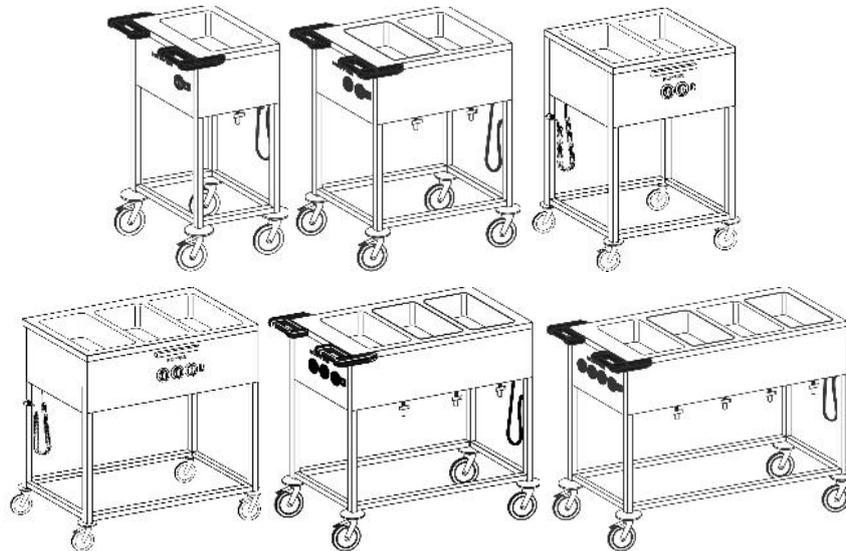


# Operating Instructions



**Mobile bain marie**  
SPA/EB-1 | SPA/EB-2 | SPA/EB-2F | SPA/EB-2LS | SPA/EB-3 |  
SPA/EB-3F | SPA/EB-3LS | SPA/EB-4

# 1 Introduction

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## 1.1 Appliance Information

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Appliance designation	Mobile bain marie
Appliance type/ -s	SPA/EB-1   SPA/EB-2   SPA/EB-2F   SPA/EB-2LS   SPA/EB-3   SPA/EB-3F   SPA/EB-3LS   SPA/EB-4
Manufacturer	HUPFER® Metallwerke GmbH & Co. KG Dieselstraße 20 48653 Coesfeld  PO 1463 48634 Coesfeld  ☎ +49 2541 805-0 📠 +49 2541 805-111  <a href="http://www.hupfer.de">www.hupfer.de</a> <a href="mailto:info@hupfer.de">info@hupfer.de</a>

Read these operating instructions thoroughly and attentively to ensure safe operation and avoid any damages!

Ensure that sources of danger and possible faulty operations have been pointed out to the operating staff.

### Subject to modifications

The products covered by these operating instructions have been developed taking into consideration the requirements of the market and the latest technology. HUPFER® reserves the right to modify the products and appertaining technical documentation in so far as the modifications are in the name of technological progress. The data and weights as well as the description of performance and functions assured in the order confirmation as binding are always decisive.

**Manual edition**  
4330002\_A0

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## 1.3 List of Abbreviations

Abbreviation	Definition																																				
BGR	Rule of the Professional Association																																				
BGV	Regulation of the Professional Association																																				
CE	Communauté Européenne European Community																																				
BGR	Rules of the Professional Association																																				
DIN	Deutsches Institut für Normung German Institute for Standardisation, technical regulations and technical specifications																																				
EC	European Community European Union																																				
EN	European Standard Harmonised standard for the EU market																																				
E/V	Spare and wearing part																																				
IP	<p>International Protection. The abbreviation IP and a further two-digit index specify the protection class of a housing.</p> <p>The first digit: Protection against ingress of solid foreign objects      The second digit: Protection against ingress of water</p> <table border="1"> <tbody> <tr> <td>0</td> <td>No protection against contact, no protection against ingress of solid foreign objects</td> <td>0</td> <td>No protection against ingress of water</td> </tr> <tr> <td>1</td> <td>Protection against contact with any large surface of the body such as the hand, protection against ingress of foreign objects <math>\varnothing &gt; 1.97''</math> (50 mm)</td> <td>1</td> <td>Protection against vertically falling water drops</td> </tr> <tr> <td>2</td> <td>Protection against contact with the fingers, protection against ingress of foreign objects <math>\varnothing &gt; 0.47''</math> (12 mm)</td> <td>2</td> <td>Protection against dripping water (at any angle up to 15° from the vertical)</td> </tr> <tr> <td>3</td> <td>Protection against contact with tools, thick wires or similar objects of <math>\varnothing &gt; 0.1''</math> (2.5 mm), protection against foreign objects <math>\varnothing &gt; 0.1''</math> (2.5 mm)</td> <td>3</td> <td>Protection against water drips at any angle up to 60° from the vertical</td> </tr> <tr> <td>4</td> <td>Protection against contact with tools, thick wires or similar objects of <math>\varnothing &gt; 0.04''</math> (1 mm), protection against foreign objects <math>\varnothing &gt; 0.04''</math> (1 mm)</td> <td>4</td> <td>Protection against water splashing from any direction</td> </tr> <tr> <td>5</td> <td>Protection against contact, protection against dust deposits inside</td> <td>5</td> <td>Protection against water jets (projected by a nozzle) at any angle</td> </tr> <tr> <td>6</td> <td>Complete protection against contact, protection against ingress of dust</td> <td>6</td> <td>Protection against rough sea or strong water jets (flood protection)</td> </tr> <tr> <td></td> <td></td> <td>7</td> <td>Protection against ingress of water during temporary immersion</td> </tr> <tr> <td></td> <td></td> <td>8</td> <td>Protection against pressurised water during continuous immersion</td> </tr> </tbody> </table>	0	No protection against contact, no protection against ingress of solid foreign objects	0	No protection against ingress of water	1	Protection against contact with any large surface of the body such as the hand, protection against ingress of foreign objects $\varnothing > 1.97''$ (50 mm)	1	Protection against vertically falling water drops	2	Protection against contact with the fingers, protection against ingress of foreign objects $\varnothing > 0.47''$ (12 mm)	2	Protection against dripping water (at any angle up to 15° from the vertical)	3	Protection against contact with tools, thick wires or similar objects of $\varnothing > 0.1''$ (2.5 mm), protection against foreign objects $\varnothing > 0.1''$ (2.5 mm)	3	Protection against water drips at any angle up to 60° from the vertical	4	Protection against contact with tools, thick wires or similar objects of $\varnothing > 0.04''$ (1 mm), protection against foreign objects $\varnothing > 0.04''$ (1 mm)	4	Protection against water splashing from any direction	5	Protection against contact, protection against dust deposits inside	5	Protection against water jets (projected by a nozzle) at any angle	6	Complete protection against contact, protection against ingress of dust	6	Protection against rough sea or strong water jets (flood protection)			7	Protection against ingress of water during temporary immersion			8	Protection against pressurised water during continuous immersion
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LED	Light Emitting Diode Light diode																																				

## 1.4 Definitions of Terms

Term	Definition
Authorised specialist	An authorised specialist is a specialist that has been trained by the manufacturer, an authorised service dealer or a company assigned by the manufacturer.
Cook&Chill-Kitchens	"Cook and Chill": Kitchens where warm food after being cooked is chilled as quickly as possible.
Cook&Serve-Kitchens	"Cook and Serve": Kitchens where warm food is served immediately after being cooked or kept warm until it is consumed.
Specialist	A specialist is a person who can evaluate work assigned and can individually recognise any possible dangers due to the professional training, specialist knowledge and experience as well as knowledge of the respective guidelines.
Gastronorm	Gastronorm is a measurement system applied worldwide, for instance, in food processing plants or large-scale kitchens and catering establishments. The use of standardised sizes makes possible to exchange food pans. The basic size of the gastronorm (GN) 1/1 is 12.8x20.9" (325x530mm). Items are available in different depths.
H1	Hygienic standard (NSF/USDA) for lubricants that are suitable for incidental and technically unavoidable contact with foodstuffs
Control	Compare with certain conditions and/or characteristics such as damages, leaks, filling levels, heat.
Machine safety	The term of machine safety means all the measures used to avert injury to persons. The basis for this are national as well as EC-wide valid directives and laws for protecting users of technical devices and systems.
Passive layer	A non-metallic protective layer on a metallic material that prevents or slows down material corrosion.
Check	Compare with certain values such as weight, torque, content, temperature.
Qualified person, qualified staff	Qualified personnel are persons who due to their professional training, experience and instruction as well as their knowledge of the respective standards, guidelines, accident prevention regulations and operating conditions have been authorised by a person responsible for system safety to carry out required activities and can recognise and prevent any possible danger (definition of specialists according to IEC 364).
Schuko®	The abbreviation of the German term "Protective contact" that indicates a system of domestic plugs and sockets equipped with protective earthed contacts used in most of Europe.
Instructed persons	An instructed person is a person who has been instructed on the possible risks resulting from improper behaviour when carrying out the assigned task as well as on the necessary protective equipment and protective measures and trained for this task if necessary.

## 1.5 Orientation Guide

### The front

"The front" means the side where the operating elements are arranged. The operating staff stays at this side to move the mobile bain marie.

### The rear

The side named "the rear" means the opposite side of the front side (the front).

### The right

The side named "the right" means the side at the right hand side of the front side (the front).

### The left

The side named "the left" means the side at the left hand side of the front side (the front).

## 1.6 Notes on Use of Manual

### 1.6.1 Notes on the manual structure

This manual is structured in functional and task orientated chapters.

### 1.6.2 Notes and their illustrations used in the chapters

The warnings and notes are separated from the other text and particularly marked by corresponding icons. The icon cannot, however, replace the text of the safety instructions. Therefore, always read thoroughly the full text of the safety instructions. The warnings and notes are separated in these operating instructions as follows and categorised by the following danger levels by means of various symbols.

<b>DANGER</b>	<b>Brief description of danger</b>
	<p>There is an imminent danger to life and limb of the user and / or third parties when the instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of danger is indicated by a symbol and explained in the accompanying text in more detail. In this example the general sign of danger is used.</p>
<b>WARNING</b>	<b>Brief description of danger</b>
	<p>There is an indirect danger to life and limb of the user and / or third parties when the instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of danger is indicated by a symbol and explained in the accompanying text in more detail. In this example the general sign of danger is used.</p>
<b>ATTENTION</b>	<b>Brief description of danger</b>
	<p>There is a potential risk of injury or damage to property when the instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of danger is indicated by a general sign and explained in the accompanying text in more detail. In this example the general sign of danger is used.</p>
<b>NOTE</b>	<b>Brief description of additional information</b>
	<p>Attention is pointed to special conditions or additional important information on the respective subject.</p>
<b>INFO</b>	<b>Short title</b>
	<p>Contains additional information on work assisting features or recommendations on the respective subject.</p>

## 2 Safety Instructions

### 2.1 Introduction

The chapter on safety instructions describes the risks associated with the appliance in terms of product liability (according to the EU Directives).

The safety instructions should warn of hazards and help to avoid damages to persons, the environment and property. Please make sure that you have read and understood all the safety instructions given in this chapter.

You must comply with the respectively valid national and international Safety at Work Regulations. The manager is responsible for the valid regulations he/she has to provide. He/she must acquaint himself/herself and the operator with the new regulations.

In addition to these operating instructions, comply with the rules on health and safety at work issued by the Main Association of the industrial Professional Associations, especially with those that concern the handling of hot items and risks involved (BGR 110 "Protection of health and safety at work in restaurants" and BGR 111 "Protection of health and safety at work in large-scale kitchens").

### 2.2 Warning Symbols Used

Symbols are used in these operating instructions to point out the dangers that can occur while operating or cleaning the appliance. In both cases, the symbol provides information on the type and circumstances of danger.

The following symbols can be used:

	General hazardous area
	Hazardous electrical voltage
	Risk of hand injuries
	Risk of squashing
	Risk of hot surfaces
	Wear hand protection

### 2.3 Safety Instructions for Appliance Safety

Safe operation of the appliance depends on appropriate and thorough use. Negligent handling of the appliance can lead to danger to life and limb of the user and / or third parties as well as hazards to the appliance itself and the other operator's property.

The following points are to be observed to ensure the appliance safety:

- The appliance may only be operated as intended, when it is in perfect condition with regards to technical standards, with awareness of safety and hazards and in accordance with the operating instructions.
- All the operating and actuating elements must be in a perfect and functionally reliable condition with regards to technical standards.
- The appliance must be checked for external visible damages and defects whenever it is put into operation. In case of damages, inform immediately the competent bodies and switch off the Mobile bain marie.

- Modifications or retrofits of the equipment are only permitted in consultation with the manufacturer and on receipt of his written agreement.
- The appliance is provided exclusively for manual transport. Mechanical transport is not permitted. Risk of injury and damage.
- Release both total brakes before commencing transporting. Moving the appliance with the total brakes locked can damage the chassis
- Transport should only be undertaken over level floors. Moving the appliance over very uneven floors and stair steps can damage the chassis.
- Do not stop the Mobile bain marie by applying the total brakes. The total brakes are designed to be able to prevent the appliance from unintended moving. Do not stop the appliance on sloping floors. Secure the appliance against rolling away by applying both total brakes when stopping it.
- When approaching walls and moving round obstacles always pay attention to persons in the way. Risk of injury.
- When transporting the appliance, always hold both push bars with your hands. Never let go of the appliance while moving it.
- When transporting the appliance, do not move it faster than a walking pace. Heavily laden appliances are difficult to brake and steer. If necessary, ask for assistance when transporting the appliance.
- If the Mobile bain marie tips over due to outside influences or inattention, never catch it manually. Risk of injury.
- In the case of off-site transport in a vehicle such as a lorry, the appliances should be secured properly. The total brakes are not sufficient as a transport securing method.
- Before transporting, switch off the appliance, pull out the mains plug and insert it into the holder provided.
- Never pull the mains plug out of the socket by the connecting lead.
- Never move the appliance by pulling by the connecting lead.
- If the mains plug has come into contact with water it must be dried before inserting it into the socket. Danger to life.
- Damaged mains plugs or connecting leads are to be replaced by authorised personnel before the appliance is reused.
- Do not use any extension leads in wet and damp areas.

## 2.4 Safety Instructions for Transport

---

The following points are to be observed when transporting the Mobile bain marie:

- When loading, use only hoists and load lifting devices approved for the weight of the appliance to be lifted.
- Use transport vehicles that are approved for the weight of the Mobile bain marie.
- In no case put a defective appliance into operation and inform the supplier immediately.

## 2.5 Safety Instructions for Cleaning and Care

---

The following points shall be observed when carrying out any cleaning and maintenance operations:

- Take the Mobile bain marie out of operation, switch it off, pull out the mains plug and secure against unauthorised reactivation before performing cleaning and care measures.
- For reasons of hygiene the cleaning instructions shall be strictly observed.
- Heated appliances must be out of operation and sufficiently cooled before cleaning.
- Do not clean the appliance with steam-jet or high-pressure washers. The appliance must be taken out of operation and switched off at the mains beforehand in any area where steam-jet or high-pressure washers are to be used.

## 2.6 Safety Instructions for Trouble Shooting

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The following points shall be observed when carrying out any trouble shooting operations:

- The local applicable Accident Prevention Regulations must be observed.
- Take the Mobile bain marie out of operation, switch it off, pull out the mains plug and secure against unauthorised reactivation before performing maintaining or trouble shooting operations. When operating on the electrical installation, the appliance is to be switched off at the mains and secured against reactivation. This work must only be carried out by a certified electrician.
- Observe the valid product safety regulations when handling oils, greases and other chemical substances.
- Carry out all the checks and inspections of the appliance on a regular basis. Remedy immediately deficiencies, such as loose screw connections, melted or damaged leads.
- All trouble shooting work should only be carried out by authorised specialists.
- Defective components should only be replaced with original parts.

## 2.7 Notes on Specific Hazards

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### Electrical energy

- All work on the electrical installations should only be carried out by a certified electrician or by authorised specialists under supervision and monitoring of a certified electrician according to the certain electro-technical regulations.
- The appliances that inspection, maintenance and trouble shooting work is performed on must be switched voltage free on and secured against reactivation, when the voltage is not required for this kind of work. This must only be carried out by a certified electrician.

## 3 Description and Technical Data

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### 3.1 Performance Description

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Mobile bain marie are electrically heated and mobile bain-marie wells. They hold up prepared meals in Gastronorm containers and the steam keeps the food warm.

Mobile bain marie are designed to keep food warm and in a ready to serve condition on food distribution belts in the food service industry and large-scale catering establishments.

Furthermore, Mobile bain marie can be used for event catering (party and conference service).

The appliances SPA/EB-2LS and SPA/EB-3LS are designed to serve food directly to guests. They are mainly used in a food serving area with counters. The containers arranged side by side longitudinally make possible to use optimally the counter width. Operating staff can easily serve food with suitable ladles from the appliances with larger depth compared to appliances with containers arranged across.

### 3.2 Intended Use

---

Mobile bain marie are designed to hold up meals in Gastronorm containers. They keep food in a ready to serve condition on food distribution belts in the food service industry and large-scale catering establishments.

The appliances are designed only for foodstuff in inserted Gastronorm containers and water in the bain-marie wells. Use of other loads is not permitted.

The intended use means the predetermined procedures, compliance with the indicated specifications and use of the delivered or additionally available original accessories.

Any other use of the appliance is considered as unintended use.

### 3.3 Improper Use

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Any other use, especially loading of the Mobile bain marie with other loads as given, is not permitted.

Move the Mobile bain marie SPA/EB-1 only when empty because of the risk of tilting, i.e. without water and GN containers. Owing to the narrow construction, there is the risk of tilting.

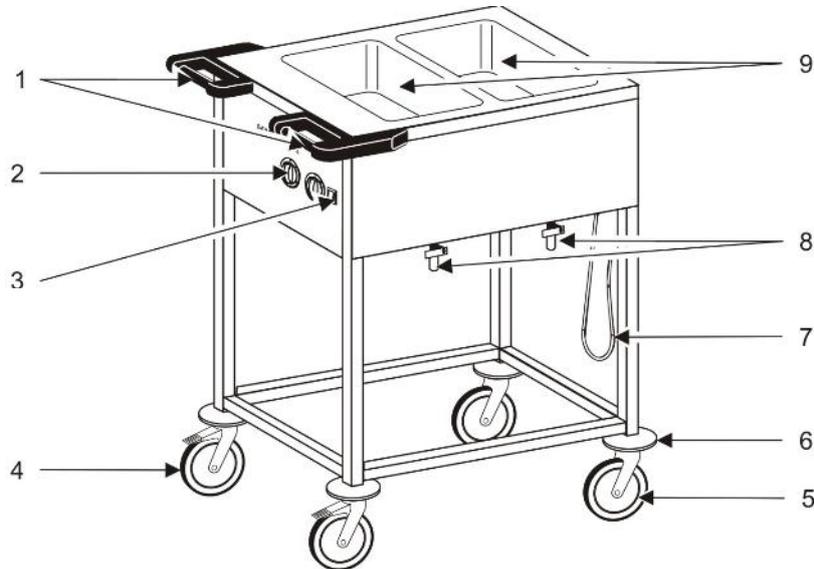
It is not permitted to heat dry the bain-marie wells of the appliances with foil heating (SPA/EB-2F and SPA/EB-3F).

In no case may people sit down or stand on or in to the appliance.

The manufacturer and suppliers are not liable for any consequential damages resulting from an unintended use. No liability is assumed and no warranty claims can be submitted for damages caused by improper use.

### 3.4 Appliance Description

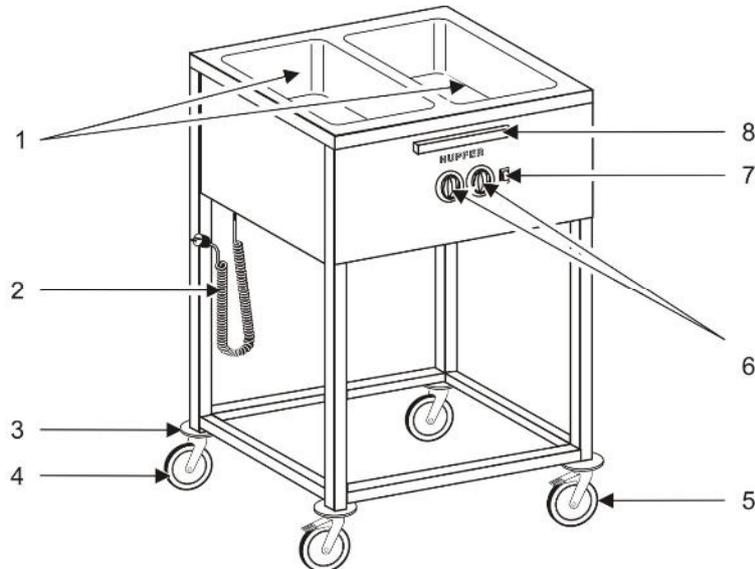
#### 3.4.1 View of the mobile bain marie (operation on the front side)



**Figure 1** View of the appliance SPA/EB-2

- |   |  |   |                                 |
|---|--|---|---------------------------------|
| 1 | Push bars                              | 6 | Protection plates               |
| 2 | Thermostat for setting the temperature | 7 | Connecting lead with mains plug |
| 3 | On / Off switch                        | 8 | Water drain taps                |
| 4 | Swivel caster with total brake         | 9 | Bain-marie wells                |
| 5 | Swivel caster without total brake      |   |                                 |

#### 3.4.2 View of the mobile bain marie (operation on the lateral side)



**Figure 2** View of the appliance SPA/EB-2LS

- |   |                                   |   |  |
|---|-----------------------------------|---|--|
| 1 | Bain-marie wells                  | 5 | Swivel caster with total brake         |
| 2 | Connecting lead with mains plug   | 6 | Thermostat for setting the temperature |
| 3 | Protection plates                 | 7 | On / Off switch                        |
| 4 | Swivel caster without total brake | 8 | Bumper with integrated finger grip     |

### 3.4.3 Appliance description

Mobile bain marie are mobile appliances with heated bain-marie wells that keep food warm. They hold up prepared meals in Gastronorm containers and keep them warm.

The bain-marie wells are filled with water and a tubular heating element or a foil heater warm them up. The generating water vapour heats up the inserted Gastronorm containers. You can heat dry the bain-marie wells of the models with a tubular heating element. Heating elements and electrical parts are easy to be accessed and can be dismantled without any problems by specialist staff in case of service.

The operating temperature is set for each bain-marie well separately. There is a thermostat on the front side of the Mobile bain marie that is used to set the operating temperature continuously between 30°C and 95°C for every bain-marie well.

Mobile bain marie are equipped with four swivel casters, two of which have total brakes that prevents the appliance from moving. Plastic protection plates on the swivel casters protect the lateral sides of the appliance and operating elements against damages.

Push bars with integrated bumper bar protect the models with the control on the front side against damages to the hands. The models SPA/EB-2LS and SPA/EB-3LS with the control on the lateral side have a plastic bumper with an integrated finger grip arranged above the operating elements to make moving the appliances easier.

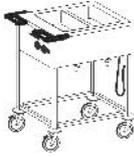
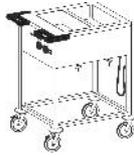
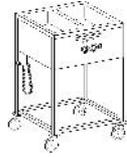
### 3.4.4 Optional accessories

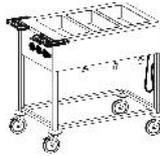
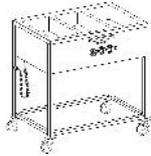
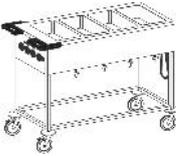
The following parts can be applied as optional accessories for the Mobile bain marie:

- **Support bar**  
Support bars are special elements of stainless steel used in the bain-marie wells. Use the support bars together with smaller Gastronorm containers. They do not let the steam escape between the containers and reduce, subsequently, heat loss.
- **Shelf**  
Shelves can be put into the base frame of the Mobile bain marie under the bain-marie wells to create additional storage space. Only objects with a firm base may be stored on the shelves. Do not move the appliance when there are open containers with hot liquids on it. The permitted total weight of the Mobile bain marie may not be exceeded.
- **Drain extension tube**  
The drain extension tube consists of a hose with a threaded connection that is screwed into the water drain tap as an extension hose. The length of the hose of 16.5" (420 mm) is used because the water can be drained out of the bain-marie wells even with an inserted shelf without using a drain container.
- **Folding shelf**  
Folding shelves made of stainless steel are designed to hold up crockery items. They can be fitted either on the lateral side or on the front side of the appliance. Only authorised staff may fix the folding shelves to the appliance. To do this, they need a welding device.  
It is not permitted to put heavy loads on to folding shelves. During transport, they must be folded up. There is a risk of crushing your fingers when folding up and locking the folding shelves.

The part numbers of the special accessories can be found in the spare parts catalogue and order lists available online.

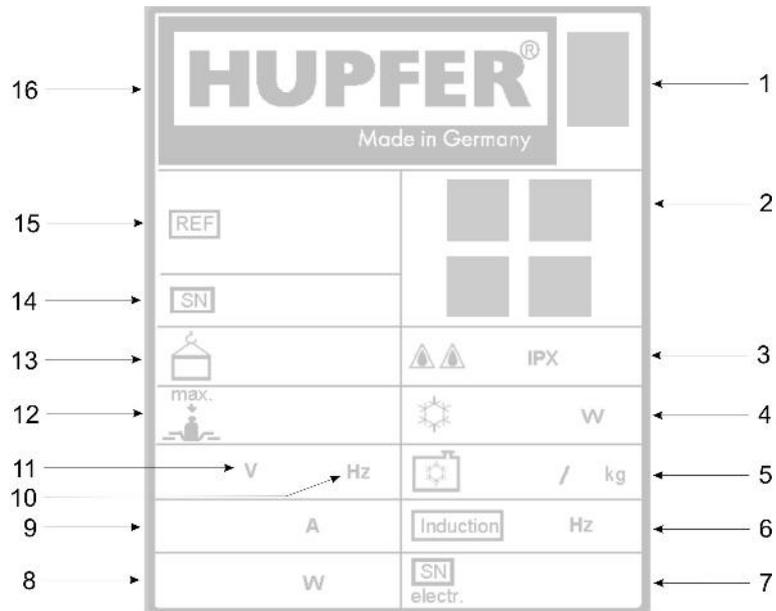
### 3.5 Technical Data

	Dim.	SPA/EB-1	SPA/EB-2	SPA/EB-2F	SPA/EB-2LS
					
Width	in (mm)	26.7" (678)	26.7" (678)	26.7" (678)	34.6" (878)
Depth	in (mm)	23.9" (606)	36" (916)	36" (916)	26.7" (678)
Height	in (mm)	35.4" (900)	35.4" (900)	35.4" (900)	35.4" (900)
Own weight	lbs (kg)	70.5 (32)	97 (44)	97 (44)	97 (44)
Payload	lbs (kg)	121.3 (55)	242.5 (110)	242.5 (110)	242.5 (110)
Number of wells		1	2	2	2
Well size for GN 1/1-200 and divisions	in (mm)	20.9 x 12.8" (530 x 325)	20.9 x 12.8" (530 x 325)	20.9 x 12.8" (530 x 325)	20.9 x 12.8" (530 x 325)
Capacity (in people)		15	25	25	25
Operating and environmental conditions of casters	°F (°C)	-4 to 122 (-20 to +50)	-4 to 122 (-20 to +50)	-4 to 122 (-20 to +50)	-4 to 122 (-20 to +50)
Caster diameter	in (mm)	5" (125)	5" (125)	5" (125)	5" (125)
Heating		Stainless steel tubular heating element	Stainless steel tubular heating element	Foil heating	Stainless steel tubular heating element
Power requirement	kW	0.7	1.4	1.4	1.4
Electrical connection		230V 1N AC 50 Hz	230V 1N AC 50 Hz	230V 1N AC 50 Hz	230V 1N AC 50 Hz
Protection class		IPX5	IPX5	IPX5	IPX5
Heat insulation		special insulation	special insulation	special insulation	special insulation
Temperature regulation, for each well separately		continuous	continuous	continuous	continuous
Thermostat setting	°F (°C)	86-203 (30-95)	86-203 (30-95)	86-203 (30-95)	86-203 (30-95)

Dim.		SPA/EB-3	SPA/EB-3F	SPA/EB-3LS	SPA/EB-4
					
Width	in (mm)	26.7" (678)	26.7" (678)	48" (1219)	26.7" (678)
Depth	in (mm)	49.5" (1256)	49.5" (1256)	26.7" (678)	62.8" (1595)
Height	in (mm)	35.4" (900)	35.4" (900)	35.4" (900)	35.4" (900)
Own weight	lbs (kg)	121.3 (55)	121.3 (55)	121.3 (55)	145.5 (66)
Payload	lbs (kg)	363.8 (165)	363.8 (165)	363.8 (165)	485 (220)
Number of wells		3	3	3	4
Well size for GN 1/1-200 and divisions	in (mm)	20.9 x 12.8" (530 x 325)	20.9 x 12.8" (530 x 325)	20.9 x 12.8" (530 x 325)	20.9 x 12.8" (530 x 325)
Capacity (in people)		50	50	50	80
Operating and environmental conditions of casters	°C (°F)	-4 to 122 (-20 to +50)	-4 to 122 (-20 to +50)	-4 to 122 (-20 to +50)	-4 to 122 (-20 to +50)
Caster diameter	in (mm)	5" (125)	5" (125)	5" (125)	5" (125)
Heating		Stainless steel tubular heating element	Foil heating	Stainless steel tubular heating element	Stainless steel tubular heating element
Power requirement	kW	2.1	2.1	2.1	2.8
Electrical connection		230V 1N AC 50 Hz	230V 1N AC 50 Hz	230V 1N AC 50 Hz	230V 1N AC 50 Hz
Protection class		IPX5	IPX5	IPX5	IPX5
Heat insulation		special insulation	special insulation	special insulation	special insulation
Temperature regulation, for each well separately		continuous	continuous	continuous	continuous
Thermostat setting	°C (°F)	86-203 (30-95)	86-203 (30-95)	86-203 (30-95)	86-203 (30-95)

The corresponding test marks can be found on our home page at [www.hupfer.de](http://www.hupfer.de).

### 3.6 Rating plate



**Figure 3** Rating plate

1	Disposal of old appliances	9	Nominal current
2	Test mark	10	Frequency
3	Protection class	11	Nominal voltage
4	Chilling capacity	12	Payload
5	Coolant	13	Own weight
6	Induction frequency	14	Serial number/Order number
7	Current serial number	15	Item and brief description
8	Electric power	16	Manufacturer

## 4 Transport, Putting into Operation and Decommissioning

### 4.1 Transport

#### ATTENTION

#### Appliance damages caused by improper transport



In the case of off-site transport in a vehicle such as a lorry, the appliances should be secured properly. The total brakes are not sufficient as a transport securing method.

If the appliances are not secured properly, there is a risk of damage to property and persons caused by squashing.

During transport, secure all the individually standing appliances using corresponding transport securing devices.

The Mobile bain marie is delivered as an assembled unit, i.e. it is completely assembled including the heating.

When loading, use only hoists and load lifting devices approved for the weight of the Mobile bain marie. Only the transport vehicles may be used that are approved for the weight of the appliance.

According to the valid purchase contract, the scope of delivery is specified in the shipping documents attached to the delivery item.

### 4.2 Putting into Operation

#### DANGER

#### Hazardous electrical voltage



The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.

Before putting the appliance into operation check, whether the power supply indicated on the rating plate (230V / 50 Hz) corresponds to the local power supply. Otherwise, do not put the appliance into operation.

Do not use any extension leads in wet areas.

Remove the original packing and check, whether the appliance is complete and undamaged. In no case put a defective appliance into operation and inform the supplier immediately.

Always place the Mobile bain marie on firm and level floors when unpacking and operating it. Apply the total brakes on both swivel casters to secure the appliance against rolling away.

#### INFO

#### Disposal of packing material

The packing consists of recyclable materials and can be disposed of appropriately. Thereby, the different materials are to be separated and disposed in an environmentally compatible manner. In any case, the local bodies responsible for disposal are to be involved for this purpose.

The Mobile bain marie should be thoroughly cleaned with a soft cloth before putting it into operation for the first time. Before the appliance is put into operation it must be clean and dry.

The following appliance functions must be checked before putting it into operation:

- the function of the total brakes
- the function of the operating elements and heating.

## 4.3 Storage and Recycling

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Temporary storage must take place in a dry and frost-free environment. The Mobile bain marie must be kept covered with a suitable covering material to be protected against dust ingress.

The appliance kept in the storage location must be checked for damages and corrosion every 6 months.

<b>NOTE</b>	<b>Condensed water formation</b>
Ensure that there is sufficient ventilation and no large temperature fluctuations in the storage location to avoid condensed water formation.	

Before the appliance is taken back into operation it must be clean and dry.

If the Mobile bain marie is required to be recycled, all the operating and auxiliary materials must be disposed in an environmentally compatible manner. The recyclable materials must be properly separated and disposed in an environmentally compatible manner according to the local Waste Disposal Regulations. In any case, the local bodies responsible for disposal are to be involved for this purpose. Separate the reusable materials of the appliance (casters and plastic parts) before disposing or send the appliance to a recycling centre. Dispose the electronics at corresponding collection centres.

We offer our customers to dispose their waste appliances. Please contact us or one of our distribution partners.

Packaging and packing material can be sent to the recycling centre by indicating the waste disposal contract number. If you do not have the valid waste disposal contract number, you can ask for it at [HUPFER®](#) - Service.

## 5 Operation

### WARNING



### Risk of hot surfaces

If the thermostat is set to the level 3 and higher, the permitted maximum temperature of 149°F (65°C) for touchable appliance surfaces can be exceeded. This can cause burns.

Only instructed staff may operate the appliance. Wear suitable protective clothing.

### ATTENTION



### Damage to property

A layer of scale acts as thermal insulation and can lead to a heat accumulation above the tubular heating element as well as cause in damage to the well base. There is a risk of corrosion under the scale layer. If you heat the bain-marie wells dry, they get warped and micro-cracks form. This can result in a total damage.

### ATTENTION



### Damage to property

Move the SPA/EB-1 only when empty because of the risk of tilting, i.e. without filled water and inserted GN containers. Owing to the narrow construction, there is an increased risk of tilting of this model.

If the Mobile bain marie tips over due to outside influences or inattention, never catch it manually.

The Mobile bain marie must be checked for external visible damages and defects before each operation. Before putting the appliance into operation, the bain-marie wells must be cooled down, clean and without scale deposits. If required, bain-marie wells that have been already put into operation and completely drained off must cool down for some time.

You can heat dry the bain-marie wells of the appliances equipped with tubular heating. However, we do not recommend this kind of heating because of a poor heat transfer. Appliances equipped with foil heating may not be heated without water in the bain-marie well.

### 5.1 Arrangement and Function of the Operating Elements

The operating elements of the Mobile bain marie are arranged on the front side.

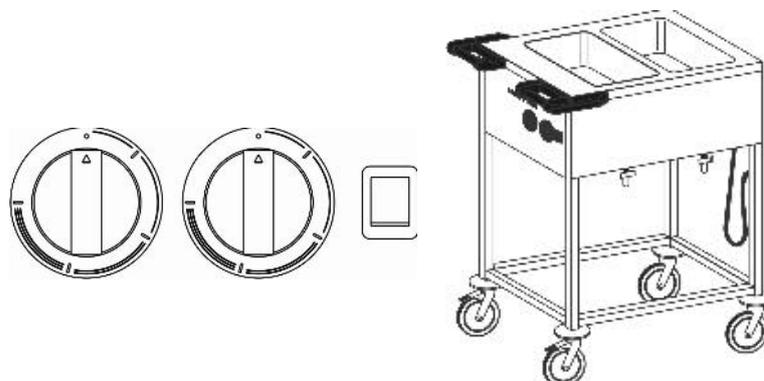


Figure 4 Operating elements on the SPA/EB-2

## 5.2 Operation

### WARNING

#### Risk of hot surfaces



If the thermostat is set to the level 3 and higher, the permitted maximum temperature of 149°F (65°C) for touchable appliance surfaces can be exceeded. This can cause burns.

Only instructed staff may operate the appliance. Wear suitable protective clothing.

#### Filling bain-marie wells

- Close the water drain taps.
- Fill the bain-marie wells with about 3 l water. There is a maximum fill level indicator on the inner side of the heat-retaining well.

### NOTE

#### Filling heat-retaining wells

Filling warm or hot water reduces the heating time of the appliance. The inserted Gastronorm containers should not come into contact with water, for this reduces heat transfer. Steam is the best heat transfer medium. The higher the fill level, the longer heating time is.

### INFO

#### Water quality

If tap water is particularly rich of minerals use softened water to reduce deposits of scale.

#### Set temperature

The On/Off switch and the thermostat for the bain-marie wells are arranged on the front side of the Mobile bain marie.

- Close the bain-marie wells with a well closing lid to avoid heat loss.
- Connect the mobile bain marie to the mains.
- Switch on the appliance with the On / Off switch. The indicator integrated in the switch will light up to show that the appliance is ready for operation.
- Set the desired temperature using the thermostat of the certain bain-marie well. A continuous adjustment is possible within the 4 power ranges. Digits engraved into the housing above every thermostat helps to allocate them to the corresponding bain-marie wells.

### INFO

#### Operating temperature

If the appliance is filled with cold water up to 0.8" (2 cm), closed well with a lid and switch on to the maximum power, the water in the bain-marie wells will reach a temperature of 194° F (90°C) in about 45 minutes.

#### Loading

### WARNING

#### risk of scalding | risk of hot surfaces



Metal parts of the appliance can get very hot during operation. Water steam escaping between the Gastronorm containers can cause scalds.

Therefore, pay always attention, if the Gastronorm containers are closed well. Wear suitable protective clothing.

Gastronorm containers (1/1) with the depth of up to 8" (200 mm) can be put into the bain-marie wells without taking any further measures.

If you use smaller Gastronorm containers (e.g. GN 2/3, GN 1/2 or GN 1/3), you should use support bars to reduce the steam escape between the containers and, subsequently, heat loss.

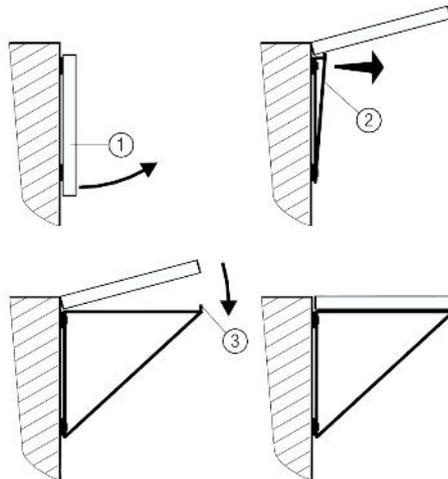
- Put support bars suitable for smaller Gastronorm containers into the bain-marie wells.

- Put the Gastronorm containers into the bain-marie wells.
- Place a suitable lid to avoid heat loss.

### Moving

- Set all thermostats to 0.
- Switch off the appliance with the On / Off switch.
- Pull out the mains plug and insert it into the plug park provided.
- Release the total brakes.
- Grip the Mobile bain marie by the push bars and move it to the destination.
- When you got to the destination, apply both total brakes and make sure they are locked and the appliance is secured against unintended movement.
- Connect the appliance to the mains.
- Switch on the Mobile bain marie with the On / Off switch.
- Set the desired capacity using the thermostat of the certain bain-marie well.

### Using the folding shelf



**Figure 5** Fold down the folding shelf

- Fold up the folding shelf (1).
- Fold down the supports (2).
- Place the supports so that the pins (3) fit into the holes when folding down the folding shelf.

To fold up the folding shelf, proceed in the reverse sequence.

## 5.3 Measures at the End of Operation

### Switch off the Mobile bain marie

#### WARNING

#### Risk of hot surfaces



Heated Gastronorm containers can be very hot after operation and exceed the maximum temperature of 65°C, at which you are allowed to touch the appliance surfaces with bare hands. There is a risk of burning.

Act carefully. Wear suitable protective clothing.

- Set all thermostats to 0.
- Switch off the appliance with the On / Off switch.
- Apply both total brakes, make sure they are locked and the appliance is secured against unintended movement.
- Pull out the mains plug and insert it into the plug park provided.
- Remove the inserted Gastronorm containers.
- Remove the support bars if available.

### Draining off water

#### WARNING

#### Risk of scalding



The water in the bain-marie wells can be very hot after operation. There is a risk of scalding, when draining off water.

Act carefully. Wear suitable protective clothing.

#### WARNING

#### Risk of hot surfaces



After draining off water, the water drain taps can get very hot and the maximum temperature of 149° F (65°C), at which you are allowed to touch the appliance surfaces with bare hands, can be exceeded. There is a risk of burning.

Act carefully. Wear suitable protective clothing.

#### NOTE

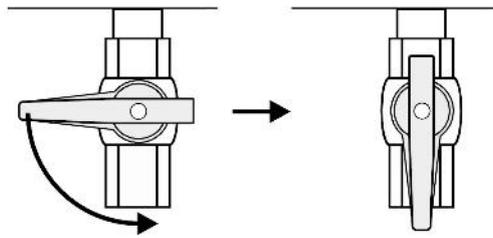
#### Open the water drain tap

Never turn off or on the water drain taps with a tool. If the water drain tap is stiff, use lubricants that are harmless to health or parting agents (according to USDA-H1).

#### NOTE

#### Draining off water

Turn on the water drain taps only directly above the on-site drain or a central waste drain in the kitchen. If you have put a shelf into the appliance, use a drain container with a sufficient volume or a drain extension tube.



**Figure 6** Opening the water drain tap

- Open the water drain taps.
- Drain off the water from the bain-marie wells.

#### Using the drain extension tube

**WARNING**

**Risk of scalding**



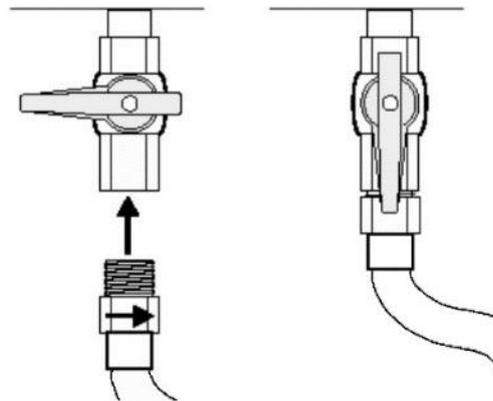
The water in the bain-marie wells can be very hot after operation. There is a risk of scalding, when draining off water.  
Act carefully. Wear suitable protective clothing.

**WARNING**

**Risk of hot surfaces**



After draining off water, the water drain taps can get very hot and the maximum temperature of 149° F (65°C), at which you are allowed to touch the appliance surfaces with bare hands, can be exceeded. There is a risk of burning.  
Act carefully. Wear suitable protective clothing.



**Figure 7** Screwing on the drain extension tube

- Screw the male thread of the drain extension tube to the end fitting of the water drain tap.
- Hold the end of the drain extension tube over a drain.
- Open the water drain tap.
- Drain off the water from the bain-marie wells.

## 6 Fault Detection and Trouble Shooting

### 6.1 Security Measures

#### DANGER

#### Hazardous electrical voltage



The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.

Before looking for faults, switch off the appliance at the mains. Pull out the mains plug and hung it on the plug holder provided.

#### WARNING

#### Risk of hot surfaces



The heated appliances can become hot during operation and only cool down slowly in the air.

Before looking for faults open the door of the appliance and let it cool down sufficiently.

### 6.2 Notes on Troubleshooting

Please contact our service partners in case of malfunctions and complaints within the warranty period. Even after the warranty period is expired you can have necessary repair work done by our service partners and certified electricians.

Service work should only be carried out by authorised specialist staff.

Defective components should only be replaced with **HUPFER®** original parts. The modular design simplifies the replacement of individual components.

In the event of after-sales service and when ordering spare parts specify always the data and corresponding part number given in the rating plate.

Regular inspection and maintenance of the appliance prevent disruptions to operation and ensure safety.

### 6.3 Fault and Action Table

Fault	Possible cause	Action
Running noise of swivel casters	Defective caster bearings	Replace the swivel casters.
	Sticky surface of the casters	Clean the swivel casters with water.
Appliance does not become warm; indicator light does not come on	Defective building fuses	Check fuse and repair, if necessary
	Defective On / Off switch	Switch off the appliance at the mains, have it checked and repaired by authorised specialist staff, if necessary
	Defective mains connecting lead or mains plug	Switch off the appliance at the mains, have it checked and repaired by authorised specialist staff, if necessary
Appliance becomes warm; indicator light does not come on	Defective indicator light	Take the appliance out of operation, have it checked and repaired by authorised specialist staff, if necessary.
	Defective circuit	Take the appliance out of operation, have it checked and repaired by authorised specialist staff, if necessary.

Fault	Possible cause	Action
Appliance does not become warm; indicator light is on	Thermostat is defective	Take the appliance out of operation, have it checked and repaired by authorised specialist staff, if necessary.
The appliance takes too long to heat up	Too much water in the bain-marie well	Reduce the amount of water
	Deposits of scale or impurities in the bain-marie well	Take the appliance out of operation, descale and clean the bain-marie well after it has been sufficiently cooled down

## 7 Cleaning and Care

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### 7.1 Security Measures

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#### DANGER



#### Hazardous electrical voltage

The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.

Before cleaning, switch off the appliance at the mains. Pull out the mains plug and hung it on the plug holder provided.

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#### WARNING



#### Risk of hot surfaces

The heated appliances can become hot during operation and only cool down slowly in the air.

Before cleaning, open the door of the appliance and let it cool down sufficiently.

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#### ATTENTION



#### Appliance damages

A layer of scale acts as thermal insulation and can lead to a heat accumulation above the tubular heating element as well as cause in damage to the well base. There is a risk of corrosion under the scale layer.

Clean the bain-marie wells thoroughly after every use.

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### 7.2 Hygiene Measures

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The correct behaviour of the operating staff is decisive for optimal hygiene.

All persons must be informed about the locally valid hygiene regulations, observe them and comply with them.

Stick a waterproof plaster to cover wounds on the hands and arms.

Never sneeze or cough on clean crockery or meals.

### 7.3 Cleaning and Care

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If the Mobile bain marie is handled with care, cleaned and maintained on a regular basis, it does not require any additional care measures. The bain-marie wells should be cleaned regularly after every use and the mobile bain-marie at the latest every 25 operating hours to ensure a hygienically perfect operation.

To clean thoroughly and quickly, wipe the Mobile bain marie and bain-marie wells with a soft cloth. Use for cleaning a soft cleaning cloth or an uncoated sponge. Use degreasing liquid cleansers that are approved for food industry. Never use high-pressure cleaner, chloride-containing cleaning agents, abrasive cleaning powder or other dry cleaning agents, steel wool, steel sponges and/or sharp-edged items.

If after cleaning the bain-marie wells there are still scale deposits, remove them, otherwise energy consumption will grow and efficiency will decrease. In case of heavy scale deposits, this can result in damages to the appliance. To descale, use commercially available descaling agents or vinegar water.

You can regrease the water drain taps with lubricating grease approved for use in the food industry to maintain tightness and ease of movement.

To clean the Mobile bain marie, proceed as follows:

- Switch off the appliance. Pull out the mains plug and insert it into the plug park provided.
- Allow the appliance to cool down.
- Drain off the bain-marie wells.
- Wipe the bain-marie wells and descale if required.
- Wipe the exterior panelling, folding shelves and shelves of the appliance.

**Table of care measures**

Cleaning and care measures	Action	daily	weekly	monthly	Interval
Bain-marie wells	clean				x <sup>1</sup>
Bain-marie wells	descale				x <sup>2</sup>
Exterior panelling of the Mobile bain marie	clean				x <sup>2</sup>
Folding shelves and shelves of the Mobile bain marie	clean				x <sup>2</sup>
Swivel casters	lubricate				x <sup>3</sup>
Water drain taps	lubricate				x <sup>2</sup>
Connecting lead: mechanical damages and obsolescence	check				x <sup>4</sup>
Mains plug: mechanical damages and obsolescence	check				x <sup>4</sup>

x<sup>1</sup> = after use

x<sup>2</sup> = if necessary, every 25 operating hours at the latest

x<sup>3</sup> = every 2 months

x<sup>4</sup> = every 6 months

## 7.4 Special Care Instructions

The resistance to corrosion of stainless steels is based on a passive layer which is formed on the surface when oxygen is admitted. The oxygen in the air is sufficient for the formation of the passive layer, so that faults or damage to the passive layer can be remedied again automatically by mechanical action.

The passive layer develops or reforms more quickly when the steel comes into contact with flowing water containing oxygen. The passive layer can be chemically damaged or disrupted by agents having a reducing (oxygen-consuming) action when the steel comes into contact with them in concentrated form or at high temperatures.

Such aggressive substances are for example:

- substances containing salt and sulphur
- chlorides (salts)
- seasoning concentrates (e.g. mustard, vinegar essence, seasoning cubes, saline solutions).

Further damages can occur due to:

- extraneous rust (e.g. from other components, tools or rust film)
- iron particles (e.g. grinding dust)
- contact with non-ferrous metals (element formation)
- lack of oxygen (e.g. no admission of air, low-oxygen water).

General working principles for the handling of appliances made of "refined stainless steel":

- Always keep the surface of appliances made from stainless steel clean and accessible to the air.
- Use cleaning agents suitable for stainless steel. No bleaching and chloride-containing cleaning agents should be used.
- Remove layers of lime scale, grease, starch and egg-white daily by cleaning. Corrosion can occur underneath these layers due to lack of air admission.
- After each cleaning operation remove all cleaning agent residues by wiping thoroughly. Afterwards, the surface should be thoroughly dried.
- Do not bring parts made from stainless steel into contact with concentrated acids, seasonings, salts etc. for longer than is absolutely necessary. Acid fumes which generate during cleaning of tiles also promote the corrosion of "refined stainless steel".
- Avoid damaging the surface of the stainless steel, particularly by metals other than stainless steel.
- Residues of extraneous metals produce extremely small amounts of chemical elements which can cause corrosion. In any case, contact with iron and steel should be avoided because that leads to extraneous rust. If stainless steel comes into contact with iron (steel wool, steel particles from pipes, water containing iron), this can be a trigger for corrosion. Therefore, for mechanical cleaning use exclusively refined steel wool or brushes with natural, plastics or refined steel bristles. Steel wool or brushes with unalloyed steel lead to extraneous rust due to abrasion.

## 8 Spare Parts and Accessories

### 8.1 Introduction

Service work should only be carried out by authorised specialist staff.

Defective components should only be replaced with **HUPFER®** original parts. That is the only way to guarantee a safe operation and long service life together with a high transport capacity.

In the event of after-sales service and when ordering spare parts specify always the data and corresponding part number given in the rating plate.

Always give the order number and corresponding part number when ordering replacement parts. The order number is given on the rating plate of the Mobile bain marie.

Always stockpile a full set of replacement parts as a reserve or make a maintenance contract with a specialised dealer to avoid standstill times.

### 8.2 Spare Parts and Accessories List

SPA/EB-1 | SPA/EB-2 | SPA/EB-2LS | SPA/EB-3 | SPA/EB-3LS | SPA/EB-4

Spare part, part number	Item designation	Type	Q-ty
014000405	Swivel caster	Ø125mm	
014000406	Swivel caster	Ø125mm with total brake	
014001005	Plug holder		
014001006	Feed-through terminal	with kink protection	
014001023	Mains terminal	3-pole	
014001081	Curly lead	3 x 1,0 with Schuko® angle plug	
014001082	Curly lead	3 x 1,5 with Schuko angle plug (SPA/EB-4 only)	
014001104	Tubular heating element	230-700W	
014001300	On / Off switch.		
014002006	Adapter	22/22	
0191010963	Push bar		
014002111	Protection plate	black	
014002170-01	Thermostat switch module	complete	
014034027	Thermostat	20-100°C (68-230°F)	
014003210	Cage nut	M5	
014003211	Mushroom-head screw	M5 x 10 A2 for appliance lid	
014005008	Ball valve	½ inch	
0132502H	Support bar	SB-325/16.5	
0132522H	Support bar	SB-325/20.5	
0132512H	Support bar	SB-530/23.5	
0162242	Shelf	for SPA/EB-1	
0162243	Shelf	for SPA/EB-2	
0162244	Shelf	for SPA/EB-3	
0162245	Shelf	for SPA/EB-4	
0162260	Drain extension tube	flexible	
0162264	Folding shelf	frontal for SPA/EB	

Spare part, part number	Item designation	Type	Q-ty
0162261	Folding shelf	lateral for SPA/EB-2	
0162262	Folding shelf	lateral for SPA/EB-3	
0162263	Folding shelf	lateral for SPA/EB-4	

SPA/EB-2F | SPA/EB-3F

Spare part, part number	Item designation	Type	Q-ty
01400405	Swivel caster	Ø125mm	
01400406	Swivel caster	Ø125mm with total brake	
014001005	Plug holder		
014001006	Feed-through terminal	with kink protection	
014001023	Mains terminal	3-pole	
014001081	Curly lead	3 x 1,0 with Schuko® angle plug	
0162626	Repair set for foil heating element		
014001300	On / Off switch.		
014002006	Adapter	22/22	
014002101	Protective strip		
014002111	Protection plate	black	
014002170-01	Thermostat switch module	complete	
014034027	Thermostat	20-100°C (68-230°F)	
014003210	Cage nut	M5	
014003211	Mushroom-head screw	M5 x 10 A2 for appliance lid	
014005008	Ball valve	½ inch	
0132502H	Support bar	SB-325/16.5	
0132522H	Support bar	SB-325/20.5	
0132512H	Support bar	SB-530/23.5	
0162243	Shelf	for SPA/EB-2	
0162244	Shelf	for SPA/EB-3	
0162260	Drain extension tube	flexible	
0162264	Folding shelf	frontal for SPA	
0162261	Folding shelf	lateral for SPA/EB-2	
0162262	Folding shelf	lateral for SPA/EB-3	