

BAK 6600513 Automatic Welding Machine Type TechOn



# BAK 6600513 Automatic Welding Machine Type TechOn Instruction Manual

[Home](#) » [BAK](#) » BAK 6600513 Automatic Welding Machine Type TechOn Instruction Manual 

## Contents

- 1 BAK 6600513 Automatic Welding Machine Type TechOn
- 2 Product Usage Instructions
- 3 SAFETY
- 4 WARRANTY AND LIABILITY
- 5 STARTING OF THE WELDING MACHINE
- 6 ASSEMBLY
- 7 MAINTENANCE
- 8 ASSISTANCE AND SUPPORT
- 9 TRANSPORT – HANDLING – STORAGE
- 10 TECHNICAL DATA
- 11 Documents / Resources
  - 11.1 References
- 12 Related Posts

# BAK

**BAK 6600513 Automatic Welding Machine Type TechOn**



## Specifications

- Manufacturer: BAK Technology AG
- Model: TechOn
- Intended Use: Automatic welding machine for overlap welding of roofing membranes
- Materials Supported: PE, PVC, TPO, ECB, EPDM, CSPE, bitumen
- Voltage Rating: 230V or 400V
- Max. Permissible Network Impedance:  $Z_{max} < 0.194$  (230V),  $Z_{max} < 0.299$  (400V)

## Product Usage Instructions

### Safety Precautions

- Unplug the device before opening to avoid danger to life due to exposed live components.
- Avoid using the device near combustible materials to prevent fire and explosion risks.
- Avoid touching the hot air device when hot; let it cool down to prevent burns.
- Ensure the voltage rating matches the mains voltage and consult local electricity supply if needed.
- Connect the device to a residual current circuit breaker for personal protection on construction sites.
- Do not leave the device unobserved to prevent ignition of combustible materials by hot air radiation.
- Keep the device away from damp and wet conditions.

### Intended Use

The TechOn is designed for automatic welding of roofing membranes made of specific materials. Use the machine only for its intended purposes as detailed in the operating instructions.

### Nozzle Adjustment

Changes to the nozzle adjustment can be made by loosening the adjustment screw as necessary for proper operation.

### FAQ

• **Q: What should I do if the connecting line or plug of the automatic welding machine is damaged?**

A: Stop operating the machine immediately and have the damaged parts repaired or replaced by a qualified technician to ensure safety.

• **Q: Can children use this welding machine?**

A: No, the tool must not be used by children or individuals with limited physical, sensory, or mental abilities. Children should always be supervised to prevent misuse.

### OPERATING MANUAL

### SAFETY



- **Danger to life** when opening the device as live components and connections are exposed. Unplug the device before opening it.



- **Danger of fire and explosion** if the device is used incorrectly. Demonstrate the necessary caution when using the welding machine near combustible materials. Never use the device in inflammable areas.



- **Danger of burns**

Do not touch the hot air device when it is still hot. Let the device cool down.



- Connect the device to a socket with protective earth conductor. Any interruption of the protective earth conductor within or outside the device is dangerous! Only use extension cables with protective earth conductor and a minimum diameter of 2.5 mm<sup>2</sup>.



- The voltage rating stated on the nameplate must correspond to the mains voltage.
  - Max. permissible network impedance 230V:  $Z_{max} < 0.194 \Omega$
  - 400V:  $Z_{max} < 0.299 \Omega$
- Consult your local electricity supply board if necessary.



- For personal protection, the device must be connected to a residual current circuit breaker before using it on construction sites.
- Do not leave the device unobserved. Hot air radiation of the hot air device may ignite combustible materials. Heat may reach inflammable materials that are not visible or obvious.



- The tool must not be used by children or people with limited physically, sensory or mental ability. Children must be supervised to prevent that they play with the tool.



- Protect the device from damp and wet!

## **WARRANTY AND LIABILITY**

Warranty and liability apply from the date of purchase (documented by the invoice/delivery note) according to the currently valid general terms of business of BAK. BAK refuses to honor any warranty for devices which are not in their original condition. BAK devices may never be reconfigured and/or modified.

BAK reserves the right to deny any responsibility if this is ignored. No liability can be assumed by BAK for incorrect installation and/or use as well as natural wear and tear of components (e.g. heating elements).

### **Note**

This operating manual must be available to the installation and operating personnel at all times. Read these operating instructions carefully before installing and using the device.

### **Copyright**

This document must not be disclosed to third parties without the explicit written approval of BAK. Any forms of reproduction or copying and electronic storage are prohibited.

## **INTENDED USE**

The TechOn is an automatic welding machine for overlap welding of roofing membranes made of PE, PVC, TPO, ECB, EPDM, CSPE and bitumen. The machine can also be used in areas close to edges.

Any improper use may result in danger for the operator or third parties or may adversely affect machines and assets.

Only use the automatic welding machine if in technically perfect condition and for the purposes for which they are intended while observing the operating instructions.

The tool can be used for the applications mentioned in the present operating instructions only!

### **Stop operating the automatic welding machine if**

- the connecting line or the plug have been damaged.
- safety installations have been damaged.
- changes occur in the operating state.

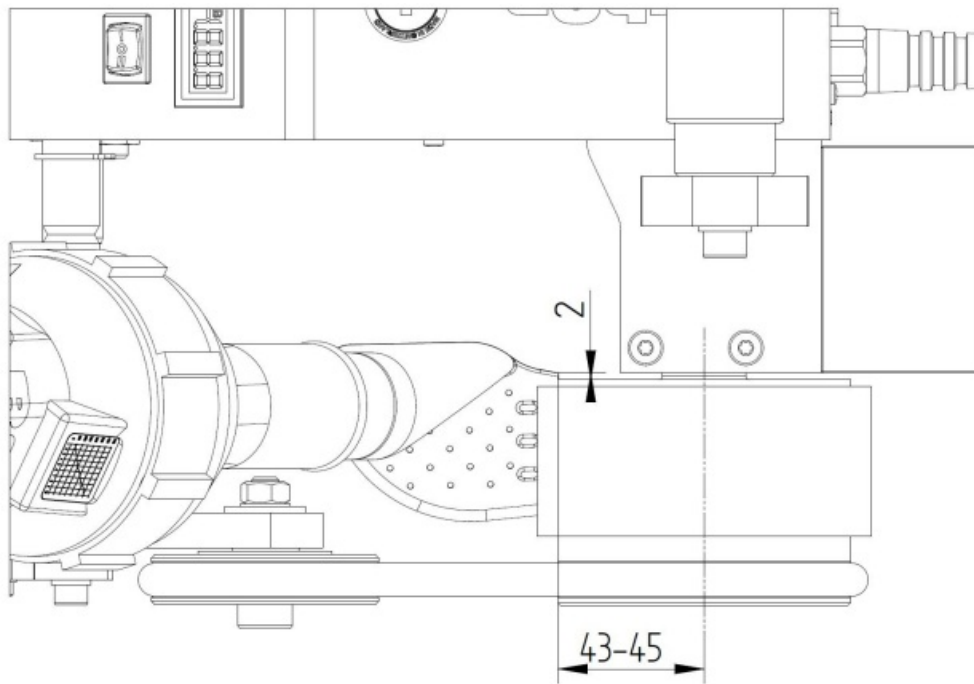
## **EXTENSION CORDS**

When using extension cords the minimum diameter of cables must be observed. Extension cords must be approved and marked for their place of utilization.

## **NOZZLE ADJUSTMENT**

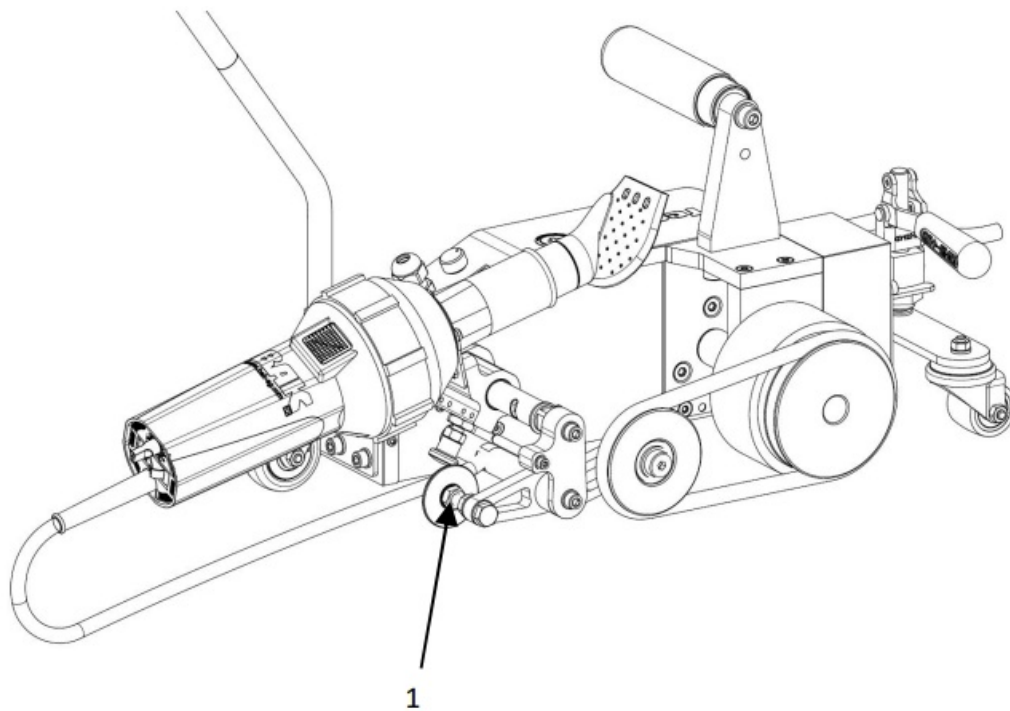
Changes of the nozzle adjustment can be done when loosening the adjustment screw.

For recommended setting use the following sketch:



### GUIDE ROLLER ADJUSTMENT

Fold down the guide wheel (1) and fixate it with the hexagon nut on the thread bar. Outside edge of the overlap, outside edge of the pressure roller and outside edge of the guide roller have to be in one line.

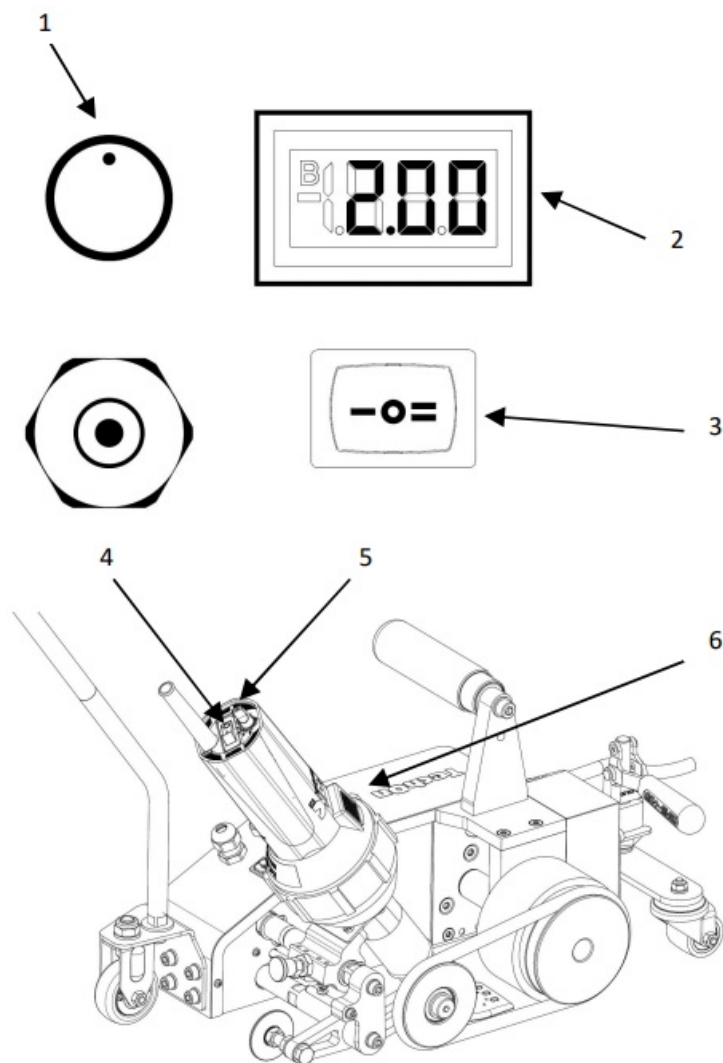


*BAK Technology AG*

### STARTING OF THE WELDING MACHINE

#### **Attention:**

Always do a test welding before the real welding to find out the parameters.



### Control unit

1. Potentiometer speed
2. Display speed
3. Switch hand – automatic
4. Switch heat
5. Potentiometer heat
6. Display temperature (only on digital version)

### Before plugging in the mains please check the following

- Switch heat (4) is on position OFF
- Switch (3) is on position II (Auto)
- The hot air tool has to be in stand-by position

### After this the following process needs to be followed

- Plug in mains
- Adjust the desired heat value (5) with the potentiometer
- Switch on the heat switch (4)

- The machine is now heating up to the desired temperature.
- Adjust the desired welding speed on the potentiometer (1), this will be shown on the display (2).
- The switch for the drive (3) has two functions:
  - On position 1 the drive starts immediately and is running constantly.
  - On position 2 the drive starts after sliding in the nozzle into the material and stops after taking out the nozzle.
- Once the welding is finished the tool needs to cool down. For this put the switch for the heat (4) on position OFF and wait until the tool has cooled down.
- Disconnect the tool from the mains.

## **ASSEMBLY**

### **Attention**

Always plug out the mains before working on the machine!

Changing the heating element (only if the tool is properly cooled down)

- Swing out the hot air blower and lock it
- Loosen four screws on the flange of the nozzle
- Take off the nozzle
- Take off the mica tube (be careful, the mica tube is fragile)
- Take off the gasket ring
- Take off the damaged heating element
- Plug in the new heating element – double check the markings, the wattage and the voltage
- Put on the mica tube
- Put on the gasket ring, position the drillings
- Slide on the nozzle and attach it with the four screws
- Adjust the nozzle according the sketch on page 4

## **MAINTENANCE**

- Clean the nozzle with a wire brush at the end of the welding
- Treat the chains by necessity with chain spray
- After use, always check that the mains cable and the plug are not damaged. Should the mains cable of the tool be damaged, it must be immediately exchanged by the supplier, his customer service or another qualified person to prevent danger.

## **WARNING**

- If the power supply cable gets damaged, it has to be replaced by the manufacturer, its customer service or by a qualified person in order to avoid danger.
- The machine must not be used by personnel (including children) with limited physical, sensory or mental capabilities or lack of experience and/or knowledge, except when supervised by a person who is responsible for their safety or when advised how to use the device by that person.

- Children must be supervised in order to ensure that they do not play with the machine.
- Because of the enormous fire danger, the operating personnel must be specially briefed and regularly instructed.
- Fire can occur if the machine is not used carefully.
- Do not leave the machine unobserved while it is in operation.
- Demonstrate the necessary caution when operating the device near inflammable materials. Do not operate on the same surface for longer periods of time.
- A fire extinguisher must always be within reach in the work area.
- The machine must not be used in explosive atmospheres.
- Heat may reach inflammable materials that are not readily visible.
- There is a very significant risk of fire when the machine stops because of any disturbance and the hot air device is still running (max. temperature 600 °C). Therefore, special attention should be placed on the subsurface and the material to be processed.
- The welding machine must not be used on inflammable surfaces (e. g. wooden roofs and floors made of wood)
- The machine bears the protection mark IP20 and must therefore be protected from damp and rain.
- When using the machine on roofs and tables, it could fall down due to its automatic drive system. In order to avoid a fall, necessary precautions must be taken.

## **OPERATIONAL SAFETY**

The automatic welding machine is manufactured in accordance with the recognized rules of technology. The latest safety standards have been observed to eliminate work related risks to the life and health of the operating personnel when the machine is used in accordance with its intended use.

## **DANGER ZONE**

The main danger zone of the automatic welding machine is the nozzle which can heat up to temperatures of 620°C. It is recommended to wear heat protective gloves. While sliding in the nozzle bruises can occur.

## **ASSISTANCE AND SUPPORT**

The BAK group and its authorized service centers offer free support and assistance in the area of applications technology. Our specialists will be pleased to help you.

Customer service and orders:

- BAK Technology AG
- Industriestrasse 6
- CH-6064 Kerns/Switzerland
- **Telephone:** (0041) 041 661 22 50
- **Telefax:** (0041) 041 661 22 51
- **E-Mail:** [info@bak-ag.com](mailto:info@bak-ag.com)

Get the best results by using BAK-accessories and spare parts.

Please refer to our brochures for additional information.

## **SERVICE AND REPAIR**

Repairs have to be carried out exclusively by BAK authorized service centers.

## **SHIPPING**



For repairs, please return the machine appropriately packed for transport to your next BAK service center.

### **Shipping to CUSTOMER ACCOUNT**

Technical modifications reserved. In case of doubt, consultation with BAK is required. Images and drawings may deviate from the original. Changes reserved.

## **TRANSPORT – HANDLING – STORAGE**

### **Transport:**

The automatic welding machine is packed appropriately and must be protected from moisture.

### **Handling:**

The shipment must be checked if complete and for transport damage. In the event of transport damage, the defect must be confirmed in writing at the time of the delivery by the carrier. The seller must be promptly informed in writing!

### **Storage:**

In the case of temporary storage, the welding machine should be kept packed and must be protected from moisture. In the case of damage resulting from improper storage, no warranty claim will be honored.


## **DISPOSAL**

Power tools, accessories and packaging should be sorted for environmental friendly recycling.

Do not dispose power tools together with household waste! Only EU countries: According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its incorporation into national law, power tools that are no longer operational must be separately collected and sent to be environmental friendly recycled.



## **TECHNICAL DATA**

		<b>TechOn</b>
<b>Voltage</b>	<b>V</b>	120/230
<b>Frequency</b>	<b>Hz</b>	50/60
<b>Nominal power</b> <b>Power consumption max.</b>	<b>W</b>	1700/2100
<b>Temperature</b>	<b>°C</b>	20 – 600
<b>Drive</b>	<b>m/min</b>	0.5-4
<b>Dimensions</b>	<b>mm (L x B x H)</b>	450x230x320
<b>Weight</b>	<b>kg</b>	17
<b>Conformity symbol</b>	<b>CE</b>	
<b>Protection type I</b> 		
Other voltages on request.		

## CE/TechOn

### Declaration of conformity

BAK Technology AG, CH-6064 Kerns/Switzerland


declares that the tool described below, released by us fulfils the provisions of the following EC directive(s).

- Description of tool: Welding machine
- Type: TechOn
- EC directives: 2014/30/EU, 2014/35/EU, 2006/42/EC, 2011/65/EU
- Harmonized standards: EN 55014-1:2017 + A11:2020, EN 55014-2:1997+A1:2001+A2:2008, EN 61000-3-2:2014,
- EN 61000-3-3:2013, EN 60335-1:2012 + AC:2014 + A11:2014 + A13:2017 + A1:2019 +
- A2:2019 + A14:2019 + A2:2019 + A15:2021, EN 60335-2-45:2002 + A1:2008 + A2:2012,
- EN 62233:2008, EN 63000:2019-05

Kerns, 10.01.2024 Bruno Zurmühle, CEO



## Documents / Resources

	<p><b>BAK 6600513 Automatic Welding Machine Type TechOn</b> [pdf] Instruction Manual  6600513 Automatic Welding Machine Type TechOn, 6600513, Automatic Welding Machine Type TechOn, Welding Machine Type TechOn, Machine Type TechOn, Type TechOn</p>
---	--

## References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.