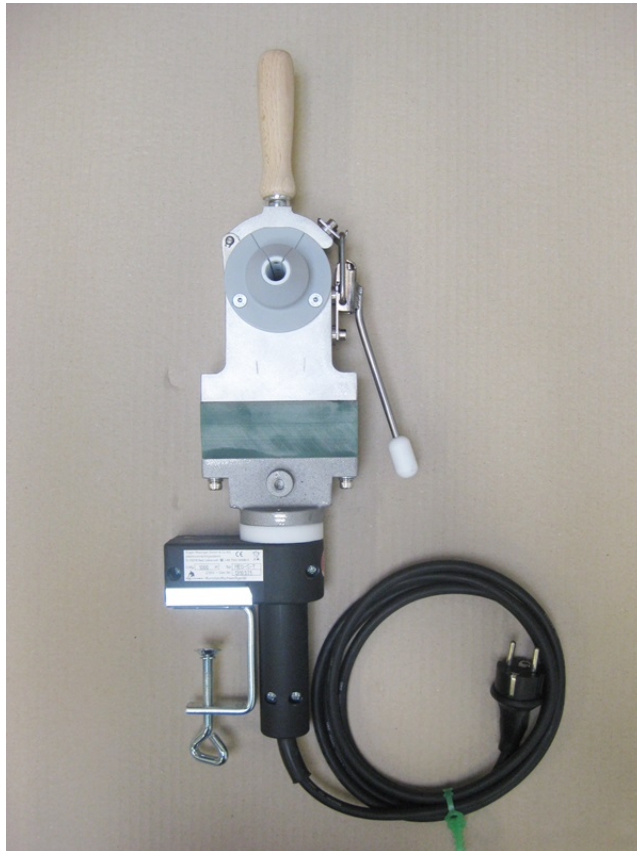


# Operating manual

## Socket welding unit

### Type MEG-S- T



*Distributor:*

***Hs Pipe Control AB***

*Ekvägen 5B*

*732 48 Arboga*

*Sweden*

*Phone +46 70-6800674*

*E-mail [hs@hspsc.se](mailto:hs@hspsc.se) [info@hspsc.se](mailto:info@hspsc.se)*

*[www.hspipecontrol.se](http://www.hspipecontrol.se)*

---

# *Table of contents*

---

<b>1. Important basic information</b> .....	<b>4</b>
1.1 Operator evaluation.....	4
1.2 Safety symbols.....	4
1.3 Legal notice.....	5
1.4 Labelling on the manual welding unit.....	5
<b>2. Basic safety instructions</b> .....	<b>6</b>
2.1 Follow the operating manual.....	6
2.2 Usage according to regulations.....	6
2.3 Improper usage.....	7
2.4 Personnel requirements.....	7
2.5 Informal safety measures.....	7
2.6 Properly functioning of protective devices.....	8
2.7 Organizational measures.....	8
2.8 Other hazards.....	8
2.8.1 Fire hazard.....	8
2.8.2 Electrical hazards.....	9
2.8.3 Heat hazards.....	9
2.8.4 Environmental hazards.....	9
<b>3. Technical data</b> .....	<b>10</b>
3.1 General information.....	10
3.2 Delivery contents.....	10
3.3 Dimensions and weight.....	10
3.4 Workpieces.....	10
3.5 Electrical connection.....	10
3.6 Emissions.....	11
<b>4. Setup and function</b> .....	<b>12</b>
4.1 Overview.....	12
4.2 Functionality.....	13
<b>5. Delivery, in-company transport and storage</b> .....	<b>14</b>
5.1 Delivery.....	14
5.2 Environmental conditions for storage and transport.....	14
<b>6. Setup and activation</b> .....	<b>15</b>
6.1 Connect to electrical power supply.....	15
6.2 Initial operation.....	15
<b>7. Operation</b> .....	<b>16</b>

---

---

7.1 Temperature control.....	16
7.2 Welding operation.....	16
<b>8. Finding and repairing malfunctions.....</b>	<b>18</b>
8.1 Repair electrical malfunctions.....	18
8.2 Guarantee.....	18
<b>9. Maintenance.....</b>	<b>19</b>
9.1 Cleaning the machine.....	20
<b>10. Dismantling and disposal.....</b>	<b>21</b>
10.1 Deactivation.....	21
10.2 Final shutdown.....	21
10.3 Disposal.....	21
<b>11. Annex.....</b>	<b>22</b>
11.1 EC Conformity Declaration.....	22

# 1. Important basic information

## 1.1 Operator evaluation

Dear operator,

Our operating instructions are updated on a regular basis. Your suggestions for improvement help us create an increasingly user-friendly operating manual. Please use the contact form for your suggestions (see Chap. 1 on p. 1).

## 1.2 Safety symbols

This operating manual uses the following designations and symbols for hazards:



### ***Danger!***

This symbol refers to an *immediate danger to the life and health* of a person. Disregarding such notices results in severe harm to a person and may even cause fatal injuries.



### ***Warning!***

This symbol refers to a *potentially immediate danger to the life and health* of a person. Disregarding such notices *may* result in severe harm to a person and may even cause fatal injuries.



### ***Caution!***

This symbol refers to a *potentially harmful situation*. Disregarding such notices may result in minor harm to a person or material damage.



### ***Attention!***

This symbol gives important information for properly handling the machine. Disregarding such notices may result in malfunctions or material damage *of the machine or cause damage to the environment*.



### Information




This symbol provides *instructions* and particularly useful information. Such information helps you use all functions of your machine optimally.

## 1.3 Legal notice

Without explicit, written authorisation of the company Eugen Riexinger GmbH & Co. KG the operating manual may not be electronically or mechanically copied, distributed, changed, forwarded, translated into another language nor used in any other way.

The company Eugen Riexinger GmbH & Co. KG is not liable for damages resulting from non- or partial compliance with the operating manual.

## 1.4 Labelling on the manual welding unit

Symbol	Attachment location	Meaning
TYPE LABEL 	Handle	Type label and CE marking of the manual welding unit
	Handle	Do not use equipment when wet or damp
	Handle	Test badge according to DGUV Roule 3

## 2. Basic safety instructions

### 2.1 Follow the operating manual

- Carefully read this operating manual before using the machine for the first time.
- Familiarize yourself well with all safety instructions contained therein and observe these at all times when working with the machine.
- Always keep the operating instructions on hand near the machine.
- If the machine is transported to a new location, give these instructions to the new operator.
- In case of non-compliance the Eugen Riexinger GmbH & Co. KG disclaims any liability.

### 2.2 Usage according to regulations

The socket welding unit is exclusively designed for socket welding of plastics of PE, PP and PVDF.

Proper usage also includes:

- Observing all guidelines from the operating manual and
- Adhering to maintenance intervals

The socket welding unit is exclusively intended for usage in industry, craft and trade. It is not intended for private usage.

The welding machine is designed and built for manual applications. It is not designed for mechanical applications.



#### ***Information***

For the use and the possible installation of the welding unit in a machine, it is necessary to consult the Eugen Riexinger GmbH & Co. KG. Without approval by the manufacturer the guarantee becomes void.

## 2.3 Improper usage

The socket welding unit may not be -

- operated when malfunction and defects have not been repaired;
- modified or changed;
- be operated outdoors if it is not adequately protected from rain or moisture.

Furthermore, it is also not permissible to -

- modify the performance;
- welding materials that are not intended for the socket welding unit
- work on the machine without the personal protective gear prescribed in this operating manual.
- Work on the machine under the influence of alcohol, drugs or medication.

## 2.4 Personnel requirements

The socket welding unit may only be operated by trained personnel whom the operator has authorised.

The operator must make the instructions available to the operator and make sure that he has read and understood the operating instructions.

Personnel who are still learning how to work with the machine or apprentices may only operate it under the constant supervision of an instructed person.

The minimum age for operators is 16 years.

In his working area, the operator is responsible in relation to third parties.



### ***Warning!***

#### ***Electrocution hazard!***

Only professional electricians may perform work on the machine's electrical equipment according to the electro-technological regulations.

## 2.5 Informal safety measures

- Always keep the operating instructions on hand near the machine.
- In addition to this operating manual, adhere to general and local accident prevention- and environmental protection regulations.
- Ensure that all safety instructions and danger notices attached to the machine (see Chap. 1.4 on p. 5) are legible and replace them if necessary.

## 2.6 Properly functioning of protective devices

The special range for the unit is not allowed to equip the hand welder with all conventional protective devices. Therefore, ensure great care and the optimum conditions when handling the welding device.

*THERE ARE HAZARDS IN EACH COMPONENT OF WELDING UNIT!*

## 2.7 Organizational measures

The proprietor of the socket welding unit is obligated to provide the required personal protective equipment. The personal protective equipment includes:

- Work clothing
- Protective gloves

Do not wear loose clothing, bracelets, necklaces or other items that could get caught in the moving parts of the machine.

## 2.8 Other hazards

### 2.8.1 Fire hazard



***Warning!***

***Fire hazard due to plastic waste***

- Keep ignition sources away from the work area.
- Do not smoke in the work area.
- Ensure that no open fire ignites in the work area.

### Fire protection

- Never use water to extinguish a fire source; always use sand, carbon dioxide or powder.
- It is imperative to turn off the machine by disconnecting the power supply before extinguishing a fire source.



## 2.8.2 Electrical hazards



### ***Warning!***

***Directly or indirectly touching live parts may result in electrocution.***

- Pull the power plug or deactivate the power supply before working on electrical components.
  - Electrical components are not protected against spray water. The proprietor must implement appropriate protective measures.
- 
- Connect socket welding unit with power supply only when unit is switched off and only connect to the mains voltage specified on the type label.
  - When used outdoors (eg construction sites), the sockets must be with residual current circuit breakers (RCD) fitted. Protect hand welding unit from moisture.
  - Keep the cable away from the heat range of the heater. Also protect against oil and sharp edges.
  - Don't use cable to carry hand welding unit
  - Never pull the plug on the power cable
  - Replace damaged mains cable immediately. Avoid damage to the cabinet: The insulation may be destroyed.

## 2.8.3 Heat hazards



### ***Attention!***

***Danger of burns from hot heating element!***

Wear protective gloves during repair work or allow heater to cool down before touching it.

## 2.8.4 Environmental hazards



### ***Attention!***

***Plastic waste and used saw bands contaminate the environment!***

Dispose of all shavings, plastic waste and used saw bands according to locally applicable legal stipulations.

## 3. Technical data

### 3.1 General information

#### Machine construction

- Robust hand welding unit
- Heating element

#### Operation

- manual welding
- temperatur control at heater

### 3.2 Delivery contents

The delivery contents consist of:

- basic device with heater
- temperatur control at handle
- 1 operating manual

### 3.3 Dimensions and weight

	MEG-S-T
Heater bore	Ø 20 mm
Heater Teflon bushing	Ø 14/20
Weight ca.	9 kg

### 3.4 Workpieces

Plastics from PE, PP and PVDF

### 3.5 Electrical connection

	MEG-S-T
Operating Voltage	230 V
Frequency	50/60 Hz
Electrical protection	5 A
Power rating	1000 Watt

## 3.6 Emissions

### EMC

The socket welding unit complies with protection requirements in regard to interference immunity according to EN 61000-6-2:2005 (Interference immunity for industrial areas).

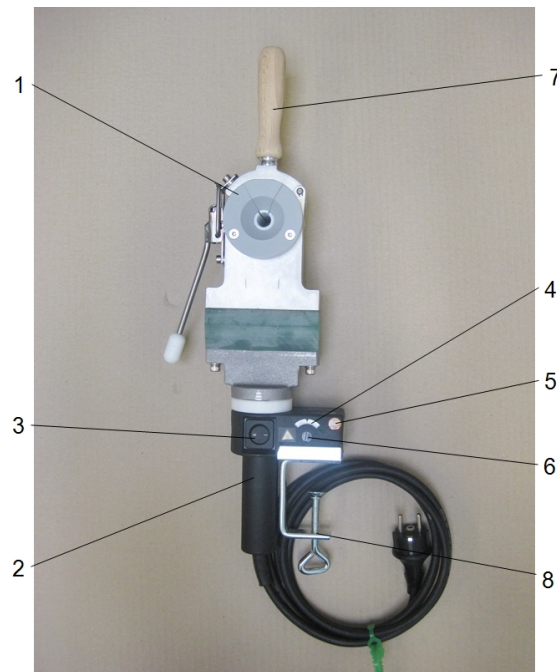
The socket welding unit complies with protection requirements in regard to interference emission according to EN 61000-6-3:2007 (Interference emission for living-, commercial- and trade areas as well as for small business).

Therefore, the machine may be operated in industrial- as well as in living- and commercial areas.

During welding of the specified plastics within the temperature range to 260 degrees C there are no noxious fumes.

## 4. Setup and function

### 4.1 Overview



Pos.	Description
1	Heating element with swivelling lever to embrace cable in workpiece
2	Handle
3	Power switch
4	Viewing window
5	Control light
6	Temperature adjusting screw
7	Wooden handle (optional)
8	Unit holder for workbench (optional)

## 4.2 Functionality

The operating process is executed as follows:

- 1) If equipped with unit holder, fasten socket welding unit at a stable and secure standing work-table.
- 2) Open heater and insert workpiece.
- 3) After melting open heater and remove.
- 4) Merge plastinated surfaces and wait for cooling down.



***Warning!***

***Directly or indirectly touching live parts may result in electrocution.***

The socket welding unit is disconnected from the mains by unplugging the power corde.

Although switching off the machine danger of burns!!!



***Attention!***

***Danger of burns from hot heating element!***

Wear protective gloves during operatione or repair work or allow heater to cool down before touching it.

## 5. Delivery, in-company transport and storage

### 5.1 Delivery

- The socket welding unit is delivered packed
- or as a set with carrying case

1) Immediately check the off-loaded machine for visible transportation damages. If the machine has been damaged, document the details and promptly report this to the transportation company and manufacturer.

2) Check also if the delivery contents of the socket welding unit are complete (see Chap. 3.2 on p. 10).

### 5.2 Environmental conditions for storage and transport

Temperature	-10 to +40 degrees C
Relative humidity	15-55%, non-condensing



***Attention!***

***Improper environmental conditions may cause damage to machine!***

Protect the machine, and especially the electrical equipment, from moisture, rain and dust. The socket welding unit may not be stored outside.

## 6. Setup and activation

### 6.1 Connect to electrical power supply



**Caution!**

***Loosely laid cables are a tripping hazard!***

Lay the power cable to the machine so that it does not pose a tripping hazard. E.g. cable bridges or connections along the ceiling can be used.



**Attention!**

***Faulty connection values may cause material damage to machine!***

Therefore, observe the machine's connection values (see Chap. 3.5 on p. 10).

- 1) The device is equipped with a connection cable and Schuko plug. Connect it to an appropriate power outlet (230 V, 50-60 Hz is required).
- 2) Regularly check cable and plug of the device, if necessary by qualified personnel.

### 6.2 Initial operation



**Attention!**

***Warning against damage to machine's electrical equipment caused by condensation!***

Wait several hours before turning on the main switch of the machine if there has been a sudden change in ambient temperature.

To ensure the best and safest handling of the device, go for initial operation as follows.

- 1) Fasten the unit holder only in a stable, safely standing work table.
- 2) The device is equipped with a connection cable with Schuko plug. Connect the plug to a suitable socket (230 V, 50-60 Hz is required).
- 3) Set temperature at heater to exactly 260 degrees C.
- 4) Switch on the unit with the mains switch.
- 5) Control lamp must be blinking after 10 minutes. The temperature is now reached.
- 6) Switch off socket welding unit with mains switch.
- 7) Check regularly cable and plug of the device, if necessary, by qualified personnel.

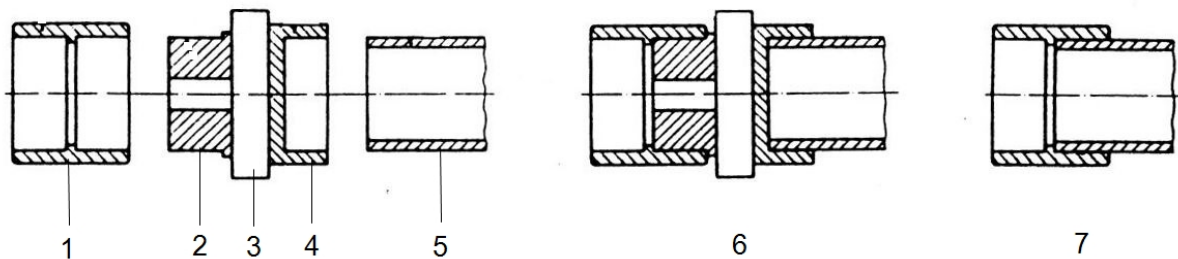
## 7. Operation

### 7.1 Temperature control

The temperature control is housed in the handle of the manual welder. Welding temperature can be set steplessly. The temperature adjustment screw is located on the right side near the main switch. Temperature is shown in the viewing window. During heating up control lamp lightens yellow. Is the selected temperature reached, control lamp is going off. Heating up time is about 10 minutes.

### 7.2 Welding operation

- 1) If not already done, set the temperature at the handle of the heater (see Chap. 7. on p. 16);
- 2) Before welding the joining surfaces of the plastic parts must be cleaned. They must be absolutely free from dirt and grease.
- 3) Open heater and insert workpiece.
- 4) Push pipe and fitting quickly and axially to the stop of the heating mandrel and socket, without twisting it.
- 5) Hold in this position (note heating times of pipe manufacturer)
- 6) After heating up tear off pipe and fitting jerky from heating spigot and socket. Open heater and remove it. Immediately stuck together pipe and fitting axial and without twisting. Fix them some time (approximately warming up time).



Pos.	Description
1	Fitting
2	Heating spigot
3	Heater
4	Heating socket
5	Pipe
6	Warming up
7	Finished connection

- 7) Wait for cooling down.
- 8) So the welding process is completed.
- 9) To make another welding operation, start again at step 1.



***Attention!******Danger of burns from hot heating element!***

Please note that the heat can be transferred to the surrounding machine parts. Wear protective gloves during operation and repair work or allow heater to cool down before touching it.

***Attention!******Do not cool down welding area simulated!***

It is strictly prohibited to cool down the Welding area simulated.

## 8. Finding and repairing malfunctions

### 8.1 Repair electrical malfunctions



***Warning!***

***Electrocution hazard!***

Only an electrician may repair an electrical malfunction of the machine's electrical equipment if these activities differ from operating tasks. The repair must be conducted according to electro-technological regulations.

Go through the table from top to bottom when searching for the cause of the malfunction.

<b>Malfunction</b>	<b>Cause</b>	<b>Corrective action</b>
Heater does not warm up control lamp does not light	The machine is not connected to power supply.	Connect machine to power supply (see Chap. 6. on p. 15)
	Power failure	Re-establish power supply
	Circuit breaker triggered in supply cable	Determine cause and activate circuit breaker
Heater doesn't heat up control lamp lights	Cable connection loosely	Control cable connection

### 8.2 Guarantee

The manufacturer provides a guarantee for a 12-month term after the purchasing date according to legal and country-specific regulations. This means that damages to the machine that have resulted from material- or manufacturer errors are repaired free of charge. As a precondition for the guarantee, the machine must be cleaned and maintained on a regular basis.

The following issues are precluded from the guarantee:

- Damages to socket welding unit which are the result of natural wear, overloading or improper handling; this especially refers to an improper operating environment.
- Damages caused by water, falls or non-legitimate interference with the inner mechanisms of the machine
- Damages to workpieces that have resulted from working with the socket welding unit

The manufacturer of the socket welding unit is not liable for the quality of manufactured parts. The proprietor alone is responsible for quality control and the quality of parts manufactured with the machine.

## 9. Maintenance



### ***Warning!***

*When working with machines that are equipped with electrical components is always a potential danger. To avoid accidents that could be caused by the use of electrical and mechanical parts of the machine, it is absolutely necessary to read carefully following rules, regulations and warnings.*



### ***Attention!***

#### ***Provide safe working conditions!***

Before making any repairs or maintenance, make sure that the power cord of the machine is pulled. The work area must be clean and it must prevail good lighting conditions.



### ***Attention!***

#### ***Danger of burns from hot heating element!***

Wear protective gloves during repair work or allow heater to cool down before touching it.



### ***Attention!***

#### ***Perform all maintenance work thoroughly and on time!***

All maintenance work in this manual must be performed thoroughly and on time to keep the machine operational with a high uptime.



### ***Attention!***

#### ***Only use original spare parts!***

For reasons of personal safety and to ensure the proper functioning of the machine, you should only use original spare parts. It cannot be ensured that spare parts from other manufacturers are constructed with the necessary strain-bearing- and safety capabilities.

Activity	How often	Description
Clean the machine, clean brush	Daily or after usage	(see Chap. 9.1 on p. 20)
DGUV Roule 3 examination (or applicable national regulation)	See DGUV Roule 3	Request service technician or authorised person
Examination according to IndSafReg §10 (2) (or according to national regulation)	Time limits according to § 3 Section 3 (Risk assessment)	Request service technician or authorised person

**Before every maintenance activity pull out power plug.**

**After every maintenance activity**

1) Check of screw and plug connections, cable testing (on existing crushing).

**Check insulation**

Test voltage 1500 V for 1 sec. Between accessible metal parts and protective conductor in the plug.

## 9.1 Cleaning the machine



***Attention!***

***Danger of burns from hot heating element!***

Wear protective gloves during repair work or allow heater to cool down before touching it.



***Attention!***

***Do not used compressed air to clean the machine!***

Compressed air blows shavings and dust into the machine guides, bearings and electrical equipment. The machine may be damaged as a result.

It is strongly recommended always to keep clean the machine.

Keep the heating surfaces always clean by cleaning the surface with a lint-free, uncolored towel and PE-cleaner (for example Henkel Tangit - available in stores).



***Attention!***

***Plastic residuals on the heating elements can only be removed when heated!***

***Danger of burns from hot heating element!***

Wear protective gloves necessarily.

## 10. Dismantling and disposal

### 10.1 Deactivation



***Attention!***

***Danger of burns from hot heating element!***

Wear protective gloves during repair work or allow heater to cool down before touching it.

How to deactivate the socket welding unit:

- 1) If a workpiece is still in the machine, remove it (see Chapter 1.1 on p.1).
- 2) Pull the power plug-in out of the receptacle.

### 10.2 Final shutdown

- 1) Execute the steps from the previous section.
- 2) Disconnect the power supply cable to the machine so that unauthorised persons cannot activate the machine.

### 10.3 Disposal



***Attention!***

***According to EU regulations machine parts may not be discarded with unsorted household garbage!***

During disposal separate the individual types of materials and dispose of them in accordance with country-specific regulations.

The following rules must be observed when disposing of the machine at the end of its lifecycle:

- Adhere to the country-specific regulations regarding disposal of industrial machines
- If unsure, contact a professional disposal company
- Separate plastics from metal and dispose of these materials separately
- Dispose of seals and rubber parts as special waste
- Also dispose of electrical motors and electrical components such as controls, switches and cables separately

# 11. Annex

## 11.1 EC Conformity Declaration

### according to EC Low Voltage Guideline 2014/35/EU, Article 15, 16 and Annex IV

We hereby declare that the product distributed by us and described in the following conforms to the basic safety- and health requirements of the EC Low Voltage Guideline in regard to its conception and design. This declaration loses its validity if the machine is changed without our consent.

#### Manufacturer:

Eugen Riexinger GmbH & Co. KG  
plasticconnectingsystems  
Egartenring 2  
75378 Bad Liebenzell / Germany

#### Person authorised to compile the technical file:

Markus Theobald (Business Manager), Eugen Riexinger GmbH Co. KG, Egartenring 2, 75378 Bad Liebenzell

#### Description of machine:

Socket welding unit for plastic parts Type MEG-S-T

#### A conformity declaration is also made for other valid product-relevant

guidelines.

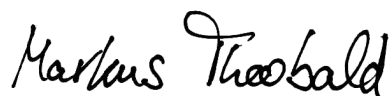
- Guideline 2014/30/EU (EMC guideline)

#### Applied and harmonised norms:

- DIN EN 61000-6-2:2005 Interference stability for industrial areas
- DIN EN 61000-6-3:2007 Interference emission for living-, commercial- and trade areas as well as for small business

Bad Liebenzell, 22.09.2016

Markus Theobald (Business Manager)



Status 22.09.2016

© Eugen Riexinger GmbH & Co. KG