance is greater than 7 MΩ before use. Otherwise, apply moisture-proof treatment.

If you encounter any significant issues, notify us. Do not disassemble the machine without a professional present.

The machine has been adequately lubricated before leaving the factory. Maintenance and lubrication replenishment are required after 100 hours of operation.

## Operation Manual



**This machine supports internal bevel cutting; an internal bevel cutter needs to be replaced, and this requirement should be specified when purchasing the machine.**

**Note:** The rear angle of the internal bevel cutter is prone to jamming.

Close the door; install the cutting blade on the internal groove and sharpen it.

**Please note.**

Place the steel pipe between the machine's spacer (1) and pressure block (13). Tighten the clamping rod (14) when the pipe's highest processing point and diameter are approximately 3 mm from the tool (12), ensuring the pipe is securely fixed to the machine. When mounting the beveling machine onto the pipe, the clamping must be reliable—neither loose nor excessive. Avoid using overly long extension rods to tighten the clamping screws, as this could cause excessive deformation of the machine housing, compromise the perpendicularity of the beveled surface, or even damage the housing beyond repair.

Open the Tian Guan (2) and observe its operation. Once no abnormalities are detected, press the self-locking switch button (1). At this point, the machine tool (12) rotates without performing any cutting operation. Press the tool advance/disengage clutch (7); the tool (12) then begins cutting. When the workpiece reaches the desired position, pull the tool advance/disengage clutch (7) upward to the dashed line position. The tool (12) immediately retracts to its initial position.

After completion of processing, press switch (2) to stop the machine. The motor will be powered off, and the plug will be unplugged. Release the clamping rod (14) to indicate successful completion of processing.

During processing, ensure that when reaching the desired position, you fully engage the advance-retreat tool clutch (7) until it reaches the dashed line. Otherwise, the machine will continue cutting, wasting material and damaging the equipment.

During processing, select the turtle mode (5) for the mechanical gear and choose the appropriate electronic high-speed setting (4) based on the thickness of the pipe wall.

| order number | product                                      |
|--------------|--|
| 1            | Self-locking switch button                   |
| 2            | switch                                       |
| 3            | any power-generating or power-driven machine |

| Order number | Product                           |
|--------------|-----------------------------------|
| 4            | Speed adjustment disc             |
| 5            | High and low speed rotary torsion |
| 6            | Handle                            |

| Order number | Product                               |
|--------------|---------------------------------------|
| 7            | Progression and recession tool clutch |
| 8            | Gear box cover                        |
| 9            | Gear case                             |

| order number | product   |
|--------------|-----------|
| 10           | Sword Rod |
| 11           | Pad       |
| 12           | cutter    |

| Order number | Product                 |
|--------------|-------------------------|
| 13           | Briquetting             |
| 14           | Release the tension bar |

Before processing, the outer cylindrical surface of the clamping section on the steel pipe must be smooth, free from protruding burrs or contaminants. Any such defects should be removed prior to processing. Additionally, verify whether the pipe cut was performed using an oxy-cutting torch; if so, any weld beads present on the cut surface must be eliminated first. Please refer to the specific dimensions of the workpiece for these requirements.

Select the pad size (11) and secure it. Adjust the speed. Choose the appropriate tool (12); when making adjustments, pay attention to the tool specifications.

(12) The rotation radius must not exceed the machine's rotational space; then secure with screws. Adjust the feed and retraction clutch (7) to the neutral position to retract the tool (12) to its final position. Carefully ensure the tool (12) is installed correctly with no 缺口 on the cutting edge.

## Operation Chart



## Common Fault Causes and Solutions

| Fault phenomenon   | Cause  | Removal Method   |
|--|--|--|
| The motor rotates, but the tool holder does not rotate.  | Gear damage  | Change the gear  |
| Motor Conversion<br>Excessive spark  | The brush is rapidly worn out, the pressure is insufficient, or there is a rotor fault.  | Replace the brush or the rotor   |
| Motor over-heating (shut down)   | Overload   | Heat protection activation (automatic shutdown when the red indicator light turns on): Cut off the power supply, turn off the motor switch, release the clamping device, realign the cutting tool, wait briefly, then restart. |
|  | The motor bearing is damaged; the stator is also affected.   | Replace the bearing  |
| Abnormal gearbox noise   | Gear damage  | Change the gear  |
| During operation, the motor stops and thermal protection is activated (red light turns on).                      | Overload   | Cut off the power supply and wait until the motor has cooled down completely before resuming operation.  |
| The motor stops during operation, but the thermal protection has not been activated (the red light remains off). | The tool gets jammed with the chip during rotation.  | Cut off the power supply, remove the chips, then re-clamp and realign the tool.  |
|  | The tool becomes loose beyond its rotational range, penetrating the interior cavity of the machine body.   | Cut off the power supply, re-clamp the tool, and align the cutting edge.   |
|  | Loose clamping, needle insertion   | Cut off the power supply, re-clamp the tool, and align the cutting edge.   |
| Smoking or a burnt odor  | Damage to the rotor and stator   | Replace the stator or rotor  |
|  | Bearing failure  | Replace the bearing  |
| The switch does not activate when turned on.   | Switch damaged   | Switch the switch  |
|  | The brush is being used properly.  | Replace the brush  |
|  | The power cord is broken.  | Replace the power cord   |
|  | Poor contact between the plug and socket   | Adjust or replace the socket   |
|  | During operation, the external power supply to the motor is interrupted while the motor switch remains engaged, triggering the activation of the motor's safety protection system.   | Turn off the motor switch, then turn it back on.   |
| The tube clamp is not tightened properly.  | (1) The tube is not round or has a taper.<br>(2) The clamping area contains burrs or other debris.<br>(3) The fixed clamp specifications are incorrect.<br>(4) The beveling machine has experienced deformation of its housing after prolonged use.<br>(5) Excessive clamping force causes housing deformation<br>(6) The clamping screw or its thread is damaged. | Adjust the position of the steel pipe or replace it; remove burrs or other debris; replace the relevant components.  |
| Vibration during cutting or<br>It was carved with a knife, using considerable effort.                            | The tool is not sharp or is loose.   | Cut off the power, replace or adjust the tool, and re-clamp for tool alignment   |
| The bevel is off-center.   | (1) The size of the fixed clamp is incorrect.<br>(2) The outer diameter dimension of the tube exceeds the allowable tolerance.   | Replace the fixing block: Customize the fixing block according to the specifications of the steel pipe.  |

## packing list

| Name                                     | Specifications                         | Quantity                    |
|--|--|-----------------------------|
| Main engine                              | ISC (O) mould □38 □45 □63 □76 □89 □114 | 1 unit                      |
| Motor                                    | BE1300                                 | 1 unit                      |
| The internal hexagon of the cutting tool | L10×30                                 | 2 pairs                     |
| Spanner                                  | 5, 6, 8                                | One each, for a total of 3. |
| Rubber handle                            |  | 1                           |
| Instructions                             |  | 1 copy                      |
| Certificate                              |  | 1 copy                      |



## Tube Beveling Machine

Model:ISC (O)-38/45/63/76/89/114 Series

**Lihong (Shanghai) Electric Co., Ltd.**  
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**Thank You for Choosing Our Company's Products.**

**Detailed information will be sent upon receipt of your letter.**