

OPERATING INSTRUCTIONS

Automatic wedge welding machine MION

Please read the operating instructions carefully before use and keep for further reference!

APPLICATION

The MION is an automatic hot wedge welding machine for overlap welding and for manufacturing of films and geomembrane liners in tunnels as well as in earthwork and civil engineering.

- **Overlap** max. 95mm
- **Type of seam** Welding seams are produced in accordance with DVS 2225 part I
Other dimensions of seams are possible on request.
- **Type of wedge** In standard version the MION is supplied with a ceramic wedge.
This allows welding of all different kind of material without changing the wedge.





SECURITY WARNING



Danger! Unplug the tool before opening it as live components and connections are exposed.



Danger of fire and explosion in case of incorrect use of the hot wedge welder, especially near combustible materials and/or explosive gases.



Danger of burns Do not touch the hot wedge when hot, allow the tool to cool down.



Connect the tool to a socket outlet with protective earth conductor. Any interruption of the protective earth conductor within or outside the tool is dangerous!!! Use only extension cables with a protective earth conductor!



The **voltage rating** stated on the tool should correspond to the mains voltage.



For personal protection, we strongly recommend to connect the tool to a **RCCB(Residual Current Breaker)** before using it on construction sites.



The tool must be operated under supervision.

Radiant heat from the hot wedge can ignite flammable materials.



Protect the tool from **damp and wet.**

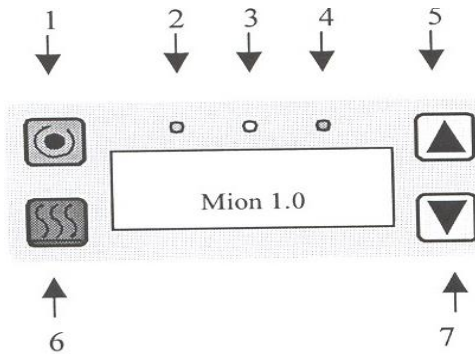
TECHNICAL DATA

Tool with protection of class I 

Voltage	V~	230 or 120V
Power consumption	W	850
Frequency	Hz	50/60
Temperature	°C	20 - 520
Welding pressure	N	max. 1000
Drive	m/min.	0.8 – 3.2
Size LxWxH	mm	200 x 200 x 210
Weight	kg	5.5

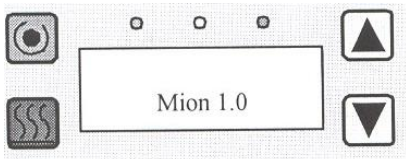
OPERATING

- | | | | | |
|---|--------------|----------|----------------------------------|----------------------|
| 1 | Motor button | (green) | 5 | Up ward button |
| 2 | Motor LED | (green) | 6 | Heating button (red) |
| 3 | Status LED | (yellow) | (plus button 5 = Heating on/off) | |
| 4 | Heating LED | (red) | 7 | Down ward button |

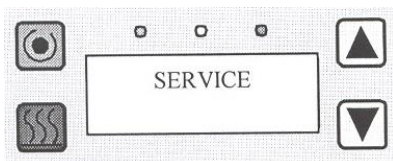


OPERATING LEVEL

Change value with buttons 5 and 7
Forward to next level with the red button.



This message only shows up when the recommended service time is reached. Confirm with the red button.

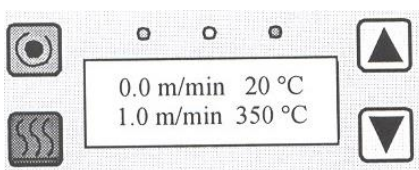


Standard display to adjust the parameters.

Speed adjustment

Motor Start/Stop with green button.

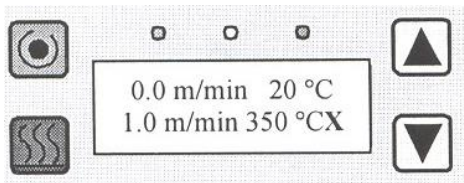
The green LED shows you the condition.



Standard display to adjust the parameters.

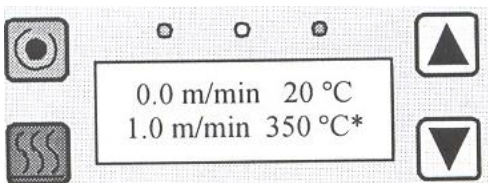
Temperature adjustment

Press the red button, beside the set-temperature appears a X. Now adjust the temperature.



To switch on the heating press the red and the up ward button together, the red LED is flashing up until the temperature is reached.

Switch off the heat with pressing this two buttons together.



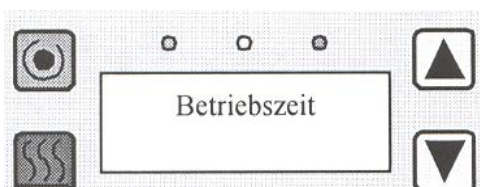
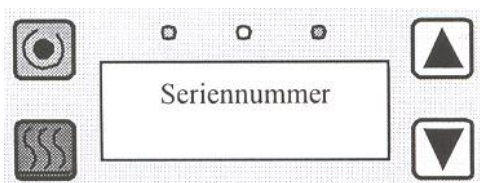
ADJUSTMENT LEVEL

To reach adjustment level

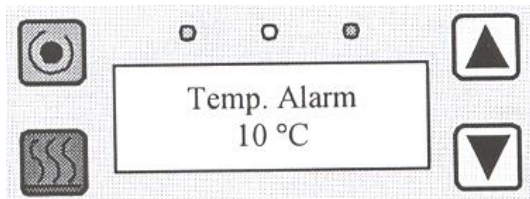
Press the up- and down ward buttons together for approx. 5 seconds.

Change value with the up- and down buttons.

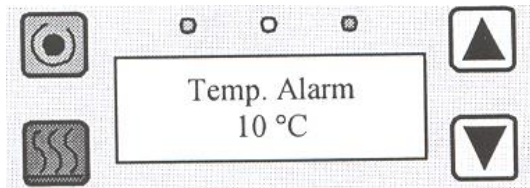
Forward to the next level with the red button. It shows serial number and working hours (can't be changed).



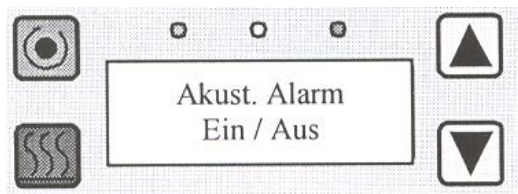
Maximum speed tolerance to alarm.



Maximum temperature tolerance to alarm.



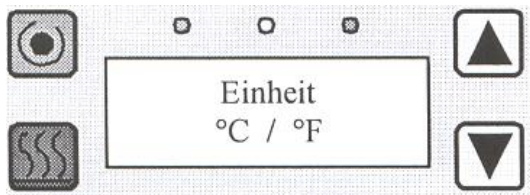
Alarm signal on / off



Choice of display

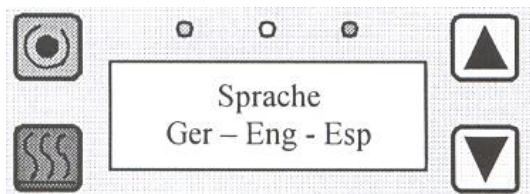
°C- m/min.

°F -ft/min.

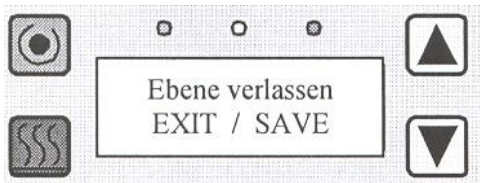


Adjustment of language

German – English – Spanish



Don't save parameter = EXIT
Save parameter = SAVE
Menu end with the red button

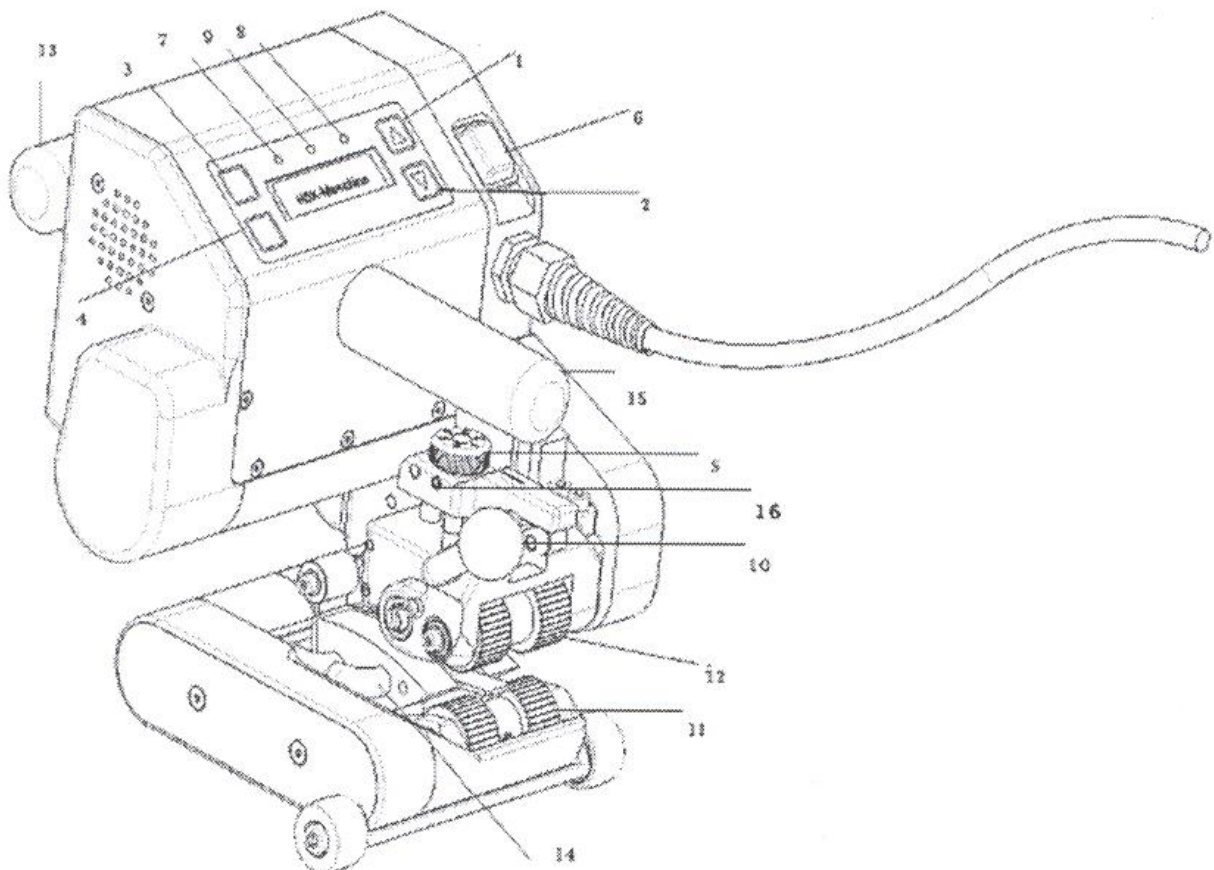


Pressure adjustment – DON'T HEAT UP THE WEDGE!!

Engage and position the welding tool onto the material to be welded. Pull the toggle lever (10). By rotating the adjustment screw (5) the drive/pressure rollers will lightly touch the material to be welded, in this way you will define the **POINT ZERO(0) N** of pressure. Set the desired pressure by rotating the adjustment screw (5), to every single step of rotation you will set 65N of pressure on seam. Lock the desired pressure with the locking screw (16)

Warning: If the maximum welding pressure (1000 N) is exceeded, mechanical damage may occur.

DESCRIPTION OF MACHINE



1	Button increase	9	LED machine on
2	Button decrease	10	Toggle lever
3	Button Drive on/off	11	Lower pressure roller
4	Button Heating on/off (together with button 1)	12	Upper pressure roller
5	Pressure adjustment screw	13	Guide handle (optional)
6	Main switch	14	Heater cartridge
7	LED Motor (on/off alarm)	15	Handle
8	LED Heating (on/off alarm)	16	Locking screw

MAINTENANCE

Clean the hot wedge with a wire brush at the end of a working day.

Clean the drive/pressure rollers with a wire brush.

As required, treat the chain with a suitable spray.

After use, always check the mains cable and the plug to ensure that they are not damaged.

SERVICE AND REPAIR

The welding machine should be checked by an authorised service centre approx. every 1000 hours of running time.

Inspections and repairs have to be executed exclusively by BAK authorised service centres.

GUARANTEE AND LIABILITY

For BAK guarantee and liability see the general and sales conditions on the back of the invoice paper.

BAK Thermoplastic Welding Technology rejects any guarantee claims for tools which are not in original condition.

Technical data are subject to change without prior notice.