Polyfusion welder for plastic pipes 1850W



Instructions for use

Translation of the original instructions

Home

Thank you for purchasing our product and we wish you to be satisfied with its use. You have become the owner of a thermoplastic pipe welder from MAR-POL. This welding machine is characterized by maximum safety and easy operation. It is a reliable machine with fast installation and high performance. Although it is easy to use, its operation must comply with
the requirements contained in the following operating instructions and the health and safety regulations in force in the area where it is used.

Before starting

The manufacturer will not be held liable for damage or injury caused by improper use of the tool, failure to comply with safety regulations and local health and safety regulations and recommendations contained in this manual. Improper use of the tool also waives the rights
of the user arising from the warranty and non-compliance with the contract of sale.

Purpose of the welding machine

The welder is used to weld thermoplastic pipes and fittings (polyethylene, polypropylene, etc.) during installation:

- cold water;

- hot water;

- central heating.

It is equipped with an electronic temperature controller (with ambient temperature compensation) with a control range from 100°C to 300°C, which ensures the accuracy of temperature maintenance within 5O°C.

It has a readiness light. Its compact and lightweight design allows the pipe to be mounted directly on walls or structures. The replaceable heating tips are coated with an anti-adhesive layer (technical Teflon). The welder is equipped with an attachment for mounting in a vice or on a stand.

Basic safety principles

ATTENTION: Read all of the following instructions. Ignoring them may result in electric shock, fire, or personal injury.

Work area

1. Keep the work area well lit and clean. Clutter and poor lighting can cause accidents.
2. Do not operate power tools in environments with an increased risk of explosion that contain flammable liquids, gases or vapours. Power tools produce sparks that can cause fires when in contact with flammable gases or vapors.
3. Do not allow children or bystanders into the work area. Loss of concentration may result in loss of control of the tool. It is forbidden to work in damp environments, flooding or dampness of the tool can cause electric shock!
4. The unit is designed for indoor operation only.

Electrical safety

1. The plug of the power cord must fit into the mains socket. Do not modify the plug. No adapters may be used to adapt the plug to the socket.

   A non-modified plug that fits into the socket reduces the risk of electric shock.
2. Avoid contact with grounded surfaces such as pipes, radiators and refrigerators. Earthing the body increases the risk of electric shock.
3. Do not expose power tools to precipitation or moisture. Water and moisture that get inside power tools increase the risk of electric shock.
4. Do not overload the power cord. Do not use the power cord to carry, connect or disconnect the plug from the mains socket. Avoid contact of the power cord with heat, oils, sharp edges and moving parts. Damage to the power cord increases the risk of injury electric current.
5. Never use the appliance in places where the power cord may be damaged, any irregularities in the cord structure are an indicator of possible damage.

Personal safety

1. Come to work in good physical and mental condition.
2. Pay attention to what you are doing.
3. Never work under the influence of narcotics, which include selected painkillers.
4. Even a moment's inattention at work can lead to serious injury. Wear personal protective equipment. Always wear safety goggles. Wearing personal protective equipment such as dust masks, safety boots, helmets and ear defenders reduces the risk of serious injuries.
5. Avoid accidental switching on of the tool. Make sure the electrical switch is in the "off" position before connecting the tool to the mains. Holding the tool with your finger on the switch or connecting power tools when the switch is in the "on" position can lead to serious injury.
6. Before switching on the power tool, remove any wrenches or other tools that have been used to set it up. A key left on the parts of the tool can lead to serious Injury. Keep your balance. Maintain correct posture at all times. This will allow you to control the power tool more easily in the event of unexpected situations while working.
7. Wear protective clothing. Do not wear loose clothing or jewellery. Hair, clothing and work gloves keep away from moving parts of power tools. Loose clothing, jewellery or long hair can get caught on moving parts of the power tool.
8. Use fume extractors if the tool is equipped with one. Make sure they are correct and you have connected them correctly. Using a fume extractor reduces the risk of serious injury.

Use of power tools

1. Do not overload power tools.
2. Use the right tool for the job. The right tool for the job will ensure a more efficient and safer work.
3. Do not use the power tool if its mains switch is not working. Tools that cannot be operated by the mains switch are dangerous and should be returned for repair.
4. Before adjusting, changing accessories or storing, unplug the power plug from the power outlet of the tool. This prevents accidental switching on of the power tool.
5. Keep the tool out of the reach of children. Do not allow persons who are not trained to use the tool to operate it. Power tools can be dangerous in the hands of untrained operators.

6. Ensure proper maintenance of the tool. Check the tool for misalignment and loose moving parts.
7. Check if any part of the tool is damaged. If defects are found they should be repaired before using the tool.
8 Many accidents are caused by poorly maintained tools. Properly maintained tools are easier to handle while working. Dirt and cavities on the dies lead to deformation of the joints. Use power tools and accessories according to the above instructions. Use tools in accordance with their intended use, taking into account the type and conditions of the work. Using tools for work other than that for which they were intended may increase the risk of dangerous situations.

Working with a welding machine

Before starting work, check that the housing body and the connecting cable with plug are not damaged. If necessary, clean the tool of dirt and unblock the ventilation holes. Do not use metal tools for cleaning, which may damage or destroy the surface of the fasteners or the heating head. If damage is found, further work is prohibited!

Caution All tube adaptor changes, cleaning etc. must be carried out with the power to the tool switched off, so before carrying out these operations: if necessary, pull the plug of the tool cord out of the mains socket and wait until the heating surfaces of the tool have cooled down.

Mounting adapters

1. Make sure that the contact surfaces of the heating head and adapters are not dirty.
2. Screw the adapters firmly and securely onto both sides of the heating head using the screw.
3. Select the location where the adapters will be mounted on the head, following the principle that the smaller adapters should be mounted closer to the end of the head.
4. The edge of the adapter must not extend beyond the edge of the heating head. It is permissible to mount one set of adapters during operation.

Heating

When assembly is complete, place the welder on the stand. Make sure that the adapters and heating head do not touch other objects. Plug the power cord plug into a power outlet. Use the temperature selection knob to set the desired value



With the M55905, a choice of operation of one or both heaters.

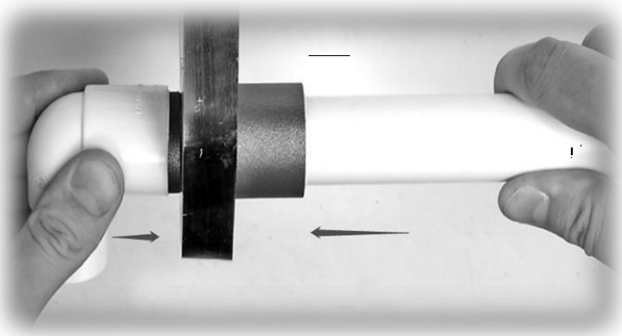


The indicator light is on during operation, i.e. during heating. When the light goes out, the temperature has been reached and the appliance is ready for operation.



For models M55901 and M55908, the thermostat knob serves as a switch, the green light indicates power, the red light indicates heater operation.

As with every model, the knob is also used to set the desired temperature.



Welding process

Welded parts must be cleaned of all dirt, moisture and dust.

When heating is complete, place the oven on the adapter, or fitting. Place one part on the adapter, the other part on the adapter so that there is a small difference in diameter between the parts to be welded.

Leave the parts on the fitting for the time indicated in the table. Then slide the joined parts off the adapter and join them by sliding them into each other, rotating them gently to facilitate insertion. Do not slide the elements deeper than the boundary of the heated area. Allow the finished joint to cool so that it does not deform or disconnect.
Leave the welder on the base until it has cooled completely. Remove the pipe adapters and subject the appliance and adapters to maintenance.

Before starting the welder, plan your work, trim all parts so that the welding process is kept to a minimum. The machine must not be left unattended, it is not economical or responsible to leave it to trim or assemble pipework.

ATTENTION! : Never leave the appliance unattended! The appliance will lose temperature for 15-20 minutes after being unplugged.

Abbreviations for weldable

materials

HD-PE - High Density

Polyethylene

PE - polyethylene

PP - polypropylene

PTFE - poly (tetrafluoroethylene)

*Outer diameter [mm].	Heating height [mm]	** heating time [s]	** operation time [s]	** cooling time [s]
20	14	5	4	3
25	16	7	4	3
32	20	8	4	4
40	21	12	6	4
50	22,5	18	6	5
63	24	24	6	6
75	26	30	10	8
90	32	40	10	8
110	38,5	50	15	10

*diameter of fittings are optional accessories

**the times are approximate

Maintenance, transport and storage

Let the tool cool down after each use! Cleaning and maintenance of warm tools can lead to injuries!

Cleaning

Clean the welding machine cover with a damp cloth, clean the heating accessories with a damp soft cloth, any scratches on the surface of the accessories will lead to excessive adhesion of plastic during welding.

Transport

If transportation is required, the unit should be transported in the factory suitcase in the trunk of the vehicle. It is advisable to check that the all components inside the case properly secured so they don't bounce around during transport. Secure the suitcase to prevent it from moving in the luggage compartment.

Repository

The instrument should be stored in the factory case in a location that is inaccessible to minors and persons unfamiliar with the operation of the instrument. The storage temperature should be as cool as possible and the location should not be exposed to sunlight.

Disposal of used power tools

A symbol indicating the separate collection of waste electrical and electronic equipment.



E-waste is a secondary raw material - it is forbidden to dispose of it in in household waste bins, as they contain substances hazardous to human health and the environment! Actively help to manage waste wisely natural resources and protect the environment by taking your used equipment to an electrical appliance disposal facility. In order to reduce the amount of waste to be disposed of, reused, recycled or recovered in another form.

Specification

TECHNICAL DATA / SPECIFICATIONS			
TYPE	M55905	M55901	M55908
Supply voltage	230 V	230 V	230 V
Temperature control	50-300OC	50-300OC	50-300 OC
Range of welded pipes	16-63 mm	16-63 mm	16-32
Rated power	1,5 kW	0.8 kW	1.2 kW