

# Working Instruction Translation

## WIDOS hand-held heating tool



H0090E / H0090T  
H0120E / H0120T  
H0200E / H0200T



H0150VE / H0150VT  
H0250VE / H0250VT



Keep for further use!

Type: WIDOS hand-held heating tool  
(size see type plate)

Serial number / year of construction: see type plate

### Customer entries

Inventory-no.:

Place of working:

### Order of spare parts and after sales service:

#### Address of manufacturer

#### WIDOS

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## Purpose of the document

These working instructions give you information about all important questions which refer to the construction and the safe working of your hand-held heating tool.

Just as we are, you are obliged to engage in these working instructions, as well.

Not only to run your hand-held heating tool economically but also to avoid damages and injuries.

Should questions arise, contact our service team in the factory or in our subsidiary companies.

We will help you with pleasure.

According to our interest to continuously improve our products and working instructions, we kindly ask you to inform us about problems and defects which occur in exercise.

Thank you.

## Structure of the working instructions

This manual is arranged in chapters, which belong to the different using phases of the hand-held heating tool. Therefore the searched information can be easily found.

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# 1. Description of product

The chapter gives important basic information about the product and its prescribed use.  
All technical details of the hand-held heating tool are put together as a general arrangement.

## 1.1. Usage and purpose-oriented use

The WIDOS hand-held heating elements **H0090E / T ; H0120E / T ; H0200E / T ; H0150VE / VT ; H0250VE / VT** are made for heating element butt welding of pipes and fittings out of PE, PP and PVDF.

The weldable diameters of the **hand-held heating elements** are as follows:

	<b>DA</b>
H0090E / T	20 - 90
H0120E / T	20 - 120
H0200E / T	20- 200
H0150VE / VT	20 - 150
H0250VE / VT	20 - 250

## 1.2. Safety measures

In case of wrong use, wrong operation or wrong maintenance the heating element itself or products being in the surrounding can be damaged or destroyed.

Persons being in the endangered area may be injured.

Therefore these working instructions have to be thoroughly read and the corresponding safety advices must necessarily be adhered to.

## 1.3. Conformity

The hand-held heating tool corresponds in its construction to the valid recommendations of the European Community as well as to the according European standard specifications.

The development, manufacturing and mounting of the hand-held heating tool were made very carefully.

## 1.4. Marking of the product

The product is marked by a type label.

It contains the type, the serial number and the year of construction of the heating element.

## 1.5. Technical Data

### 1.5.1. Technical Data H0090

Power:	315 Watt
Current:	1,4 A ( $\pm 10\%$ )
Voltage:	230 V ( $\pm 10\%$ )
Frequency:	50 Hz
Surface:	anti-stick coated
Attached elements:	<ul style="list-style-type: none"> <li>- electronic temperature control</li> <li>- control lamp</li> <li>- connecting cable with plug</li> </ul>

### 1.5.2. Technical Data H0120

Power:	500 Watt
Current:	2,7 A ( $\pm 10\%$ )
Voltage:	230 V ( $\pm 10\%$ )
Frequency:	50 Hz
Surface:	anti-stick coated
Attached elements:	<ul style="list-style-type: none"> <li>- electronic temperature control</li> <li>- control lamp</li> <li>- connecting cable with plug</li> </ul>

### 1.5.3. Technical Data H0200

Power:	800 Watt	800 Watt
Current:	3,6 A ( $\pm 10\%$ )	7 A
Voltage:	230 V ( $\pm 10\%$ )	110 V
Frequency:	50 Hz	60 Hz
Surface:	anti-stick coated	
Attached elements:	<ul style="list-style-type: none"> <li>- electronic temperature control</li> <li>- control lamp</li> <li>- connecting cable with plug</li> </ul>	

**1.5.4. Technical Data H0150**

Power:	750 Watt
Current:	3,3 A ( $\pm 10\%$ )
Voltage:	230 V ( $\pm 10\%$ )
Frequency:	50 Hz
Surface:	anti-stick coated
Attached elements:	<ul style="list-style-type: none"><li>- electronic temperature control</li><li>- control lamp</li><li>- connecting cable with plug</li></ul>

**1.5.5. Technical Data H0250**

Power:	2,0 kW
Current:	8,7 A ( $\pm 10\%$ )
Voltage:	230 V ( $\pm 10\%$ )
Frequenz:	50 Hz
Surface:	anti-stick coated
Attached elements:	<ul style="list-style-type: none"><li>- electronic temperature control</li><li>- on-/off –switch with control lamp</li><li>- connecting cable with plug</li></ul>

## 2. Safety rules

The base for the safe handling and the fault-free operation of this heating element is the knowledge of the basic safety indications and rules.

These working instructions contain the most important indications to run the heating element safely. The safety indications are to be followed by all persons working with the heating element.

### 2.1. Explanation of the symbols and indications

In the working instructions, following denominations and signs are used for dangers:



This symbol gives important indications for the proper use of the hand-held heating tool.

- The disrespect of these indications may conduct to malfunctions and damages on the hand-held heating tool or on goods in the surrounding.



This symbol means a possibly danger for the life and the health of persons.

- The disrespect of these indications may have heavy consequences for the health.



This symbol means a possible dangerous situation due to hot surfaces.

- The disrespect of these indications may conduct to heavy burns, respectively to self-ignition or even fire.

**The regulations for the prevention of accidents are valid (UVV).**

### 2.2. Obligations of the owner

The owner is obliged only to let persons work with the hand-held heating tool who

- know about basic safety and accident prevention rules and are instructed in the handling of the hand-held heating tool, as well as who
- have read and understood the safety chapter of this manual and certify this by their signature.

***The safety-conscious working of the staff has to be checked in regular intervals.***

### 2.3. Obligations of the worker

All persons who are to work with the hand-held heating tool are obliged before working:

- to follow the basic safety and accident protection rules.
- to have read and understood the safety chapter and the warnings in this manual and to confirm by their signature that they have well understood them.
- to inform themselves about the functions of the hand-held heating tool before using it.

### 2.4. Measures of organisation

- All equipment required for personal safety is to be provided by the owner.
- All available safety equipment is to be inspected regularly.



## 2.5. Information about safety precautions

- The working instructions have to be permanently kept at the place of use of the hand-held heating tool.
- They are to be at the operator's disposal at any time and without much effort.
- In addition to the manual, the common valid and the local accident protection rules and regulations for the environmental protection must be available and followed.
- All safety and danger indications on the hand-held heating element have to be in a clear readable condition.
- Every time the hand-held heating element changes hands or is being rent to third persons, the working instructions are to be sent along with and their importance is to be emphasized.

## 2.6. Instructions for the staff

- Only skilled and trained persons are allowed to work with the hand-held heating element.
- It must be clearly defined who is responsible for transport and starting the operation, setting, tooling, operation, maintenance, inspection and repair.
- A person who is being trained may only work with the hand-held heating element under supervision of an experienced person.

## 2.7. Specific dangers

### 2.7.1. Danger of combustion by hand-held heating tool and welding area



You can burn yourself, inflammable materials can be ignited!

The hand-held heating tool is heated up to more that **250° C!**

- Do not leave the hand-held heating tool unsupervised.
- Do not touch the surfaces of the hand-held heating tool.
- Take enough safety distance to inflammable materials.
- Do wear safety gloves.
- When cleaning the hot hand-held heating tool with detergents (e.g. with PE cleaner) there is the danger of inflammation. For this reason, please take care that the inflammation point is above the actual temperature of the hand-held heating tool. Do not bring any fire sources (e.g. cigarettes) close thereto.

### 2.7.2. Danger of the electric energy



Only skilled persons are allowed to work at electrical appliances.

- The electrical equipment of the hand-held heating tool has to be checked regularly. Loose connections and damaged cables have to be replaced or repaired immediately
- Make sure that no person must step over the wire of hand-held heating tool.

## 2.8. Structural modifications on the hand-held heating tool

- No modifications, extensions or reconstructions may be made on the hand-held heating tool without permission of the manufacturer.
- Parts that are not in perfect condition are to be replaced immediately.
- Only use original **WIDOS** spare and wear parts.

## 2.9. Warranty and liability

Fundamentally our "General Sales and Delivery Conditions" are valid.

They are at the owner's disposal latest when signing the contract.

Guarantee and liability demands referring to personal injuries or damages on objects are excluded if they are caused by one or several of the following reasons:

- not using the hand-held heating tool according to the prescriptions
- inexpert transport, mounting, starting, operating, and maintenance of the hand-held heating tool
- ignoring the information given in this manual
- structural modifications on the hand-held heating tool without permission
- unsatisfactory checking of parts of the hand-held heating tool which are worn out
- repairs performed in an inexpert way
- in case of catastrophes and force majeure.

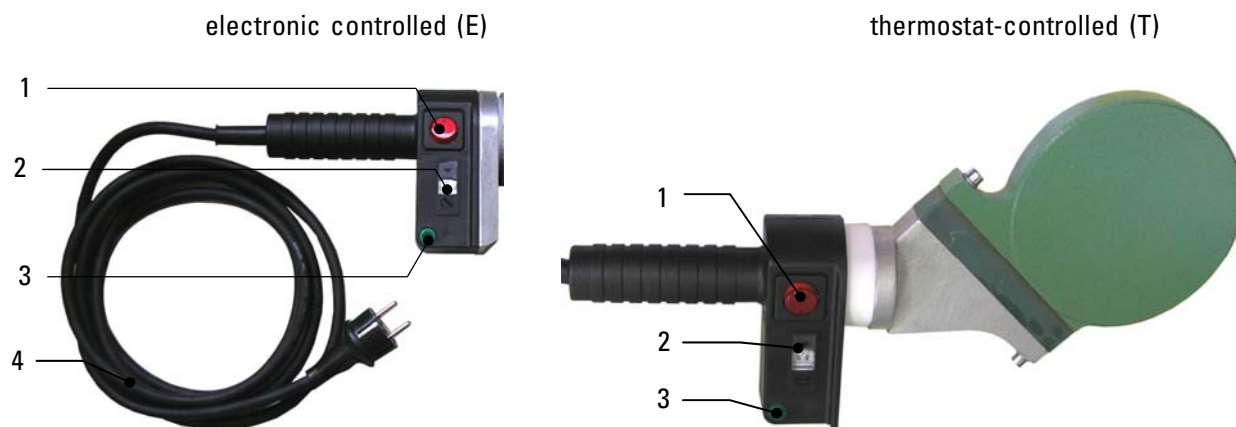
## 3. Elements at the hand-held heating tool

### 3.1. Elements at H0090



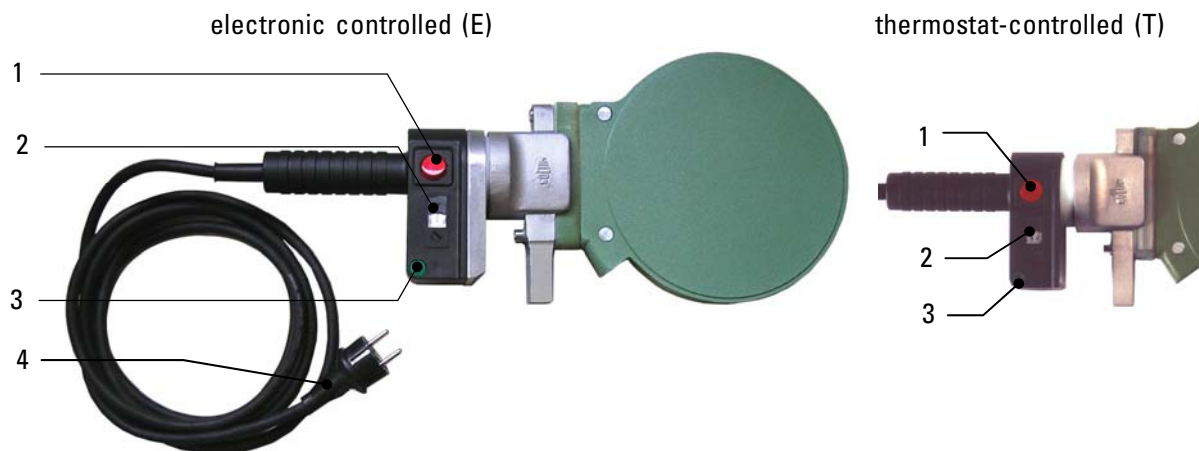
<i>No.</i>	<i>Denomination</i>	<i>Function</i>
1	Connecting cable with plug	- Connection to local power supply
2	Control dial	- Temperature adjustment for the heating element
3	Control lamp, red	<p>- <b>Upon electronic control:</b></p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Blinking:</b> The heating tool temperature is maintained by a certain pulse-position ratio.</li> <li>• <b>Off:</b> Signals that the heating tool is not heated up at the moment or that it cools down.</li> </ul> <p>- <b>Upon thermostatic control:</b></p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Off:</b> Signals that the heating tool is not heated up at the moment or that it cools down.</li> </ul>

### 3.2. Elements at H0120 E / T



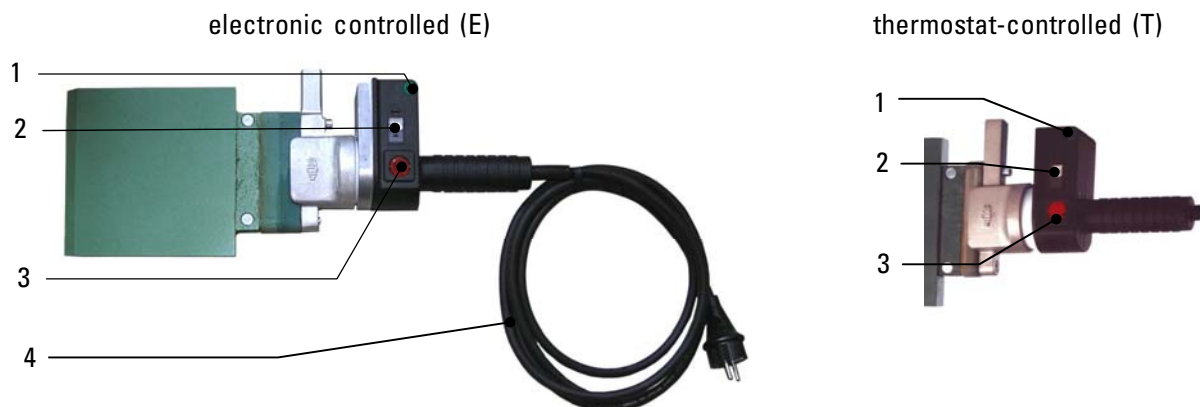
No.	Denomination	Function
1	Switch on/off with lamp, red	- As soon as the heating tool is switched on, it is heated up.
2	Control dial	- Temperature adjustment for the heating element
3	Control lamp, green	- <b>Upon electronic control:</b> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Blinking:</b> The heating tool temperature is maintained by a certain pulse-position ratio.</li> <li>• <b>Off:</b> Signalizes that the heating tool is not heated up at the moment or that it cools down.</li> </ul> - <b>Upon thermostatic control:</b> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Off:</b> Signalizes that the heating tool is not heated up at the moment or that it cools down.</li> </ul>
4	Connecting cable with plug	- Connection to local power supply

### 3.3. Elements at H0200 E /T



No.	Denomination	Function
1	Switch on/off with lamp, red	- As soon as the heating tool is switched on, it is heated up.
2	Control dial	- Temperature adjustment for the heating element
3	Control lamp, green	<p>- <b>Upon electronic control:</b></p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Blinking:</b> The heating tool temperature is maintained by a certain pulse-position ratio.</li> <li>• <b>Off:</b> Signals that the heating tool is not heated up at the moment or that it cools down.</li> </ul> <p>- <b>Upon thermostatic control:</b></p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Off:</b> Signals that the heating tool is not heated up at the moment or that it cools down.</li> </ul>
4	Connecting cable with plug	- Connection to local power supply

### 3.4. Elements at H0150 VE / VT



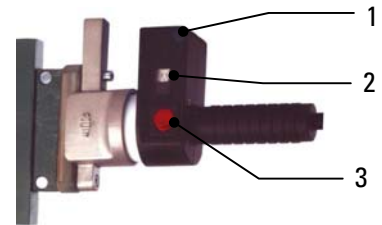
No.	Denomination	Function
1	Control lamp, green	<p>- <b>Upon electronic control:</b></p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Blinking:</b> The heating tool temperature is maintained by a certain pulse-position ratio.</li> <li>• <b>Off:</b> Signalizes that the heating tool is not heated up at the moment or that it cools down.</li> </ul> <p>- <b>Upon thermostatic control:</b></p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Off:</b> Signalizes that the heating tool is not heated up at the moment or that it cools down.</li> </ul>
2	Control dial	- Temperature adjustment for the heating element
3	Switch on/off with lamp, red	- As soon as the heating tool is switched on, it is heated up.
4	Connecting cable with plug	- Connection to local power supply

### 3.5. Elements at H0250 VE /VT

electronic controlled (E)

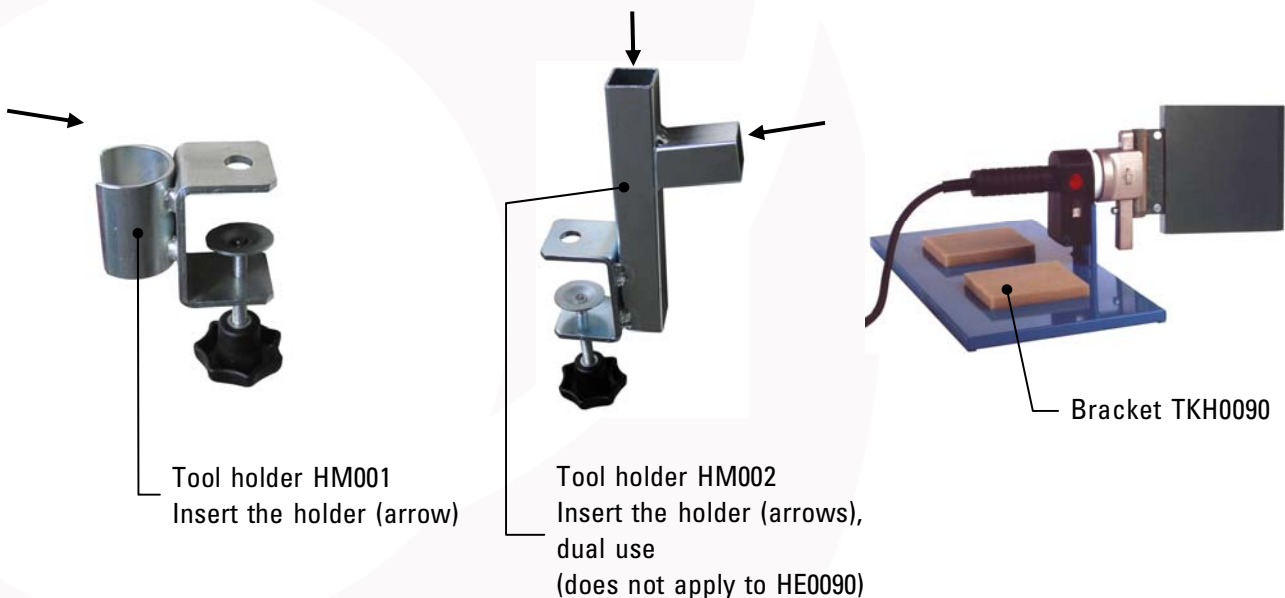


thermostat-controlled (T)



No.	Denomination	Function
1	Control lamp, green	<p>- Upon electronic control:</p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Blinking:</b> The heating tool temperature is maintained by a certain pulse-position ratio.</li> <li>• <b>Off:</b> Signalizes that the heating tool is not heated up at the moment or that it cools down.</li> </ul> <p>- Upon thermostatic control:</p> <ul style="list-style-type: none"> <li>• <b>On:</b> signals that the heating tool is heated up at the moment. The desired temperature has not been reached yet.</li> <li>• <b>Off:</b> Signalizes that the heating tool is not heated up at the moment or that it cools down.</li> </ul>
2	Control dial	- Temperature adjustment for the heating element
3	Switch on/off with lamp, red	- As soon as the heating tool is switched on, it is heated up.
4	Connecting cable with plug	- Connection to local power supply

### 3.6. Accessories (option)



## 4. Starting and operating

The instructions of this chapter are supposed to initiate in the operation of the hand-held heating tool and lead during the appropriate starting of the hand-held heating tool. This includes:

- the safe operation of the hand-held heating tool
- using all the possible options of the hand-held heating tool
- economic operation of the hand-held heating tool.

### 4.1. Starting

The hand-held heating tool may only be operated by initiated and authorized persons. For the qualification, a plastic welding exam can be taken according to DVS and DVGW.

- In situations of danger for persons and the hand-held heating tool, the mains plug has to be unplugged immediately.
- After completion of the welding work and during breaks the hand-held heating tool has to be switched off. Further take care that no unauthorized person has access.
- Protect the hand-held heating tool from wetness and humidity!
- For a safe storage resp. transport you should store the device within a transport case.
- According to VDE 0100, the use on construction sites is only allowed with a power distributor with a FI-security protective switch.
- Necessarily observe the safety regulations!

### 4.2. Preparation of the welding

- A stop-watch must be available for recording the actual times for heating and cooling.
- The joining surface of the pipes must be treated according to the indications of the manufacturers for semi-finished products.
- The hand-held heating tool surfaces are to be clean and, above all, free from grease.
- Therefore they are to be cleaned with non-fraying paper and detergent (e.g. PE cleaner) before every welding or if they are dirty.

The anti-stick coating of the hand-held heating tool is to be undamaged in the working area.

- Take into account the surrounding conditions:
  - the welding may not be performed under direct sun rays influence.
- If the surrounding temperature is under 5 °C / 41 °F, measures have to be taken:
  - preheat the pipe ends if necessary.
- In addition, take measures against rain, wind and dust.
- Protect the hand-held heating tool from wetness and humidity!



### 4.3. Welding process

**The respectively valid welding prescriptions (ISO / CEN / DVS...) are to be basically followed.**

- Wear safety gloves as protection against combustion!
- Insert the heating element with the handle e.g. into the optional bracket (accessory for transport case) or into an optional tool holder (chapter: 0).
- Connect the mains plug to the power supply (observe voltage). The temperature for both versions is adjusted by the adjusting screw: „T“ (thermostatic) and „E“ (electronic).
- Activate the heating element; as soon as the required temperature has been reached, the green control lamp is showing the following:
  - Upon version „T“ the control lamp extinguishes.
  - Upon version „E“ it will start to blink.
- Press the pipes onto the hand-held heating element and keep fixed there as long as the heating time lasts.
- After the heating time has elapsed, detach the pipes from the heating element and press together without mismatch.
- Keep the compressed pipes fixed and let them cool down afterwards.
- You may only strain the welding connection by further laying works after the cooling time has elapsed.

## 5. Maintenance / storage / transport

### 5.1. General

- Replace damaged parts immediately, be particularly careful with electrical parts - dirt and wetness are very good current conductors.
- Only use original **WIDOS spare parts**.



Prescribed maintenance and inspection works should be performed in time. The DVS gives the advice of inspection works after 1 year.

For tools with an especially high usage percentage the testing cycle should be shortened.

The works should be performed at the WIDOS GmbH company or by an authorized partner.

- Regularly check the coating of the heating element; it must be undamaged in the welding area.

### 5.2. Storage

The heating element should be stored in a way that the coating may not be damaged.

### 5.3. Transport

Pack the heating element for the transport in a way that the coating may not be damaged, or put it into the transport case (option).

### 5.4. Disposal



At the end of its life time, the hand-held heating tool and the wear parts have to be disposed of properly and non-polluting, and in accordance with the national laws of waste disposal.

## 6. Spare parts lists

### 6.1. Hand-held heating tool H0090 E /T

#### 6.1.1. Hand-held heating tool, electronically controlled (E)

#### 6.1.2. Hand-held heating tool, thermostat-controlled (T)



You can access our website and select our spare parts lists via the qr code shown here. Select "Hand-held heating tool H0090"

### 6.2. Hand-held heating tool H0120 E /T

#### 6.2.1. Hand-held heating tool, electronically controlled (E)

#### 6.2.2. Hand-held heating tool, thermostat-controlled (T)



You can access our website and select our spare parts lists via the qr code shown here. Select "Hand-held heating tool H0120"

### 6.3. Hand-held heating tool H0200 E /T

#### 6.3.1. Hand-held heating tool, electronically controlled (E)

#### 6.3.2. Hand-held heating tool, thermostat-controlled (T)



You can access our website and select our spare parts lists via the qr code shown here. Select "Hand-held heating tool H0200"

## **6.4. Hand-held heating tool H0150 VE /VT**

### **6.4.1. Hand-held heating tool, electronically controlled (E)**

### **6.4.2. Hand-held heating tool, thermostat-controlled (T)**



You can access our website and select our spare parts lists via the qr code shown here. Select "Hand-held heating tool H0150"

## **6.5. Hand-held heating tool H0250 VE /VT**

### **6.5.1. Hand-held heating tool, electronically controlled (E)**

### **6.5.2. Hand-held heating tool, thermostat-controlled (T)**



You can access our website and select our spare parts lists via the qr code shown here. Select "Hand-held heating tool H0250"

## 7. Declaration of conformity

Issuing the declaration of conformity with regard to complying with the basic requirements and assembling the technical documentation is in the sole responsibility of:	
Manufacturer / Installation company:	WIDOS Wilhelm Dommer Söhne GmbH
Address:	WIDOS GmbH Einsteinstr. 5 D-71254 Ditzingen

Subject of the present declaration is the following device:	
Product name:	<b>Hand-held heating tool</b>
Model name:	WIDOS H0090E / T; WIDOS H0120E / T ; WIDOS H0200E / T ; WIDOS H0150VE / VT ; WIDOS H0250VE / VT

For the stated device we herewith declare that it complies with the <b>basic requirements</b> stipulated in the following designated harmonizing regulations:
<b>in the sense of the EC guideline EC-Machinery Directive 2006/42/EC</b>

Statement of the relevant <b>harmonizing standards</b> referred to, or indication of the specifications that the conformity is declared for:	
Standard	Title
DIN EN ISO 12100	Safety of machines, basic concepts, general layout guidelines
DIN EN 60204.1	Electric equipment of industrial machines
DIN EN 60555, DIN EN 50082, DIN EN 55014	Electro-magnetic resistance

Entitled to compile the technical documentation:	
Name:	WIDOS Wilhelm Dommer Söhne GmbH
Address:	Einsteinstr. 5 D-71254 Ditzingen

Signed on behalf of the company:	
Name, first name:	Dommer, Martin
Function:	Technical director



Heimerdingen, 06.06.2019

Place / Date

Legally binding signature

This declaration is to certify the compliance with the mentioned harmonizing regulations, however does not include any assurance of properties.