

WELDING POSITIONER OPERATION & MAINTENANCE MANUAL

WHP-5



WARNINGS SAFE GUARDS & OPERATING INSTRUCTIONS

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WARNING AND SAFEGUARD

IMPORTANT- Protect yourself and others! Remember that safety depends on you. The operator, supervisor, and helper must read and understand all warning and safety information provided in these instructions. **Serious injury or death** could result if welding equipment is not properly installed, used and maintained. Training and proper supervision are most important for a safe work place. Installation, operation, repair work, and maintenance must be performed by qualified personnel. Retain these instructions for future use.



ELECTRICAL SHOCK CAN CAUSE INJURY OR DEATH

Electrical equipment must be installed and maintained in accordance with the National Electrical Code, NFPA 70, and all local codes. Maintain Mig-Guns, Electrode Holders, Tig Torches, Plasma Torches, Work Clamp, Welding Cable, and Welding Machines in good, safe operating condition. Replace worn or damaged insulation. Do not try to repair or service equipment while the power is still on. Do not service or repair equipment unless you are trained and qualified to do so. The Electrode and Work (or Ground) circuits are electrically "HOT" when equipment power is on. At no time should you touch the Electrode and Electrical Ground at the same time with bare skin or wet clothing while the power is on. Insulate yourself from work and ground using dry insulation. When welding in damp locations make certain the insulation is large enough to cover your full area of physical contact with work and ground, Ground the work (metal to be welded) to a good electrical earth ground. Keep gas cylinders, chains, wire ropes, hoists, cranes, and elevators away from any part of the electrical path. Always be sure the work cable makes a good electrical connection with the metal being welded. Occasionally check all ground connections to determine if they are mechanically strong and electrically adequate for the current required. The ground connection should be as close as possible to the area being welded. Never touch electrically "HOT" parts of electrode holders connected to two welding power sources at the same time. The voltage between the two can be the total of the open circuit voltage of both power sources. When the welding or cutting process requires values of open circuit voltages in alternating current machines higher than 80 volts, and direct current machines higher than 100 volts, adequate insulation or other means must be provided to prevent the operator from making accidental contact with the high voltage. The use of reliable automatic controls for reducing no load voltage is recommended to reduce shock hazard. When not welding for any substantial period of time, make certain that no part of the electrode circuit will accidentally make contact with the work or ground. Never immerse Mig-Guns, Electrode Holders, Tig Torches, Plasma Torches, or Electrodes in water for cooling.



SMOKE, FUMES, AND GASES CAN BE DANGEROUS TO YOUR HEALTH

Keep smoke, fumes, and gases from your breathing zone and the general area. Smoke, fumes, and gases from the welding or cutting process are of various types and strengths, depending on the kind of base metal being welded on. To ensure your safety, do not breathe these fumes or gases. Ventilation must be adequate to remove smoke, fumes, and gases during the welding procedure to protect operators and others in the immediate area. Do not weld in locations where chlorinated hydrocarbon vapors are coming from degreasing, cleaning, or spraying operations. Vapors of chlorinated solvents can form the toxic gas "phosgene" when exposed to ultraviolet radiation from an electric arc. All solvents, degreasers, and potential sources of these vapors must be removed from the welding area. Shielding gases used for arc welding can displace air and cause injury or death. Fumes produced by welding or cutting, especially in confined areas, can cause discomfort and physical harm if inhaled over an extended period of time. Always provide adequate ventilation in the welding and cutting area to insure breathing air is safe. Use air-supplied respirators if ventilation is not adequate to remove all fumes and gases. **Never Ventilate with Oxygen**, because oxygen supports and vigorously accelerates fire.

**HOT PARTS**

Hot parts can cause serious burns, the area at and near the work being welded should be handled with proper gloves. Proper clothing should be worn to prevent spatter or chipped slag from causing burns. Never pick up welded material until it has properly cooled.

**MOVING PARTS MAY CAUSE INJURY**

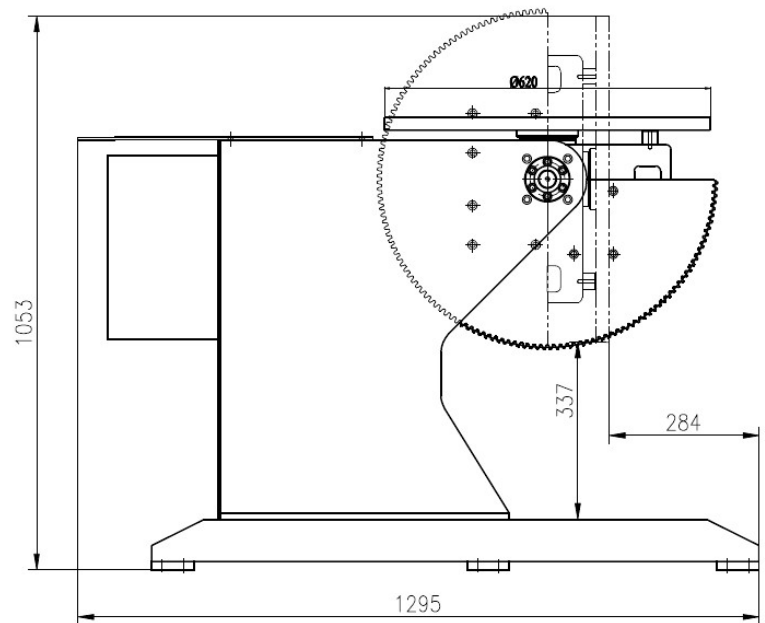
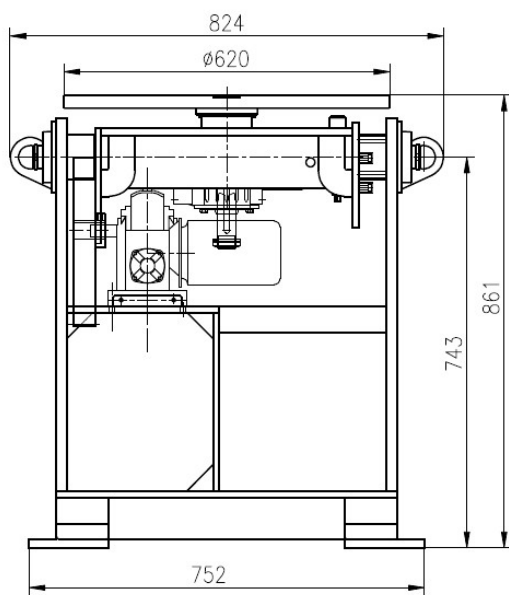
Have only qualified people remove guards or covers for performing maintenance and troubleshooting. Moving parts such as fans can maim fingers or hands and catch loose clothing. Keep tools, hands, hair and clothing away from moving parts. Be sure to reinstall all panels and guards before operating equipment.

**FALLING EQUIPMENT**

Lift only the unit to be moved without any running gear, accessories or gas cylinders that may be attached to it. Use equipment of a proper size to lift and move the unit. Falling equipment can cause personal injury and equipment damage.

Specifications

1	Model	WHP-5
2	Capacity (Turning)	500kg@300mm(Please refer to load chart)
3	Capacity (Tilting)	500kg@300mm(Please refer to load chart)
4	Electrical Panel	Yes
5	Rotation Speed	0.2 -2 rpm at 0-90VDC
6	Tilt Range	0~135Deg
7	Incoming Supply	240V-1P-50Hz
8	Control Voltage	24V
9	Rotation Drive Control	DC Motor
10	Control Means	Foot Switch c/w 3m Cable
11	Rotation Drive Motor	150W DC Motor
12	Forced Cooling Fan Supply	220V
13	Earthing	500A
14	Tilt Speed	135Deg in 50sec
15	Tilt Drive Motor	500W DC Motor
16	Brake Supply	N.A
17	Surface Preparation	Griblast to SA2.5
18	Painting	Spray Painting
19	Color	RAL 3003 Red
20	Qty	4 Unit
21	Weight	472 KG



Operating Instructions

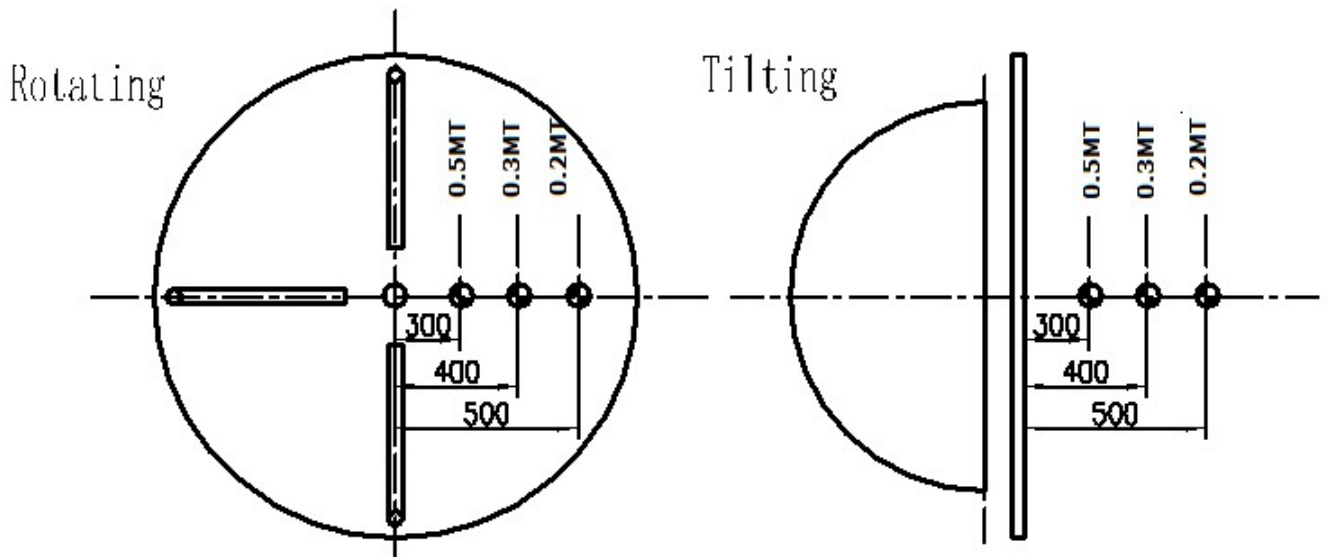
The **W.A.M.** Welding Positioner is designed for light loads, with a maximum load of 500kgs when the table is in a vertical position and 500kgs when it is in the horizontal position.

Loading the Positioner

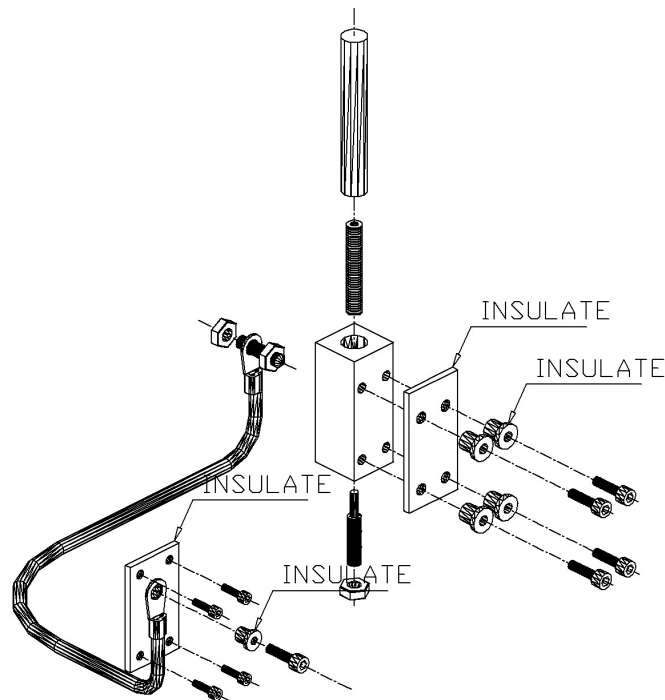
The Positioner may be floor or bench mounted. When mounting the Positioner on a bench it is advisable to secure it solidly to the bench to avoid any possibility of tipping over with a load.

When loading the work piece onto the table it is important that the following guide lines are followed to avoid overturning the positioner and/or overloading the motor and gear train

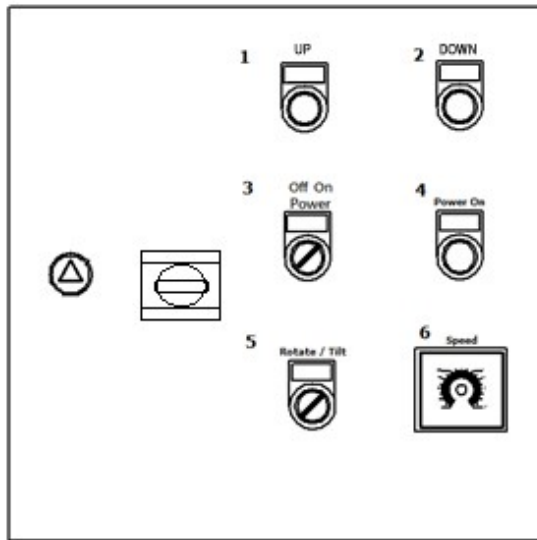
- Determine the total weight of your work piece including all fixtures, chucks, brackets, etc.
Note: This must not exceed 500kgs with the table in the vertical position or 500kgs with the table in the horizontal position.
- Locate the center of gravity of the work piece with any fixtures attached.
- Mount the work piece to the turn table making sure that the center of gravity is within 6" of the center of the turn table.



- **Warning!** Use equipment of a proper size to lift and/or move the weldment onto the positioning table. Falling equipment can cause personal injury and/or equipment damage.
- **Welding Cable Ground (Work) Connection**
The positioning table is grounded by means of a brush which contacts the underside of the table.
- Connection to this is by means of a welding cable lug. Attach the welding cable lug to a properly sized welding cable and then attach the lug to the brush holder by means of the bolt provided. Tighten the bolt securely. The brush has a maximum allowable welding current of 500 amps. DO NOT attempt to run higher than 500 amps through the grounding brush. Welding currents greater than 500 amps should be grounded directly to the work piece by means of a proper ground clamp.



Control Panel & Wiring Diagram



- 1. UP** : The table is going up when push the button switch.
- 2. DOWN** : The table is going down when push the button switch.
- 3. POWER OFF/ON** : "Turn on" or "Turn off" the power
- 4. POWER ON** : It is direction the power on or off. The power on when this light is on.
- 5. ROTATE/TILT** : "Rotate" or "Tilt"
- 6. SPEED** : It is to adjust the speed. The button switch is to adjust the speed of positional.

CAUTION! - Switching rotation direction before coming to a complete stop may damage motor and/or gear box voiding warranty.

Maintenance

The welding positioner requires little maintenance other than periodically clearing spatter and dirt from the positioning worm gear and reapplying grease to the gears.

**APPENDIX A
GENERAL ARRANGEMENT**

The General Arrangement is a CAD module illustrating the general set-up of the equipment. The main specifications of the equipment are also listed in the GA.

APPENDIX B
Electrical Drawings

Electrical Drawings are compiled in this section to give the user a detailed graphical illustration of the electrical components and circuit diagrams associated with the equipment.

**APPENDIX C
ASSEMBLY DRAWINGS**

