

WELDING POSITIONER (WP01)

OPERATING MANUAL

Cautions



WARNING

Read and understand all safety guidelines in this instruction manual before installing, operating and maintaining the equipment.

Please read the instructions carefully before turning on power. Otherwise, incorrect operation will cause damage to the machine.

Check the required voltage of the device and whether the power cable meets the required specifications before turning on power.

ATTENTION:

The rotating gearbox reducer has been lubricated before leaving the factory.

The equipment must be operated by professional operator.

TABLE OF CONTENTS

1. SAFETY REQUIREMENT	1
2. SUMMARIZE	3
3. WORKING CONDITION	4
4. TECHNICAL PARAMETERS	5
5. STRUCTURE AND CHARACTERISITICS	5
6. INSTALLATION INSTRUCTIONS	6
7. OPERATION INSTRUCTIONS	6
8. ATTENTION ITEMS AND CHECKING	7
9. MAINTENANCE	8

1. Safety Requirements

Before start the equipment, every operator, containing the user and the repairman, should read this Using instruction.

Every warning and notice describes a situation going against operator. You should be careful and avoid bad situation.

- Do not touch electric part under operation.
- You should turn electricity on after housing and protective door of Control cabinet, operation cabinet and power source are all ready.
- Before the work, operator should wear insulated glove, shoes and clothes and ensure dryness of working environment.
- “light” can hurt eyes and burn the skin when welding. You should wear protective glasses and clothes.
- Splash of hot slag will cause burning and fire. So you should notice fireproofing.

Electric shock defending

Please pay attention to followed warning when operating:

- When operating equipment, you should not stand, sit or lie on damp ground or other object.
- Keep the dryness of your glove, shoes and clothes.
- If you have to work near damp place, you should be careful and wear insolated glove and shoes and prepare insolated material to defend electric shock.
- Equip a Circuit breaker that has corresponded safety wire. This circuit breaker is connected to power resource and operator can disconnected the power resource in case of emergency.
- When you need to open housing of electric part for repairing, you should disconnect Circuit breaker, to avoid risk bringing by uncoated power resource.
- You should wait at least 5minutes after disconnect main power resource, to let capacitor fully discharge.
- Check on the housing of power cord regularly, if find some damage effecting

equipment, you must replace it in time.

- Check on the wire of motor, if find some damage or abrade, replace it in time.
- Before replacing electric part, you should disconnect main power source. After replacing, you should connect power source after every part fastened.
- Not permit bypass or short-circuit safety device.

Burning defending

Protect eyes and skin from highly luminous ultraviolet radiation, light, spark and hot metal.

- Wear color filter or a protective covering ,which is special for welding.
- Tell the people not to watch welding directly. Should wear color filter or a protective covering before that.
- Wear protective glove, shoes and clothes and hat.
- To let the body away when start button of welding, avoiding hurt skin.
- Don't touch the front of welding torch after starting welding.
- Don't touch workpiece which was welded just now. You only can touch it when fully cooled.

Poisonous smoke dust defending

To avoid risk of poisonous smoke dust when welding.

- Proper ventilation are provided in work place.
- Don't weld container with poisonous material or containing poisonous material. It should be clear away before welding.

Fire defending

It will hot metal and produce spark and slag when waiting welding. You must be careful of fire.

- Not permit to have naked fire in work place.
- Flammable material must be far away from work place, at least 10 meters.
- Workpiece which was welded just now must be fully cooled before touch with Flammable material or to be touched.

- Do not weld container with flammable material or containing flammable material.
- Do not weld in condition which has too much smoke dust or flammable gas.

Explosion defending

- Do not work in the condition which has explosive dust and steam.
- It is prohibited to store inflammable and explosive dangerous goods in workplaces.

Input power resource

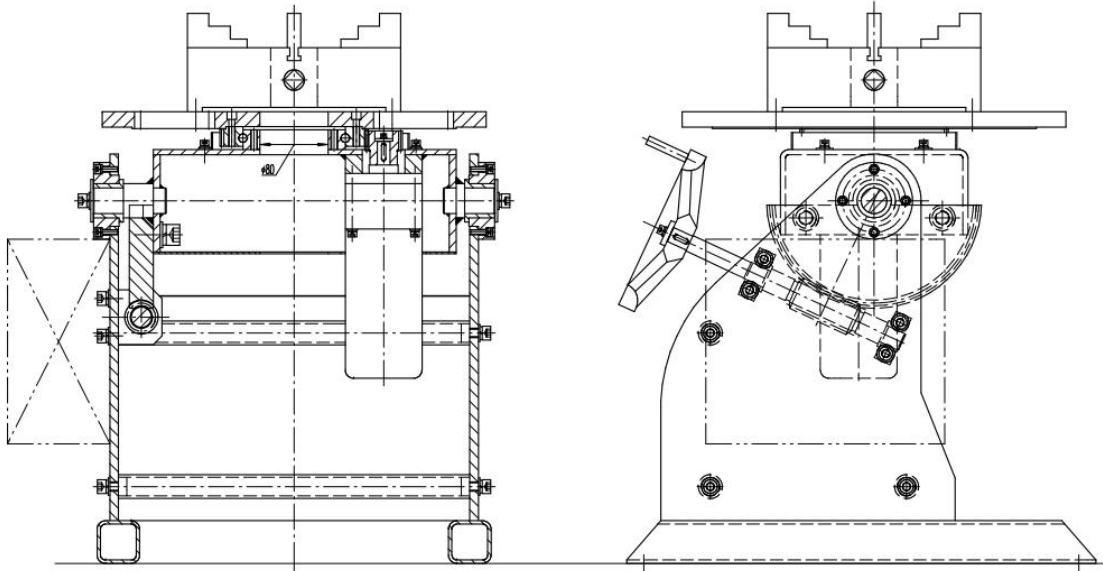
- Ensure power resource has connected to socket which has grounded line. Or grounded line should connect to grounded line of circuit breaker.

Machine defending

- Gears rotate and front of machine move when equipment under operation. The operator should avoid being twisted and hurt.
- If there are many metal material and workpeice, you should avoid being injured.
- Operator should bear switch of power resource in mind.
- Operator can disconnect the power resource or circuit breaker in case of emergency.

2. Summary

Welding positioner is mainly used for adjusting position for welding. The workpiece can be positioned and achieved the welding position by the worktable tilting and rotating. It can improve quality of welding and save times of moving and human resource, is a way to improve efficiency rapidly.



Please confirm the weight of the workpiece before putting it on the worktable, to make sure the workpiece is suitable for the machine.

Operators transport workpiece to the worktable of welding positioner by crane and fix, then control rotating of worktable through wireless remote control and adjust the tilting angle through handwheel, to achieve optimal welding position.

3. Working Condition and Environment

Working Condition

- Altitude: $\leq 1000\text{m}$
- Air Temperature: $-15^{\circ}\text{C} \sim 40^{\circ}\text{C}$
- Air Humidity: $\leq 80\%$

Power Supply

- Power Voltage: 1Phase 230V
- Power Frequency: 50Hz
- Grid Voltage Fluctuation: $\pm 10\%$
- Grid Frequency Fluctuation: $\leq \pm 1\%$

Working Environment

The equipment should be placed in a place without serious hazards, explosive or corrosive industrial gases, water vapor, salt spray and chemical sediment, and should be away from the place with violent vibration.

4. Technical Parameters

NO.	ITEM	UNIT	PARAMETERS
1	Max. Loading Capacity	Kg	100
2	Worktable Diameter	mm	Φ450
3	Rotating Speed	rpm	0.3-3
4	Rotating Motor Power	Kw	0.12
5	Tilting Angle:	°	0-90°
6	Tilting Adjustment Mode		Manual
7	Chuck Model		K11-250C
8	Max. Clamping Diameter	mm	250

5. Structure and Characteristics

Welding positioner is mainly composed of main machine body, tilting transmission mechanism, rotating transmission mechanism, worktable, wireless remote control, chuck, and electronic control system.

Tilting mechanism is driven by handwheel to realize the tilting of the worktable. The worktable can be stopped or tilted at any position within the specified tilting angle 0-90°.

Rotating mechanism is mainly composed of slewing bearing, rotating pinion, rotating motor and gearbox reducer.

Rotating motor and reducer drive slewing bearing to rotate, to realize the rotation of the worktable.

Worktable is round, 3 paths bolt slots are evenly distributed on the worktable, and engraved concentric circle scales with different diameter.

6. Installation Instructions

- Please place the welding positioner horizontally and then fix it on the ground by expansion bolts.
- When finished installation, check whether tight firmware of each port loosens to move the phenomenon or not, if have, please tighten them immediately.

7. Operation Instructions



WARNING

Please take preventive measures and pay attention to safety at all times when the machine is running.

Operator should read the instructions firstly, and be familiar with the structural characteristics and operation methods.

- Clear out unnecessary sundries in work place before using.
- Do not put overloaded workpiece on worktable, to avoid damaging equipment.
- Notice if there is something preventing rotating before machine running.
- Before use, the AA battery should be installed into the wireless remote control.
- First using, test run for a few minutes, get familiar with operating buttons and action instructions, make sure all parts are running normally, to make preparations before welding.
- If need to operate reverse action, proceed to the operation after the worktable stops completely.

- Cut off power source after using.
- Clear out dust on worktable to prolong service life.

8. Attention items and checking

- Before using, to check and clear the machine.
- Check whether the electricity each operation button is failure or not, indicator whether by rule designation.
- During welding, welding positioner must have the credibility to connect ground wire, to insure the safety.
- When welding positioner occurrence break down, should cut off the power supply immediately, then carry on check or maintain.

Daily check

- ✓ Don't open the electric control cabinet when it is powered on or running.
- ✓ The operating environment meets the requirements: no rain, corrosive gas, or high temperature.
- ✓ Indicator parts are normal.
- ✓ Have no excrescent voice, vibration and smell.

Periodical check

- ✓ When periodically checking, stop running and cut off the power supply.
- ✓ Clean the dust of operation panel.
- ✓ Check the cable. If there is any damage, stop using immediately and repair it.
- ✓ Check the connectors. If they are loose, must tighten it.
- ✓ Check circuits and electrical components. If there's any damage, must repair it.

9. Maintenance



WARNING

Please turn off the power supply of the equipment before maintenance.

- Professional operators maintain the machines.
- Check press-button with its appearance.
- Check line connects to ground for security.
- When equipment go wrong, cutting off electrical source, check or maintenance.
- Control cabinet must be according with system drawing, check exactly and no fault of connecting.
- Check insulation of cable usually, must stop using if there is damnify. Operator must wear protection and operation must be safe.
- Welding positioner should not be used under the rain or excessive sun exposure, to avoid breaking electric components.
- The rotating gearbox reducer has been lubricated 30# machine oil before delivery.
- Give out oil after using first month and replace new oil. Later, it is recommended to replace it once every 6 months.
- The slewing bearing is lubricated with lithium grease, which is recommended to be added once every month.
- Check the transmission gear regularly, no foreign body drop, and replenish the grease, it is recommended to use lithium grease.

WUXI ACME MACHINERY CO.,LTD

Tel: +86-0510-83950905

WhatsApp / Mobile: +86-15716172181

Wechat: 15716172181

Email: sales@acmemachinery.cn

Website: www.acmemachinery.cn
