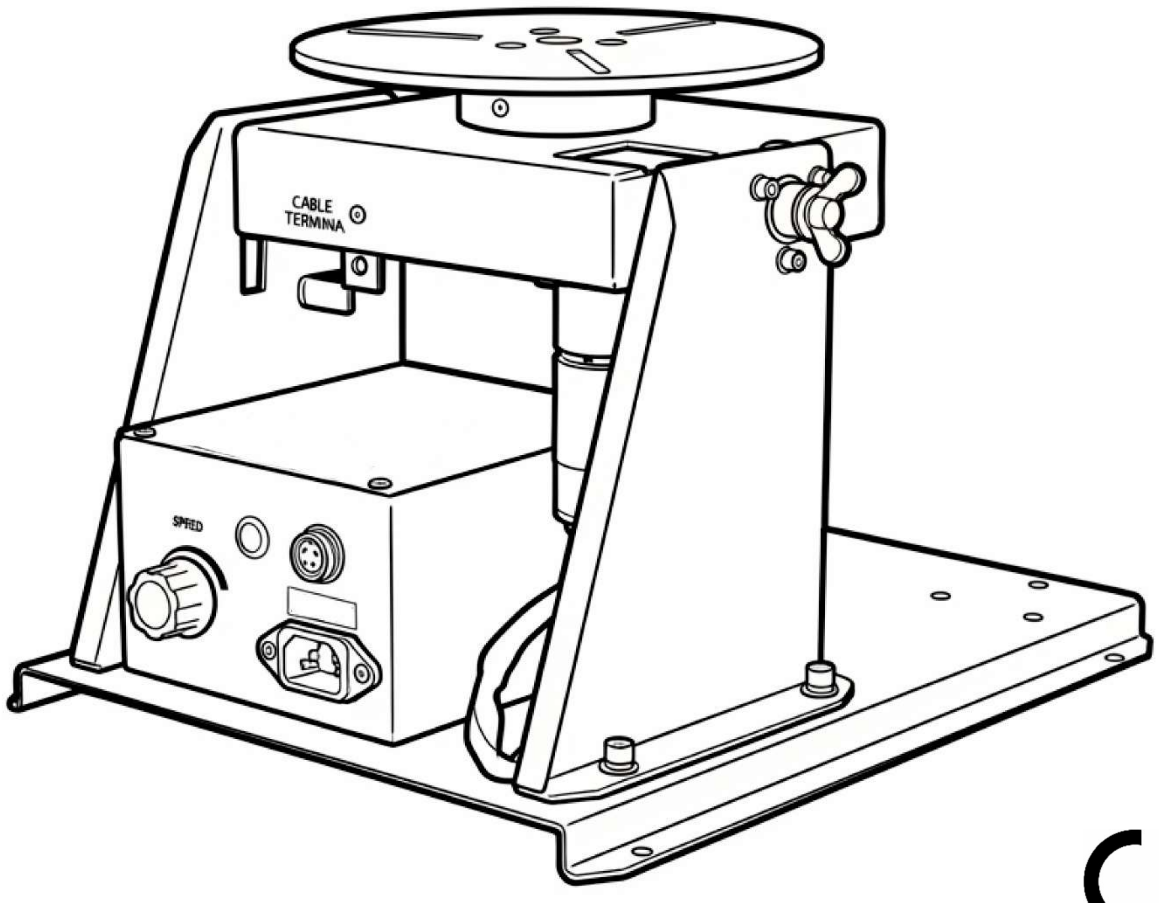
Sherman

ENG V2_1 08-09-2026

USER MANUAL

BY-10 POSITIONER



CE




WARNING!

Before installing and starting the positioner , please refer to this manual

1. GENERAL COMMENTS

The positioner can only be commissioned and operated after carefully reading these Operating Instructions.
Due to the continuous technical development of the positioner , some of its functions may be modified and their operation may differ in detail from the descriptions in the manual. This is not a fault of the positioner , but the result of progress and continuous modification work of the positioner .
Damage to the positioner caused by improper operation will void your warranty rights.
Any modifications to the device are prohibited and will void the warranty.

Before starting the positioner , you should:

- Check the condition of electrical and mechanical connections.
- Take care of proper working conditions, i.e. ensure proper temperature, humidity and ventilation in the workplace. Protect against precipitation outside closed spaces.
- Place the positioner in a place that is easy to use.

Damage to the positioner caused by improper operation will void your warranty rights.
Any modifications to the positioner are prohibited and will void the warranty.

2. SYMBOLS

Some of the following symbols may appear on the positioner and in the operating instructions. Familiarize yourself with them and understand their meaning. Correct interpretation of each symbol ensures more efficient and safer operation of the positioner .

	**General Warning Sign** The content preceded by this sign contains important information about the safe use of the equipment.
	**Read the user manual** Before using the equipment, please read the user manual.
	**Do not touch moving parts.**
	**Caution – risk of grabbing/crushing your hand.**
	**Attention – electrical voltage.**
	**Work work tableonnect power before maintenance.**
	**The product should not be disposed of in a regular municipal waste bin.** The product is treated as electrical and electronic waste (WEEE) and must be separately collected and recycled.

3. SAFETY RULES



WARNING!

Before installing, operating, maintaining or repairing the welding positioner, please read this manual carefully and comply with all applicable health and safety regulations for welding work and electrical equipment.

1. The positioner may only be operated by persons with appropriate qualifications and training in the safe operation of welding equipment.
2. Before each start-up, check the technical condition of the positioner , in particular the power cord, control foot pedal, fasteners, and electrical and mechanical connections. Do not use a damaged positioner .
3. The positioner should be placed on a swork table, level and durable ground, ensuring that the working loads can be carried safely.
4. Must not exceed the permissible load parameters
5. The workpiece must be securely and stably attached to the workbench before the work work table rotates or tilts. Improper attachment may result in workpiece being pulled out, loss of stability of the machine, and injury to the operator.
6. During operation, it is forbidden to touch the rotating parts of the positioner and put your hands between the welded component and the positioner structure. A safe distance from the work table movement zone must be maintained.
7. Work table tilt adjustment should be performed only after the rotation of the work work table has stopped and the workpiece has been protected against uncontrolled movement.
8. All maintenance, adjustment and repair work may only be carried out when the positioner has been work work tableonnected from the mains.
9. It is forbidden to use the positioner in rooms at risk of explosion, in the presence of flammable substances or in conditions of excessive humidity.
10. The operator should wear personal protective equipment appropriate to the welding process, including: welding helmet, protective gloves, flame retardant clothing and protective footwear.
11. Do not remove the protective covers, make arbitrary modifications to the design of the positioner or interfere with the electrical system. Such actions may lead to loss of safety of use, damage to the positioner and loss of warranty.
12. When you have finished working, stop the rotation of the work table, work work tableonnect the positioner from the mains and leave the workstation in a safe and tidy state.

NOTE: During the operation of the positioner, the stability of the workpiece clamping and the even distribution of the mass on the workbench must be constantly monitored. Improper loading may cause excessive vibrations, overload of the drive and loss of control over the workpiece.

4. DESCRIPTION OF HAZARDS

During the operation of the welding positioner, there may be hazards resulting from both the mechanical movement of the positioner and the welding processes carried out. The operator is obliged to identify hazards and use appropriate protective measures. The positioner has a rotating work work table, the possibility of tilting the work work table in the range of 0–90° and is designed for manipulation of details, which requires special care.

4.1 Mechanical hazards

1. Grabbing or pulling a body part through a rotating work work table.
   - Do not touch the rotating components while the positioner is operating.
   - It is forbidden to use loose clothing, jewellery and gloves with loose elements that can be caught by moving parts of the positioner .

2.Impact by rotating workpiece.
   - A rotating component may protrude beyond the work table contour and pose a hazard to the operator and bystanders.
   - Keep a safe distance from the operating zone of the positioner .

3. Crushing when adjusting the tilt of the work table.
   - When changing the tilt angle, there is a risk of crushing your hands or fingers between the elements of the positioner's structure.

4. Falling or tearing out the workpiece.
   - Incorrect attachment of the component or exceeding the permissible load capacity may cause the workpiece to slip, damage the positioner and injury to persons nearby.

4.2 Electrical hazards

1. The positioner is powered by 230V AC, so there is a risk of electric shock during use, maintenance or repair
2. A particular risk occurs in the case of:
   - damage to the power cord,
   - use of the positioner in conditions of increased humidity,
   - perform service work without work work tableonnecting the power supply.
3. Any repairs to the electrical installation may only be carried out by persons with appropriate qualifications.

4.3 Risks associated with the welding process

1. Arc radiation
   - It can cause damage to vision and skin burns.
   - Welding helmets and appropriate protective clothing should be used.
2. Hot metal and slag splinters
   - They can cause burns and fire of materials located near the workplace.
3. Welding fumes and gases
   - may adversely affect the health of the operator.
   - The workstation should be equipped with effective ventilation or a welding exhaust system.

4.4 Ergonomic hazards

1. Improper clamping of heavy workpieces can lead to musculoskeletal overloads during loading and dismantling.
2. For components with a significant weight, auxiliary equipment such as hoists, cranes or cranes must be used.

4.5 Hot metal chips

1. The welding process generates high temperature and hot metal chips that can lead to ignition of flammable materials.
2. It is forbidden to operate the positioner in rooms at risk of explosion or near flammable substances.
3. Near the workplace there should be functional firefighting equipment suiwork table for the hazards occurring during welding.

4.6 Protective measures

In order to reduce the risk of an accident, the operator should use:

- a welding helmet or welding work work table,
- protective gloves for welders,
- flame retardant clothing with long sleeves,
- safety footwear with a protective toe cap,
- hearing protectors (if the noise level at the station requires it),
- respiratory protection in case of insufficient ventilation.



WARNING: It is forbidden for bystanders to be in the positioner's work area while the work table is rotating or welding operations are being performed. The operator should stop the positioner immediately if malfunctioning, excessive vibrations, loosening of the workpiece fastening or other situations that may cause a risk to health and life occur.

5. GENERAL DESCRIPTION

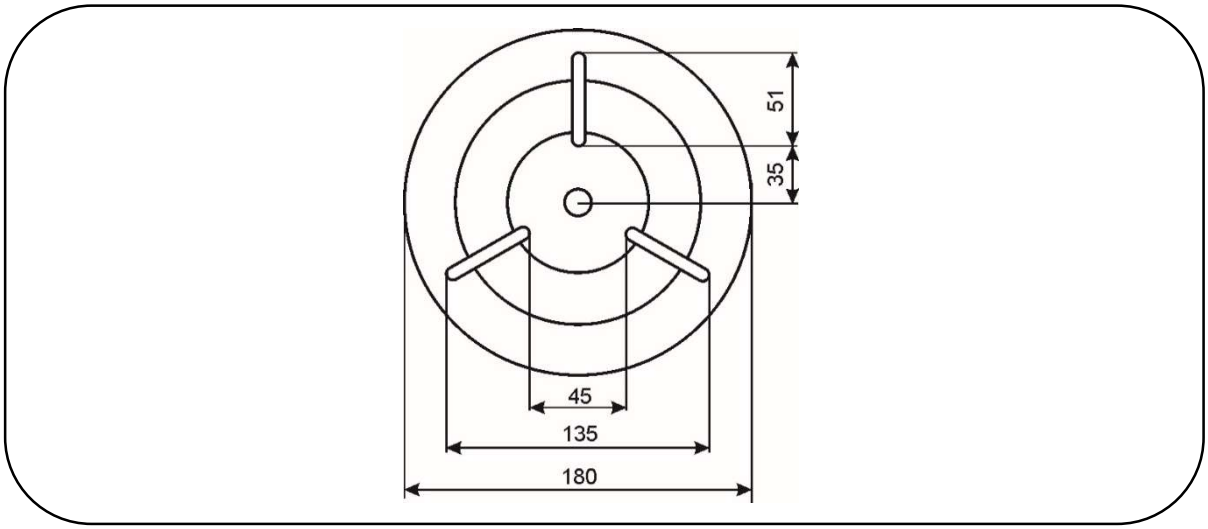
The BY-10 industrial welding positioner is an ideal tool for manipulating the welded element in simple or semi-automatic technological processes. It is characterized by extraordinary versatility, allowing the welding process to be carried out in an optimal position and thus contributing to the improvement of the quality of welded products. The design solutions used ensure safe operation and trouble-free operation. The positioner allows the work work table to be tilted in the range of 0 - 90°. The work table is equipped with mounting connection grooves for fixing handles and jaws. The positioner has smooth speed regulation and the ability to choose the direction of rotation. The control foot pedal allows remote control (start - stop).

The positioner can be powered by a single-phase voltage of 230V 50Hz.

6.TECHNICAL PARAMETERS

	BY-10
Supply Voltage	AC 230V 50Hz
Rotating motor power	24V 15W
Maximum load capacity (horizontal position)	10 kg
Load capacity at maximum work table inclination	5 kg
Work table diameter	180 mm
Work table tilt adjustment range	0-90°
Work table speed adjustment range	2 – 10 rpm
Weight:	10 kg
Overall dimensions	320 x 275 x 275 mm

6.1. PLATE DIMENSIONS



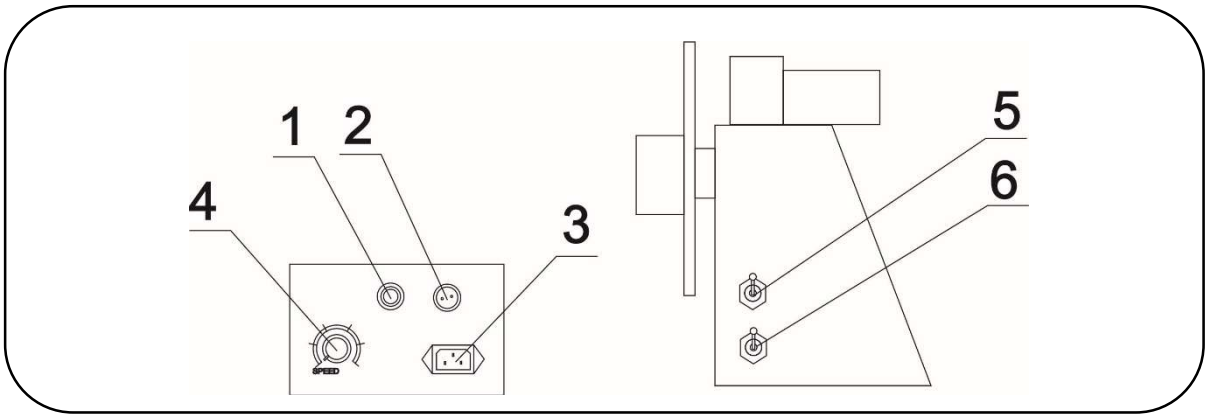
7. CONNECTION TO THE POWER SUPPLY

1. The positioner should only be used in a single-phase, three-wire, grounded zero point power supply system.
2. BY-10 welding positioners are designed to work with a 230V 50 Hz network protected by 16A delay-acting fuses. The power supply should be swork table, without voltage drops.
3. The positioner is equipped with a power cord and plug. Before connecting the power supply, make sure that the power switch (5) is in the OFF position.

8. WELDING CIRCUIT GROUND WIRE CONNECTION

In order to be able to carry out the welding process while the positioner is running, the ground cable of the welding circuit must be fixed on the rotary beam supporting the plate with the help of an eye clamp

9. DESCRIPTION OF THE FUNCTIONS OF SWITCHES AND KNOBS



1. LED to indicate that the positioner is plugged into the network
2. Control foot pedal socket
3. Power socket
4. Speed control knob
5. Main switch
6. Rotation direction switch.

When starting the rotational operation of the positioner, set the minimum rotational speed, and then gradually increase it to the required value. To change the direction of rotation, first reduce the rotational speed to the minimum, stop the positioner by setting the rotation direction switch to the "0" position, then switch the direction of rotation and gradually increase the rotational speed to the required value.

10. HEALTH AND SAFETY INSTRUCTIONS

Employees operating the positioner should have the necessary qualifications to perform welding:

- know the rules of health and safety in the operation of equipment powered by electricity,
- Be familiar with the contents of this manual and operate the positioner for its intended purpose.

The following hazards exist during electric welding:

- Electric shock

Electric shock can be prevented:

- connecting the positioner to a technically efficient electrical system with proper protection and zeroing efficiency (additional protection against electric shock);
- in conditions of particular risk of electric shock (work in environments with high humidity and closed tanks), work with an assistant and a safety watcher, use clothing and gloves with good insulating properties,
- If you notice any irregularities, you should contact competent people to remove them.
- It is forbidden to operate the positioner with the covers removed.

11. OPERATING INSTRUCTIONS

The operation of the BY-10 positioner should take place in an atmosphere free of corrosive components and high dust. Do not place the positioner in dusty places, near working grinders, etc. Avoid operation in environments with high humidity, especially in situations where there is dew on metal components. In the event of dew on metal elements, e.g. after introducing a cool positioner into a warm room, wait until the dew disappears. It is recommended that the positioner be placed under the roof in order to protect it from adverse weather conditions if the positioner is operated outdoors.

12. MAINTENANCE INSTRUCTIONS

Regular maintenance of the positioner allows you to maintain its technical efficiency, extend the life of components and increase operational safety. All maintenance should be performed with the power supply work work tableonnected.

12.1 General Rules

Before starting maintenance, switch off the positioner and work work tableonnect the plug of the power cord from the mains.
Maintenance and repairs should be carried out by persons with appropriate qualifications in the operation of electrical equipment.
Do not use harsh chemicals or solvents that may damage painted components, electrical cables, or seals.

12.2 Daily Maintenance
After completing the work, you should:

- remove welding chips, dust and other contaminants from the workbench,
- check the condition of the fastening grooves and fasteners of the workpiece,
- inspect the power cord and the control foot pedal cable for mechanical damage,
- check the correct operation of the rotation and direction of rotation control.

12.3 Periodic Maintenance
At least once every 3 months or more often in the case of intensive use, you should:

- check the tightening of the screws fixing structural elements,
- check the condition of electrical connections and terminals,
- check the smoothness of the work table rotation and the tilt mechanism,
- remove accumulated dust from the housing and ventilation holes,
- check the correct operation of circuit breakers and controls.

12.4 Inspection of technical condition
Switch off the positioner immediately and submit it for service if you experience:

- unusual transmission or engine noises,
- excessive work table vibrations,
- damage to electrical wires,
- incorrect operation of the speed control,
- damage to the control foot pedal,
- structural clearances affecting occupational safety.

13. STORAGE AND TRANSPORT INSTRUCTIONS

The positioner should be stored at a temperature of -10°C to +40°C and a relative humidity of up to 80% free of corrosive fumes and dust. Transport of packaged positioner s should be carried out by covered means of transport. During transport, packaged positioner s should be protected against movement and provided with the correct position.
In the event of a longer decommissioning, the positioner should:

- clean thoroughly,
- Store in a dry, closed room,
- protect against moisture, dust and precipitation,
- work work tableonnect from the power source.

14. WARRANTY

The warranty is granted for a period of 12 months for business entities, but excluding warranty claims, or 24 months for consumers from the date of sale.
The warranty will be respected upon presentation by the complainant of proof of purchase (invoice or receipt) and a warranty card with the product name, serial number, date of sale and stamped point of sale.
To order a warranty repair, please fill in the form located on the www.tecweld.pl website in the SERVICE tab. On the basis of the notification, the positioner will be transported to the service by a courier company. Positioner s sent in any other way at the expense of TECWELD will not be accepted!
The positioner sent for complaint must be properly packed and secured for transport. TECWELD is not responsible for damage to the positioner resulting during transport.



If you intend to dispose of this product, do not dispose of it with ordinary household waste. According to the WEEE Directive (Directive 2012/19/EU) in force in the European Union, separate disposal methods must be used for used electrical and electronic equipment.
In Poland, in accordance with the provisions of the Act of 11 September 2015 on Waste Electrical and Electronic Equipment, it is prohibited to place waste equipment marked with the crossed-out bin symbol together with other waste.

The user who intends to dispose of this product is obliged to hand over waste electrical and electronic equipment to a waste equipment collection point. Collection points are operated, m.in, by wholesalers and retailers of this equipment and by municipal organisational units operating in the field of waste collection.
The above statutory obligations have been introduced in order to reduce the amount of waste generated from waste electrical and electronic equipment and to ensure an appropriate level of collection, recovery and recycling of waste equipment. The proper implementation of these obligations is particularly important when waste equipment contains hazardous components that have a particularly negative impact on the environment and human health.

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