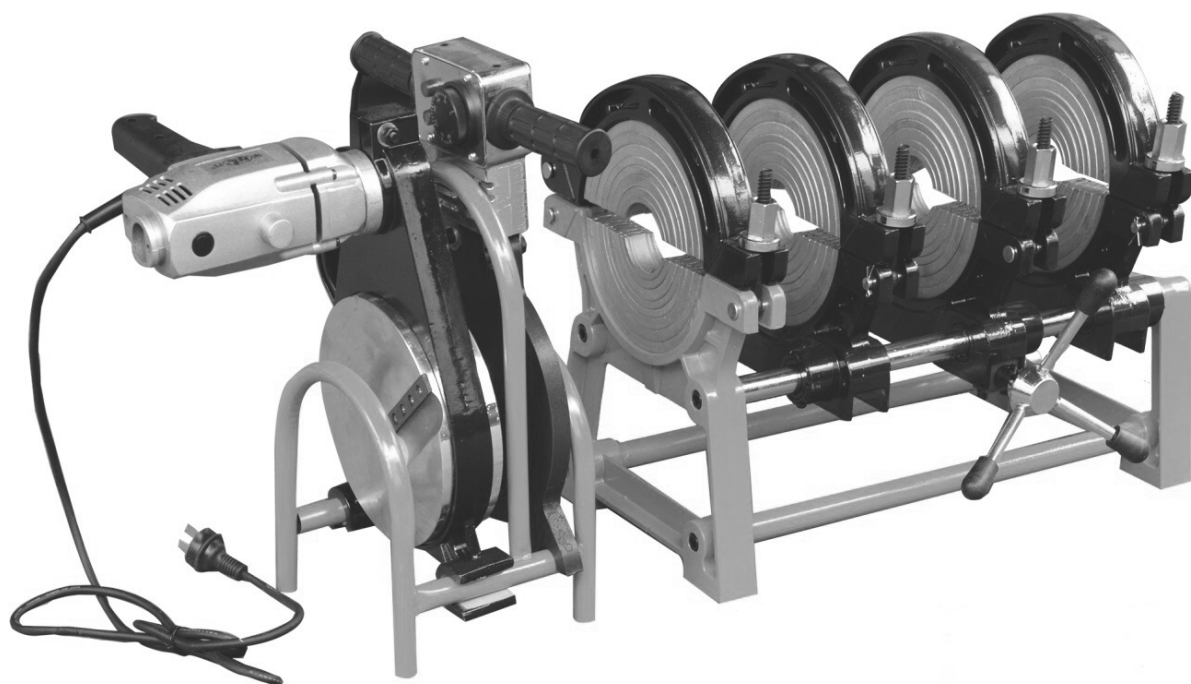


Model: EWELDP003 / 004

HDPE BUTT FUSION PIPE WELDING MACHINE

OPERATING INSTRUCTIONS / USER MANUAL



Please read all safety regulations and operating instructions carefully before using this equipment. Retain these safety guidelines and instructions for future reference.



2025

E&OE Please Note that details and specifications contained herein, are correct at the time of publishing. Adendorff reserve the right to change specifications at any time without prior notice.

IMPORTANT SAFETY INFORMATION

Thank you for purchasing this quality product. Our goal is to help you achieve the best results from your new equipment while ensuring safe operation.

This manual contains essential information regarding the operation, safety warnings, precautions, maintenance, cleaning procedures, parts list, and assembly diagram. Please read it carefully before use.

It is important to keep this manual along with your invoice for future reference. Write the invoice number on the inside of the front cover and store both the manual and the invoice in a safe, dry place.

This manual should be considered a permanent part of the product and must remain with it if the product is resold.

Your safety and the safety of others are very important.

This manual contains important safety messages — please read and follow them carefully.

Safety messages warn you about potential hazards that could cause injury to you or others.

Each message is preceded by a safety alert symbol (!) and one of the following words: DANGER, WARNING, or CAUTION.

Here's what they mean:

DANGER: You WILL be killed or seriously injured if you do not follow the instructions.

WARNING: You CAN be killed or seriously injured if you do not follow the instructions.

CAUTION: You CAN be injured if you do not follow the instructions.

SAFETY & PRECAUTIONS

Operating the HDPE pipe welding machine involves high temperatures, rotating parts, hydraulic pressure, and electricity. To ensure the safety of operators and the longevity of the machine, follow these essential safety guidelines at all times:

1. Electrical Safety

Connect the machine to a single-phase power supply within the range of 198V to 242V.

Ensure the machine is properly earthed before use.

Inspect all cables, plugs, and sockets before each use. Do not operate with damaged wiring.

Keep the electrical control cabinet closed during operation.

Avoid operating in wet or damp conditions to prevent electric shock.

2. Thermal Hazards

The heating plate reaches temperatures of up to 220°C — do not touch the plate directly.

Always handle the heating plate with heat-resistant gloves.

After use, allow the heating plate to cool completely before storing.

3. Mechanical Hazards

Ensure all pipes are securely clamped before milling or welding.

Never put your hands near the milling cutter while it's running.

Confirm that cutter blades are properly tightened before each use.

SAFETY & PRECAUTIONS

Keep hands, tools, and loose clothing clear of moving parts.

4. Pressure & Hydraulic Safety

Do not exceed recommended pressure levels for each pipe size (refer to the welding parameter table).

When operating the hydraulic valve, move it smoothly to avoid sudden pressure spikes.

Regularly inspect the hydraulic system for leaks — leaking oil is both a slip hazard and a sign of mechanical issues.

5. Operator Safety

Only trained personnel should operate this machine.

Work in a clean, unobstructed area, and ensure the machine sits on a level surface.

Wear safety gloves and eye protection, especially during facing and welding.

Avoid loose clothing and remove jewelry that could get caught in the machine.

6. Fire & Environmental Safety

Do not use the machine near flammable materials or in areas with explosive gases.

Keep a fire extinguisher accessible when operating the machine.

7. General Precautions

1. Clean the heating plate before and after each use to prevent contamination.
2. Regularly grease the clamping screws and other moving parts to avoid wear and tear.
3. Follow the correct welding sequence — skipping steps can result in weak joints and equipment damage.
4. If the machine malfunctions or something seems off (strange noise, excessive heat, loss of pressure), stop work immediately, switch off the power, and contact our technical service team.

GUARANTEE/WARRANTY – (CARRY IN)

This product is covered by a warranty against manufacturing defects for a period of 12 months from the date of purchase. Please ensure you retain your receipt, as proof of purchase will be required when making a warranty claim.

Warranty Exclusions

The warranty will be void if the product:

- Has been abused, misused, or tampered with.
- Has not been used for the intended purpose.
- Was not installed correctly.

- Was used with an incorrect power supply or voltage.
- Was used with an undersized or unsuitable compressor (where applicable).
- If you are unsure of the correct product selection, please consult with one of our trained sales staff for guidance.

End User Responsibility

To qualify for warranty coverage, the end user must ensure that:

- The product is installed correctly, using a suitable voltage supply with the correct current rating.

GUARANTEE/WARRANTY – (CARRY IN)

- The product is regularly inspected and maintained according to the maintenance schedule provided in the user manual.

Warranty Limitations

The following are not covered by this warranty:

- Negligence or improper use.
- Wear and tear parts.
- Consumable parts.
- Accidental damage.
- Misuse, abuse, or modifications.
- Lack of maintenance.
- Improper wiring.
- Unauthorized repairs.
- Damage caused by lightning or power surges.
- Failures caused by contaminated fuels, oils, or coolants (where applicable).
- Products used in a manner contrary to the provided instruction manual.
- Products operated on incorrect power sources, including batteries.

What the Warranty Does Not Cover

Under this warranty, we are not responsible for:

- Transportation fees for sending the product to/from the warranty centre.
- Any incidental, consequential, or indirect damages resulting from defects in materials or workmanship.
- Any delays in repair or replacement of defective parts.

As a reminder, transportation costs to/from the warranty centre remain the customer's responsibility.

Labour charges for overtime, holiday, or emergency work.

Satisfaction Guarantee and Returns

If you are not fully satisfied with the product, you may return the unused product for a full refund under the following conditions:

The product must be in its original packaging.

The product must be returned within 10 days from the date of purchase.

The original invoice must accompany the return.

Additional Terms

Adendorff Machinery Mart reserves the right to charge a packaging fee for any product returned without its original packaging.

Refunds, returns, exchanges, and cancellations will be handled in accordance with the Consumer Protection Act (CPA) regulations.

If the product was purchased for a specific purpose based on advice from a salesperson and is found unsuitable for that purpose, a handling fee may apply, depending on the product's condition, in line with our internal policy.

All repairs performed under this warranty carry a 3-month repair warranty.

As a reminder, transportation costs to/from the warranty centre remain the customer's responsibility.

PRODUCT STRUCTURE

The welding machine set consists of the following main parts:

- 1. Frame**
The frame holds and clamps the pipes securely during the welding process.
It accommodates different pipe sizes according to your machine's specifications.
- 2. Milling Cutter**
Power Source: Electric drill motor.
Drive System: Gear reducer with bearings, sprockets, and chain drive.
Cutting Tool: Aluminum cutter disks fitted with blades to trim pipe ends.
- 3. Heating Plate**
Heating Element: Embedded electric heating tube cast into an aluminum alloy plate.
Temperature Sensor: Built-in heat-sensitive resistor for accurate temperature control.
Wiring: 5-core rubber connection cable with terminal board and aviation socket for reliable connection.
- 4. Accessories Frame**
Storage frame for holding the heating plate and milling cutter.
Control panel housing switches, plugs, thermostat, timer relay, and voltage meter.

TECHNICAL SPECIFICATIONS

Model	EWELDP003
Heating Board Power	2.0KW
Milling Cutter Power	0.8KW
Voltage	230V / 50-60Hz
Working Range	63-200mm
Working Temperature	270°

Model	EWELDP004
Heating Board Power	3.0KW
Milling Cutter Power	0.9KW
Voltage	230V / 50-60Hz
Working Range	90-250mm
Working Temperature	270°

MODEL	PIPE SIZE	HEATING PLATE POWER	MILLING CUTTER POWER	TOTAL POWER
D160	63 - 160 mm	1600 W	850 W	2450 W
D200	63 - 200 mm	2000 W	850 W	2850 W
D250	90 - 250 mm	2500 W	1000 W	3500 W

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OPERATING INSTRUCTIONS

Preparation

1. Clean the heating plate before each use using a cotton cloth. Removing dust and dirt helps extend the heating plate's lifespan.
2. Place the heating plate and milling cutter on the accessories frame. Power on the machine.
3. Fit the pipes into the clamps on the frame. Tighten the clamps securely, but do not overtighten or deform the pipes.

OPERATING INSTRUCTIONS

Milling (Facing the Pipes)

Pipe Outer Diameter (mm)	Heating Plate Temperature (°C)	Bead Height (mm) Before Heating Time	Heat Soak Time (sec/mm)	Changeover Time (sec)	Cooling Time (min)	Total Welding Time (approx.)
63	200 - 220	0.5 - 1	4 - 5	≤ 5	6	12 - 14
75	200 - 220	1 - 1.5	4 - 5	≤ 5	7	13 - 15
90	200 - 220	1 - 2	5 - 6	≤ 5	8	15 - 17
110	200 - 220	1 - 2	6 - 7	≤ 5	10	18 - 20
125	200 - 220	1 - 2	7 - 8	≤ 5	12	20 - 22
140	200 - 220	1.5 - 2	8 - 9	≤ 5	14	22 - 25
160	200 - 220	1.5 - 2	10 - 12	≤ 5	16	26 - 28
180	200 - 220	2 - 2.5	12 - 14	≤ 5	18	30 - 33
200	200 - 220	2 - 3	14 - 16	≤ 5	20	34 - 37
225	200 - 220	2 - 3	16 - 18	≤ 5	22	37 - 40
250	200 - 220	2 - 3	18 - 20	≤ 5	24	40 - 44

RECOMMENDED WELDING PARAMETERS

PIPE OUTER DIA. (mm)	HEATING PLATE TEMP. (°C)	BEAD HEIGHT (mm) (BEFORE HEATING TIME)	HEAT SOAK TIME (sec/mm)	CHANGEOVER TIME (sec)	COOLING TIME (min)	TOTAL WELDING TIME (approx.)
63	200 - 220	0.5 - 1	4 - 5	≤ 5	6	12 - 14
75	200 - 220	1 - 1.5	4 - 5	≤ 5	7	13 - 15
90	200 - 220	1 - 2	5 - 6	≤ 5	8	15 - 17
110	200 - 220	1 - 2	6 - 7	≤ 5	10	18 - 20
125	200 - 220	1 - 2	7 - 8	≤ 5	12	20 - 22
140	200 - 220	1.5 - 2	8 - 9	≤ 5	14	22 - 25
160	200 - 220	1.5 - 2	10 - 12	≤ 5	16	26 - 28
180	200 - 220	2 - 2.5	12 - 14	≤ 5	18	30 - 33
200	200 - 220	2 - 3	14 - 16	≤ 5	20	34 - 37
225	200 - 220	2 - 3	16 - 18	≤ 5	22	37 - 40
250	200 - 220	2 - 3	18 - 20	≤ 5	24	40 - 44

SAFETY WARNING

1. Regularly check your heating plate's surface for damage or contamination.
2. Always make sure pipe ends are clean and aligned properly before welding — this is critical for a strong weld.
3. If you're new to butt welding, practice on scrap pipe to get a feel for the machine.
4. Don't forget regular lubrication and general maintenance — a well-maintained machine makes your life easier and ensures reliable welds.
5. This machine is designed to heat and fuse HDPE pipe ends under manual pressure, creating a solid joint.
6. The machine must run on single-phase power within 198V - 242V. Always ensure the machine is properly earthed.
7. The heating plate gets extremely hot. Avoid direct contact to prevent burns.
8. Grease the eight clamping screws regularly to ensure smooth operation.
9. If you experience a technical fault you can't resolve, contact our service team using the number on the heating plate — we'll assist as quickly as possible.

For full terms and conditions of our guarantee please visit our website:
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