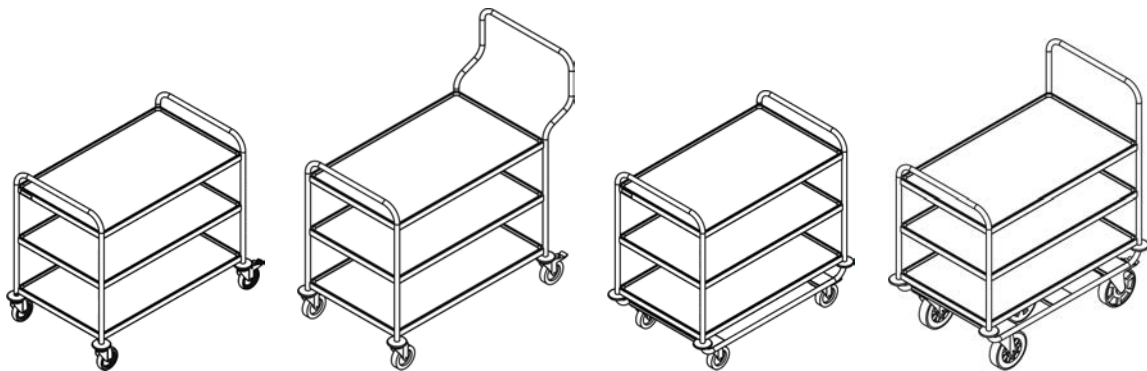


Operating instructions



Serving Trolley
SW | SW ERGO | SSW | SSW ERGO | MSW | MSSW

1 Introduction

1.1 Appliance Information

Appliance name	Serving Trolley
Appliance type/s	SW SW ERGO SSW SSW ERGO MSW MSSW
Manufacturer	HUPFER® Metallwerke GmbH & Co. KG Dieselstraße 20 48653 Coesfeld Germany Postfach 1463 48634 Coesfeld Germany ☎ +49 2541 80 50 📠 +49 2541 805 111 www.hupfer.de info@hupfer.de

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

Ensure that operating staff have been briefed regarding sources of danger and possible incorrect handling.

Subject to modifications

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

Translation of the original edition

Manual edition
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1.3 List of Abbreviations

Abbreviation	Definition																																				
AK-BWA	Working Group Bedframe and Cart Decontamination Systems (<i>Arbeitskreis Bettgestell- und Wagendekontaminationsanlagen</i>)																																				
BGR	German Employers' Liability Insurance Association rule (<i>Berufsgenossenschaftliche Regel</i>)																																				
BGV	German Employers' Liability Insurance Association regulations (<i>Berufsgenossenschaftliche Vorschrift</i>)																																				
CE	Communauté Européenne European Community																																				
DGSV e.V.	German Society for Sterile Supply (<i>Deutsche Gesellschaft für Sterilgutversorgung</i>)																																				
DIN	Deutsches Institut für Normung German Institute for Standardisation, technical regulations and technical specifications																																				
E/V	Spare or wearing part (<i>Ersatz- bzw. Verschleißteil</i>)																																				
EC	European Community																																				
EN	European Standard (<i>Europäische Norm</i>) Harmonised standard for the EU market																																				
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 $\varnothing > 2.0''$ (50 mm)</td> <td>1</td> <td>Protection against dripping water (vertically falling drops)</td> </tr> <tr> <td>2</td> <td>Protection against contact with the fingers, protection against ingress of foreign objects $\varnothing > 0.5''$ (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, wires or similar objects of $\varnothing > 0.1''$ (2.5 mm), protection against foreign objects $\varnothing > 0.1''$ (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, wires or similar objects of $\varnothing > 0.04''$ (1 mm), protection against foreign objects $\varnothing > 0.04''$ (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 $\varnothing > 2.0''$ (50 mm)	1	Protection against dripping water (vertically falling drops)	2	Protection against contact with the fingers, protection against ingress of foreign objects $\varnothing > 0.5''$ (12 mm)	2	Protection against dripping water (at any angle up to 15° from the vertical)	3	Protection against contact with tools, 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, 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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MPG	German Law on Medical Devices (<i>Medizinproduktegesetz</i>)																																				
RDG	Cleaning and disinfecting machines (<i>Reinigungs- und Desinfektionsgeräte</i>)																																				
StE	Sterilisation unit (<i>Sterilguteinheit</i>)																																				
ZSVA	Central Sterile Supply (<i>Zentrale Sterilgutversorgung</i>)																																				

1.4 Definitions of Terms

Term	Definition
Disinfection	Reduction of causal agents of infections on and in contaminated objects, so that the objects can no longer be the source of further infections.
German Society for Sterile Supply (<i>Deutsche Gesellschaft für Sterilgutversorgung e. V.</i>)	The primary objective is to create a uniformly high standard of quality in the preparation of medical devices. The recommendations of the Quality Committee of Experts provide tips and instructions on practical methods of preparation. For instance, the introduction of agreed curricula for training personnel entrusted with preparing medical devices made it possible to implement recognised standards that have made a significant contribution towards achieving the stated objectives.
Specialist	A specialist is a person who can assess work assigned and can recognise possible hazards themselves based on their professional training, skills, experience and knowledge of the respective guidelines.
Gastronorm	Gastronorm is a measurement system used worldwide in places such as food processing plants or large-scale kitchens. The use of standardised sizes makes it possible to exchange food pans. The basic size of the Gastronorm (GN) 1/1 is 12.8 x 20.9" (325 x 530mm). Items are available in different depths.
H1	Hygienic standard (NSF/USDA) for lubricants that are suitable for incidental and technically unavoidable contact with foodstuffs
ISO Standard	The ISO standard is a system of measurements governing containers used in sterile supply logistics, for example, for transport and storage of articles in cupboards and transport vehicles, in OP theatres, ambulances, preparation and ward rooms as well as laundry rooms. The basic dimension is 15.7 x 23.6" (400 x 600 mm). ISO standard containers are available in different versions and with different depths.
Check, inspect	Compare with certain conditions and/or characteristics such as damage, leaks, filling levels and heat.
Machine safety	The term machine safety refers to all the measures used to avert injury to persons. The basis for machine safety is directives and laws for protecting users of technical devices and systems valid nationally and across the EC.
German Law on Medical Devices (<i>Medizinproduktegesetz</i>)	The German law governing medical devices is the name given in Germany and Austria to the transposition into national law of the European Directives 90/385/EEC relating to Active Implantable Medical Devices, 93/42/EEC relating to Medical Devices and 98/79/EEC relating to In-Vitro Diagnostic Medical Devices. Medicines are not covered by the term medical devices.
Passive layer	A non-metallic protective layer on a metallic material that prevents or slows down material corrosion.
Verify, test	Compare with certain values such as weight, torque, content or temperature.
Qualified person, qualified personnel	Qualified personnel are persons who due to their professional training, experience, instruction and their knowledge of relevant 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 potential hazards (definition of specialists according to IEC 364).
Clean / unclean side	The Central Sterile Supply consists of three working areas: the unclean side or cleaning zone, the clean side (packaging stations) and the sterile area (sterile supply store). Contaminated material is cleaned and/or disinfected manually and automatically on the unclean side. Cleaning and disinfecting machines clean, disinfect and dry the material. Cleaning and disinfecting machines are so-called through-loading types that can only be loaded on the unclean side and unloaded on the clean side. The clean side is the second largest working area of the ZSVA (Central Sterile Supply). The cleaned and disinfected material is then packaged in containers and subsequently sterilised.
Sterile supply	Sterile supply is a historical term that has developed over time in conjunction with the term sterilisation unit. This volume measurement of 54 l denotes the volume to be sterilised, in which it is possible to store a different number of medical devices. It is only of limited use as a measure of performance for the scale of sterilisation of medical devices.
Sterilisation unit	Volume unit. A sterilisation unit measuring 23.6 x 11.8 x 11.8" (60 x 30 x 30) cm, which equals a volume of 54 l.

Term	Definition
Sterilisation	<p>A validated process to produce devices free from viable micro-organisms.</p> <p>Sterilisation, sterilising and sanitation denote processes used to free materials and objects from living micro-organisms including those in their dormant state (for example, spores). The condition that the material and objects are said to achieve through these processes is called sterile.</p> <p>Generally speaking, steam sterilisation processes (autoclave) are utilised.</p>
Ultrasonic cleaning	<p>Used to clean small, complex and intricately structured components.</p> <p>This cleaning principle is based on cavitation. Soft cavitation is not desired in ultrasonic cleaning processes; consequently, the solution is often degassed in the ultrasonic cleaning system using a special, integrated degassing programme before the cleaning process.</p> <p>The ultrasonic field in the liquid solution generates high and low pressure shock waves. When such a low-pressure wave meets an object, hollow spaces filled with vapour are induced at small air bubbles adhering to the surfaces of an object as contaminants.</p> <p>When high pressure waves meet the cavity, compression causes the static pressure in the cavity to rise until it surpasses the saturated vapour pressure. The vapour bubbles condense abruptly at the speed of sound. This process sees peak pressures up to as much as 1,450,380 psi (100,000 bar). This cyclic formation and collapse of hollow spaces acts on and cleans the surface. As a result, dirt and other contaminants adhering to the surface are removed mechanically.</p>
Instructed persons	<p>An instructed person is a person who has been instructed on the possible risks resulting from improper behaviour when carrying out an assigned task and regarding the necessary protective equipment and protective measures, and who has been trained for this task, if necessary.</p>

1.5 Orientation of the Appliance

The front

The "front" refers to the side where the total locks at the swivel casters are located. With ERGO appliances, a push handle is located at the front.

The rear

The "rear" refers to the opposite side to the front.

The right

The "right" refers to the right hand side when viewed from the front side (front).

The left

The "left" refers to the left hand side when viewed from the front.




1.6 Notes on Using the Manual

1.6.1 Notes on the Manual Structure

This manual is divided into function- and task-focused sections.

1.6.2 Notes and their Representation used in all Sections

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.

DANGER	Brief description of hazard
	<p>There is an imminent threat to life and physical well-being for the user and / or third parties if instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of hazard is indicated by a symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.</p>
WARNING	Brief description of hazard
	<p>There is an indirect threat to life and physical well-being for the user and / or third parties if the instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of hazard is indicated by a symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.</p>
ATTENTION	Brief description of hazard
	<p>There is a potential risk of injury or damage to property if the instructions are not followed precisely or the circumstances described are not taken into account.</p> <p>The type of hazard is indicated by a general symbol and explained in the accompanying text in more detail. The general symbol for danger is used in this example.</p>
NOTE	Brief description of additional information
	<p>Attention is pointed to special conditions or additional important information on the topic concerned.</p>
INFO	Short title
	<p>Contains additional information on aspects which make work easier or recommendations on the topic concerned.</p>

2 Safety Instructions

2.1 Introduction

The section 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 section.

You must comply with the respectively valid national and international Safety at Work Regulations. The manufacturer 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, users must, in particular, comply with the Health and Safety rules of the German Federation of the Statutory Accident Insurance Institutions for the Industrial Sector, BGR 110 "Working in restaurants" and BGR 111 "Working in industrial kitchens".

2.2 Warning Symbols Used

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

The following symbols may be used:



General hazard area

2.3 Safety Instructions for Appliance Safety

The appliance is operated safely if it is used correctly and carefully. Negligent handling of the appliance can lead to a threat to life and physical well-being for the user and / or third parties as well as hazards for the appliance itself and the operator's other 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 operating and actuating elements must be in a perfect and fail-safe condition with regards to technical standards.
- Before putting the appliance into operation, the appliance must be checked for external visible damage and defects. In case of damage, inform immediately the competent bodies and switch off the Serving Trolley.
- Modifications or retrofits to the equipment are only permitted after consultation with the manufacturer and upon receipt of their consent in writing.
- The appliance is designed for transport by hand only. It is not permitted to use a machine of any type to move the appliance. Risk of injury and damage.
- Release both total locks before moving the appliance. Moving the appliance when the total locks are engaged can damage the chassis.
- The appliance should only be transported over level floors. Moving the appliance over very uneven floors and stair steps can damage the chassis.
- Do not stop the Serving Trolley by applying the total locks. The total locks are designed to be able to prevent the appliance from unintended moving. Do not park the appliance on sloping floors. Secure the appliance against rolling away by applying both total locks when stopping it.

- When approaching walls and moving round obstacles, always look out for persons in your path. Risk of injury.
- When transporting the appliance manually, always hold the push bar with your hands. Never let go of the appliance while moving it.
- Move no faster than a walking pace when transporting the appliance by hand. Heavily laden appliances are difficult to brake and steer. If necessary, ask for assistance when transporting the appliance.
- Never try to catch the Serving Trolley with your hands if it tips over due to carelessness or external circumstances. Risk of injury.

2.4 Safety Instructions for Transport

The following points are to be observed when transporting the Serving Trolley:

- The appliances should be safely secured when transported off site inside a vehicle such as a truck. The total locks are not suitable for securing the appliances when they are transported in a vehicle.
- When loading, use only hoists and load lifting devices approved for the weight of the appliance to be lifted.
- Do not put a defective appliance into operation under any circumstances and inform the supplier immediately in such a case.

2.5 Safety Instructions for Cleaning and Care

The following points must be observed when carrying out any cleaning and care operations:

- Cleaning instructions must be strictly observed for reasons of hygiene.

2.6 Safety Instructions regarding Fault Repair

The following points must be observed when carrying out any fault repairs:

- The local Accident Prevention Regulations in force must be observed.
- Observe the valid product safety regulations for the product 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.
- Only use original spare parts to replace defective components.

3 Description and Technical Data

3.1 Performance Description

Serving Trolleys are mobile transport appliances for the manual transport of food, drinks, crockery and other kitchen utensils intended for use in canteens and restaurants.

There is also high demand for safe and efficient transportation of various goods in hospitals and clinics. Medical Serving Trolleys provide a perfect aid for transportation and interim storage of devices, instruments and work materials.

All Serving Trolleys are constructed in such a way that they can be cleaned easily and without exposure to hazards. The design ensures that there are no corners or edges that could potentially cause injuries. Firmly welded supports ensure high stability.

3.2 Proper Use

Serving Trolleys are intended for containing and transporting beverages, crockery and other kitchen utensils in canteens and restaurants.

Medical Serving Trolleys are intended for containing and transporting utensils used in hospitals and clinics.

The shelves are suitable for transporting objects with a firm base, which are protected against falling down with a non-slip pad.

Proper use includes observing specified procedures, compliance with the technical specifications and use of supplied or optional original accessories.

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

3.3 Improper Use

It is not permitted to load the Serving Trolley with other loads than specified.

People must not sit or stand on the appliance under any circumstances. Transport of persons is not permitted.

The maximum load of the top surface as well as the shelves must not be exceeded. Avoid point loads, otherwise this can result in deformations in the metal sheet surface.

No liability is assumed and no warranty claims can be submitted for damages caused by improper use.

3.4 Serving Trolleys for Large-Scale Kitchens

3.4.1 View of the Appliance

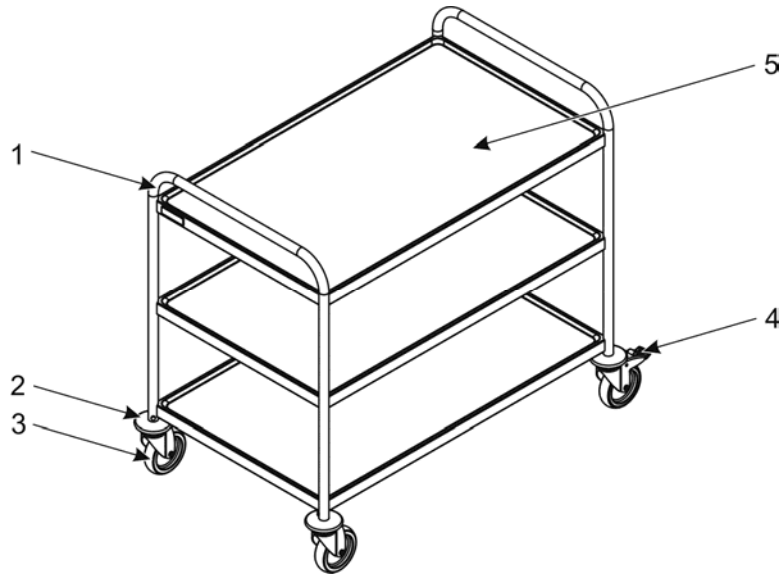


Figure 1 View of the SW Standard Serving Trolley

- | | | | |
|---|----------------------------------|---|-------------------------------|
| 1 | Round tube push bars | 4 | Swivel caster with total lock |
| 2 | Disc bumper | 5 | Shelf |
| 3 | Swivel caster without total lock | | |

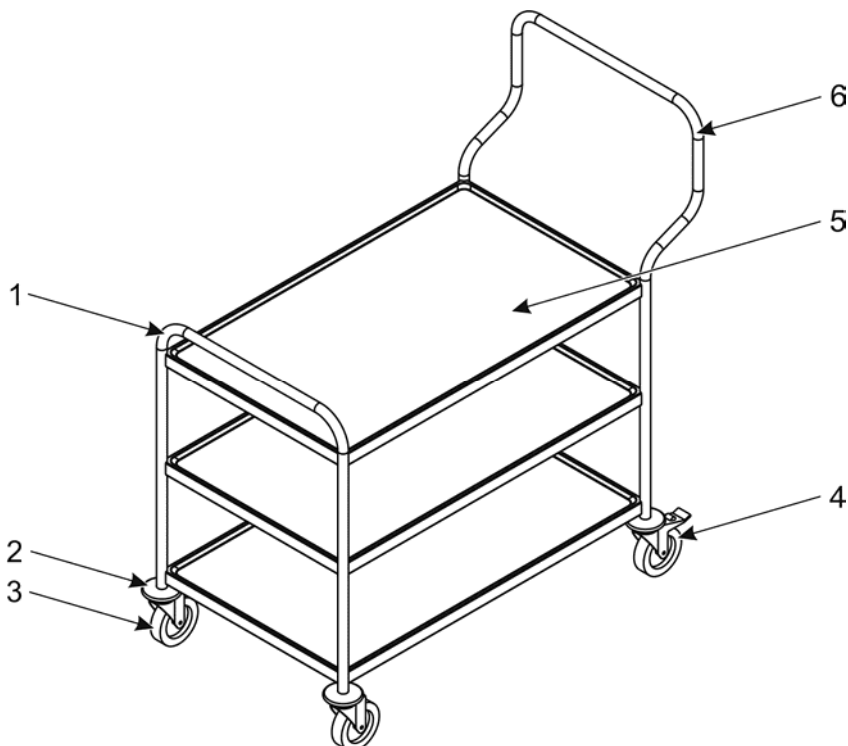


Figure 2 View of the SW Ergo Serving Trolley

- | | | | |
|---|------------------------------------|---|-------------------------------|
| 1 | Round tube push bars | 4 | Swivel caster with total lock |
| 2 | Disc bumper | 5 | Shelf |
| 3 | Swivel casters without total locks | 6 | Ergonomic push handle |

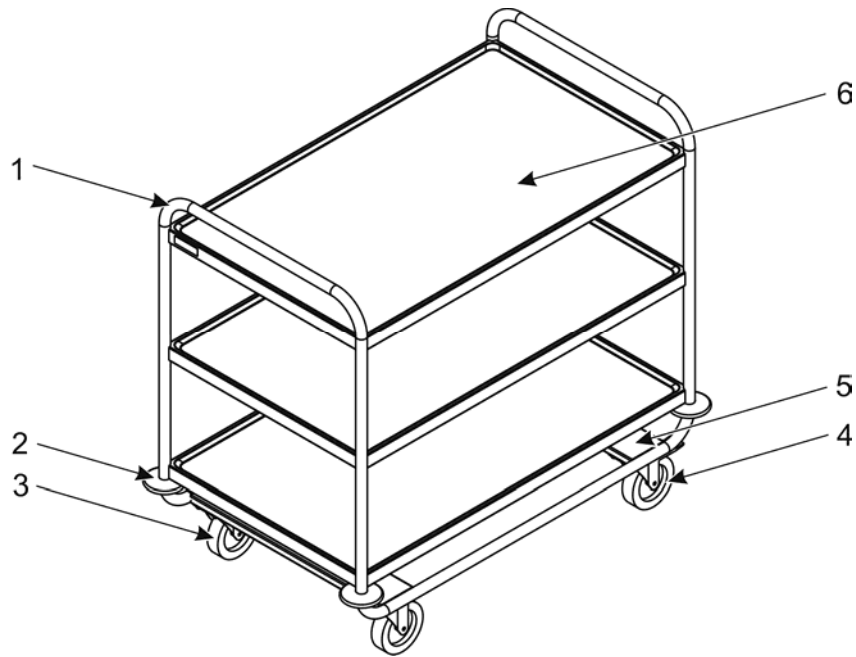


Figure 3 View of the SSW Serving Trolley (heavy-duty version)

- | | | | |
|---|----------------------------------|---|-------------------------------|
| 1 | Round tube push frame | 4 | Swivel caster with total lock |
| 2 | Disc bumper | 5 | Cross-bar |
| 3 | Swivel caster without total lock | 6 | Shelf |

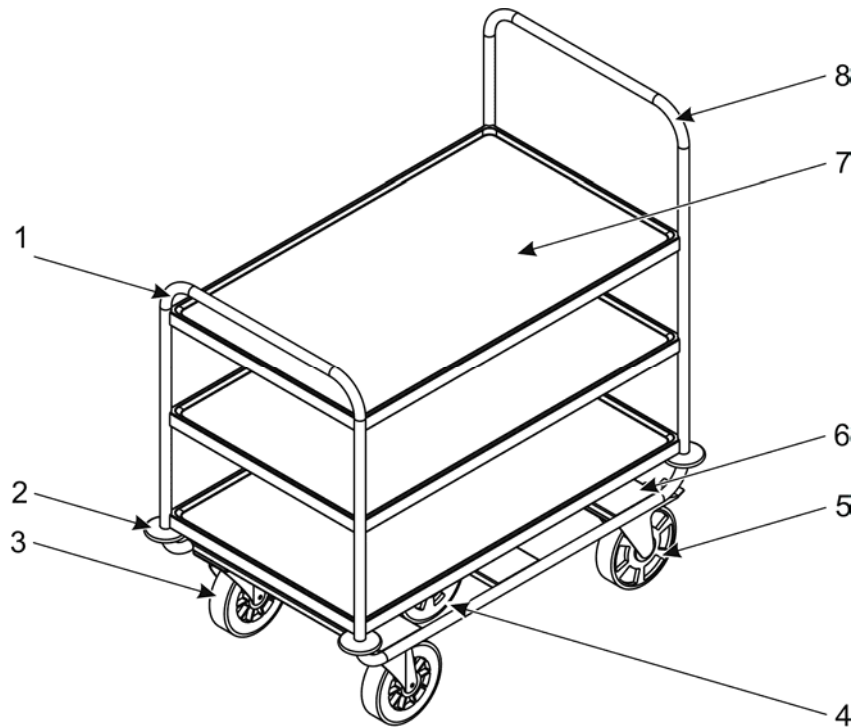


Figure 4 View of the SSW Ergo Serving Trolley

- | | | | |
|---|----------------------------------|---|-------------------------------|
| 1 | Round tube push bars | 5 | Swivel caster with total lock |
| 2 | Disc bumper | 6 | Cross-bar |
| 3 | Swivel caster without total lock | 7 | Shelf |
| 4 | Fixed caster | 8 | Ergonomic push handle |

3.4.2 Description of the Serving Trolleys

The Serving Trolleys are made of robust stainless steel. They consist of two round tube push bars or a closed round tube push frame with welded-in shelves in between.

Each shelf has a large, easy-to-clean radius and is lower than the profile edge. The shelves are bevelled on all sides, are slightly crimped towards the inside for safety purposes, and are equipped with a sound absorbing undercoating.

Four disc bumpers installed directly above the swivel casters protect from damage. The disc bumpers are made of elastic and shock resistant plastic and can easily be replaced.

All Serving Trolleys are equipped with corrosion-proof and maintenance-free swivel casters of which those at the front are additionally equipped with total locks. The Serving Trolleys may also be equipped with two swivel and fixed casters as an option.






The Serving Trolleys from the **SW ERGO** range are additionally equipped with a lateral push handle at the front, which is located at an ergonomically beneficial height and allows optimal handling without physical strain. Due to its height, the gripping position can be changed from horizontal to vertical in order to prevent the typical effects of forced postures. In addition, the upper shelf is reinforced with a support frame consisting of three braces permitting higher permanent surface loads.

The Serving Trolleys from the **SSW** range are characterised by their great loading capacity. The closed round tube push frame is additionally reinforced with welded-in traverses. Even with maximum loads, uneven terrains such as thresholds can easily be passed with the appliance.

The Serving Trolleys from the **SSW ERGO** range share their design with the SSW and are additionally equipped with a lateral push handle at the front, which is located at an ergonomically beneficial height and allows optimal handling without physical strain. Due to its height, the gripping position can be changed from horizontal to vertical in order to prevent the typical effects of forced postures. In addition, the upper shelf is reinforced with a support frame consisting of three braces permitting higher permanent surface loads. In addition, the SSW Ergo features a fifth fixed caster which is mounted in the middle and permits fast and easy shunting in the narrowest of spaces. Due to the large wheel diameter, the pulling force required remains low – even at maximum load. SSW ERGO Serving Trolleys can always be manoeuvred in the optimal way, regardless of the physical strength of the operating staff.

3.4.3 Technical Data

SW Standard Serving Trolley

	Dim.	SW 6x4/2	SW 6x4/3	SW 8x5/2	SW 8x5/3	SW 8x5/4
						
width	in (mm)	27.4 (695)	27.4 (695)	35.2 (895)	35.2 (895)	35.2 (895)
Depth	in (mm)	19.5 (495)	19.5 (495)	23.4 (595)	23.4 (595)	23.4 (595)
Height	in (mm)	35.1 (892)	35.1 (892)	37.8 (960)	37.8 (960)	50.2 (1275)
Tare weight	lbs (kg)	24.3 (11)	26.5 (12)	30.9 (14)	39.2 (17, 8)	52.5 (23,8)
Payload	lbs (kg)	176.4 (80)	264.6 (120)	176.4 (80)	264.6 (120)	330.7 (150)
Number of shelves		2	3	2	3	4
Shelf dimensions	in (mm)	23. 6 x 15.7 (600 x 400)	23. 6 x 15.7 (600 x 400)	31. 5 x 19. 7 (800 x 500)	31. 5 x 19. 7 (800 x 500)	31. 5 x 19. 7 (800 x 500)
Surface load per shelf	lbs (kg)	88.2 (40)	88.2 (40)	88.2 (40)	88.2 (40)	88.2 (40)

	Dim.	SW 6x4/2	SW 6x4/3	SW 8x5/2	SW 8x5/3	SW 8x5/4
Working height between shelves	in (mm)	21.2 (538)	9.9 (251)	23.3 (591)	10.9 (278)	10.9 (278)
Height of the top shelf	in (mm)	31.5 (800)	31.5 (800)	31.5 (800)	33.5 (851)	45.8 (1164)
Caster diameter	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)

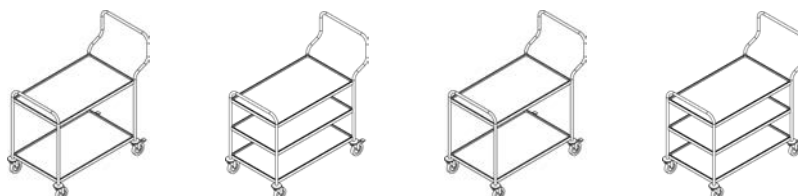
	Dim.	SW 8x5/5	SW 10x6x2	SW 10x6x3	SW 10x6x4	SW 10x6x5
--	------	----------	-----------	-----------	-----------	-----------



width	in (mm)	35.2 (895)	43.1 (1095)	43.1 (1095)	43.1 (1095)	43.1 (1095)
Depth	in (mm)	23.4 (595)	27.4 (695)	27.4 (695)	27.4 (695)	27.4 (695)
Height	in (mm)	62.4 (1586)	37.8 (960)	37.8 (960)	50.1 (1273)	62.4 (1585)
Tare weight	lbs (kg)	63.5 (28,8)	39 (17,7)	50 (22,7)	67,7 (30,7)	80,9 (36,7)
Payload	lbs (kg)	330.7 (150)	176.4 (80)	264.6 (120)	330.7 (150)	330.7 (150)
Number of shelves		5	2	3	4	5
Shelf dimensions	in (mm)	31.5 x 19.7 (800 x 500)	23.6 x 15.7 (600 x 400)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)
Surface load per shelf	lbs (kg)	88.2 (40)	88.2 (40)	88.2 (40)	88.2 (40)	88.2 (40)
Working height between shelves	in (mm)	10.9 (278)	23.3 (591)	10.9 (278)	10.9 (278)	10.9 (278)
Height of the top shelf	in (mm)	58.1 (1477)	33.5 (851)	33.5 (851)	45.8 (1164)	58.2 (1479)
Caster diameter	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)

SW ERGO Serving Trolley





	Dim.	SW 8x5/2 ERGO	SW 8x5/3 ERGO	SW 10x6/2 ERGO	SW 10x6/3 ERGO
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width	in (mm)	40.7 (1035)	40.7 (1035)	48.6 (1235)	48.6 (1235)
Depth	in (mm)	23.4 (595)	23.4 (595)	27.4 (695)	27.4 (695)
Height	in (mm)	37.8 x 49.8 (960 / 1266)	37.8 x 49.8 (960 / 1266)	37.8 x 49.8 (960 / 1266)	37.8 x 49.8 (960 / 1266)





	Dim.	SW 8x5/2 ERGO	SW 8x5/3 ERGO	SW 10x6/2 ERGO	SW 10x6/3 ERGO
Tare weight	lbs (kg)	35.3 (16)	48.5 (22)	46.3 (21)	61.7 (28)
Payload	lbs (kg)	220.5 (100)	308.6 (140)	220.5 (100)	308.6 (140)
Number of shelves		2	3	2	3
Shelf dimensions	in (mm)	31.5 x 19.7 (800 x 500)	31.5 x 19.7 (800 x 500)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)
Surface load of top shelf	lbs (kg)	132.3 (60)	132.3 (60)	132.3 (60)	132.3 (60)
Surface load of lower shelf/shelves	lbs (kg)	88.2 (40)	88.2 (40)	88.2 (40)	88.2 (40)
Working height between shelves	in (mm)	23.3 (591)	10.9 (278)	23.3 (591)	10.9 (278)
Height of the top shelf	in (mm)	33.5 (851)	33.5 (851)	33.5 (851)	33.5 (851)
Caster diameter	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)

SSW Serving Trolley (heavy-duty version)

	Dim.	SSW 8x5/2	SSW 8x5/3	SSW 8x5/4	SSW 8x5/5
					
width	in (mm)	35.2 (895)	35.2 (895)	35.2 (895)	35.2 (895)
Depth	in (mm)	23.4 (595)	23.4 (595)	23.4 (595)	23.4 (595)
Height	in (mm)	40.3 (1023)	40.3 (1023)	52.6 (1336)	64.9 (1649)
Tare weight	lbs (kg)	36.8 (16,7)	45.6 (20,7)	61.1 (27,7)	74.3 (33,7)
Payload	lbs (kg)	264.6 (120)	396.8 (180)	440.9 (200)	440.9 (200)
Number of shelves		2	3	4	5
Shelf dimensions	in (mm)	31.5 x 19.7 (800 x 500)	31.5 x 19.7 (800 x 500)	31.5 x 19.7 (800 x 500)	31.5 x 19.7 (800 x 500)
Surface load per shelf	lbs (kg)	132.3 (60)	132.3 (60)	132.3 (60)	132.3 (60)
Working height between shelves	in (mm)	23.3 (591)	10.9 (278)	10.9 (278)	10.9 (278)
Height of the top shelf	in (mm)	36.2 (919)	36.2 (919)	48.1 (1223)	64.9 (1649)
Caster diameter	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)

	Dim.	SSW 10x6/2	SSW 10x6/3	SSW 10x6/4	SSW 10x6/5
					
width	in (mm)	43.1 (1095)	43.1 (1095)	43.1 (1095)	43.1 (1095)
Depth	in (mm)	27.4 (695)	27.4 (695)	27.4 (695)	27.4 (695)
Height	in (mm)	40.3 (1023)	40.3 (1023)	52.6 (1336)	64.9 (1649)
Tare weight	lbs (kg)	47.8 (21,7)	58.9 (26,7)	74.3 (33,7)	89.7 (40,7)
Payload	lbs (kg)	264.6 (120)	396.8 (180)	440.9 (200)	440.9 (200)
Number of shelves		2	3	4	5
Shelf dimensions	in (mm)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)
Surface load per shelf	lbs (kg)	132.3 (60)	132.3 (60)	132.3 (60)	132.3 (60)
Working height between shelves	in (mm)	23.3 (591)	10.9 (278)	10.9 (278)	10.9 (278)
Height of the top shelf	in (mm)	36.2 (919)	36.2 (919)	48.5 (1232)	60.8 (1545)
Caster diameter	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)

SSW ERGO Serving Trolley (heavy-duty version)

	Dim.	SSW 8x5/2 ERGO	SSW 8x5/3 ERGO	SSW 10x6/2 ERGO	SSW 10x6/3 ERGO
					
width	in (mm)	35.4 (900)	35.4 (900)	43.3 (1100)	43.3 (1100)
Depth	in (mm)	23.6 (600)	23.6 (600)	27.6 (700)	27.6 (700)
Height	in (mm)	40.2 x 9.8 (1020/1250)	40.2 x 9.8 (1020/1250)	40.2 x 9.8 (1020/1250)	40.2 x 9.8 (1020/1250)
Tare weight	lbs (kg)	74.3 (33,7)	45.6 (20,7)	77.2 (35)	94.8 (43)
Payload	lbs (kg)	264.6 (120)	396.8 (180)	264.6 (120)	396.8 (180)
Number of shelves		2	3	2	3
Shelf dimensions	in (mm)	31.5 x 19.7 (800 x 500)	31.5 x 19.7 (800 x 500)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)
Surface load per shelf	lbs (kg)	132.3 (60)	132.3 (60)	132.3 (60)	132.3 (60)

	Dim.	SSW 8x5/2 ERGO	SSW 8x5/3 ERGO	SSW 10x6/2 ERGO	SSW 10x6/3 ERGO
Working height between shelves	in (mm)	20.1 (510)	9.3 (237)	20.1 (510)	9.3 (237)
Height of the top shelf	in (mm)	36.2 (920)	36.2 (920)	36.2 (920)	36.2 (920)
Caster diameter	in (mm)	7.9 (200)	7.9 (200)	7.9 (200)	7.9 (200)

3.5 Medical Serving Trolleys

3.5.1 View of the Appliance

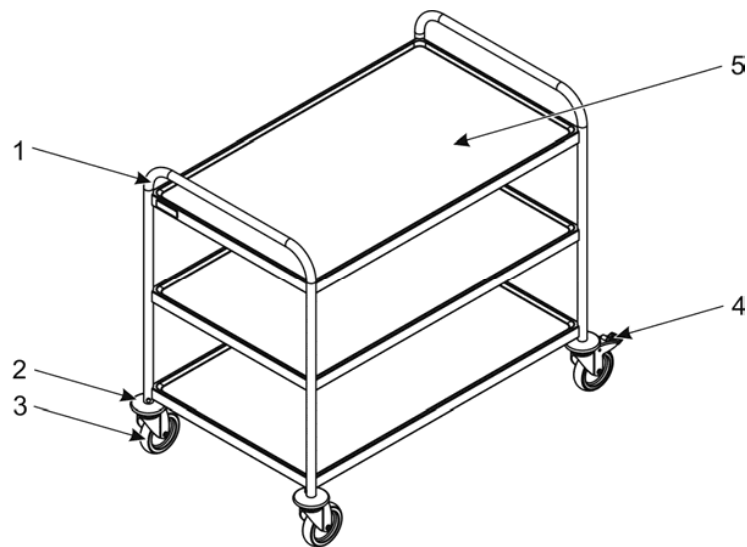


Figure 5 View of the MSW Medical Serving Trolley

- | | |
|------------------------------------|---------------------------------|
| 1 Round tube push bars | 4 Swivel caster with total lock |
| 2 Disc bumper | 5 Shelf |
| 3 Swivel caster without total lock | |



Figure 6 View of the MSSW Medical Serving Trolley

- | | |
|------------------------------------|---------------------------------|
| 1 Round tube push frame | 4 Swivel caster with total lock |
| 2 Disc bumper | 5 Cross-bar |
| 3 Swivel caster without total lock | 6 Shelf |

3.5.2 Description of the Medical Serving Trolleys

The Medical Serving Trolleys are made of robust stainless steel. They consist of two round tube push bars or a closed round tube push frame with welded-in shelves in between.

Each shelf has a large, easy-to-clean radius and is lower than the profile edge. The shelves are bevelled on all sides and are slightly crimped towards the inside.





Four disc bumpers installed directly above the swivel casters protect from damage. The disc bumpers are made of elastic and shock resistant plastic and can easily be replaced.




All Serving Trolleys are equipped with corrosion-proof and maintenance-free as well as anti-static swivel casters of which those at the front are additionally equipped with total locks. The Serving Trolleys may also be equipped with two swivel and fixed casters as an option.

Medical Serving Trolleys from the **MSSW** range are designed for handling large capacities and bearing heavy overall loads. The closed round tube push frame is additionally reinforced with welded-in traverses.






3.5.3 Technical Data

MSW Medical Transport Trolleys

	Dim.	MSW 6x4/2	MSW 6x4/3	MSW 8x5/2	MSW 8x5/3
					
width	in (mm)	27.6 (700)	27.6 (700)	35.2 (895)	35.2 (895)
Depth	in (mm)	19.7 (500)	19.7 (500)	23.4 (595)	23.4 (595)
Height	in (mm)	35.2 (895)	35.2 (894)	37.8 (960)	37.8 (960)
Tare weight	lbs (kg)	28.7 (13)	35.3 (16)	33.1 (15)	44.1 (20)
Payload	lbs (kg)	176.4 (80)	264.6 (120)	176.4 (80)	264.6 (120)
Number of shelves		2.0	3.0	2.0	3.0
Shelf dimensions	in (mm)	23.6 x 15.7 (600 x 400)	23.6 x 15.7 (600 x 400)	31.5 x 19.7 (800 x 500)	31.5 x 19.7 (800 x 500)
Surface load per shelf	lbs (kg)	88.2 (40)	88.2 (40)	88.2 (40)	88.2 (40)
Working height between shelves	in (mm)	21.2 (538)	9.9 (251)	23.3 (591)	10.9 (278)
Height of the top shelf	in (mm)	31.5 (800)	31.5 (800)	33.5 (851)	33.5 (851)
Caster diameter	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)

	Dim.	MSW 8x5/4	MSW 10x6/2	MSW 10x6/3
				
width	in (mm)	35.2 (895)	43.1 (1095)	43.1 (1095)
Depth	in (mm)	23.4 (595)	43.1 (1095)	43.1 (1095)
Height	in (mm)	50.2 (1275)	37.8 (960)	37.8 (960)
Tare weight	lbs (kg)	55.1 (25)	41.9 (19)	57.3 (26)
Payload	lbs (kg)	330.7 (150)	176.4 (80)	264.6 (120)
Number of shelves		4.0	2.0	3.0
Shelf dimensions	in (mm)	31.5 x 19.7 (800 x 500)	39.4 x 23.6 (1000 x 600)	39.4 x 23.6 (1000 x 600)
Surface load per shelf	lbs (kg)	88.2 (40)	88.2 (40)	88.2 (40)
Working height between shelves	in (mm)	10.9 (278)	23.3 (591)	10.9 (278)
Height of the top shelf	in (mm)	45.8 (1164)	33.5 (851)	33.5 (851)
Caster diameter	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)

MSSW Medical Transport Trolley (heavy-duty version)

	Dim.	MSSW 8x5/2	MSSW 8x5/3	MSSW 10x6/2	MSSW 10x6/3	MSSW 10x6/4
						
width	in (mm)	35.2 (895)	35.2 (895)	43.1 (1095)	43.1 (1095)	43.3 (1100)
Depth	in (mm)	23.4 (595)	23.4 (595)	27.4 (695)	27.4 (695)	27.6 (700)
Height	in (mm)	40.3 (1023)	40.3 (1023)	40.3 (1023)	40.3 (1023)	52.6 (1335)
Tare weight	lbs (kg)	59.5 (27)	70.5 (32)	68.3 (31)	83.8 (38)	99.2 (45)
Payload	lbs (kg)	264.6 (120)	396.8 (180)	264.6 (120)	396.8 (180)	440.9 (200)
Number of shelves		2	3	2	3	4

	Dim.	MSSW 8x5/2	MSSW 8x5/3	MSSW 10x6/2	MSSW 10x6/3	MSSW 10x6/4
Shelf dimensions	in (mm)	35.2 (895)	35.2 (895)	43.1 (1095)	43.1 (1095)	43.3 (1100)
Surface load per shelf	lbs (kg)	23.4 (595)	23.4 (595)	27.4 (695)	27.4 (695)	27.6 (700)
Working height between shelves	in (mm)	40.3 (1023)	40.3 (1023)	40.3 (1023)	40.3 (1023)	52.6 (1335)
Height of the top shelf	in (mm)	59.5 (27)	70.5 (32)	68.3 (31)	83.8 (38)	99.2 (45)
Caster diameter	in (mm)	264.6 (120)	396.8 (180)	264.6 (120)	396.8 (180)	440.9 (200)

You can find the corresponding certification marks on our homepage at www.hupfer.de.

3.6 Rating Plate

The rating plate is at the bottom of the appliance.

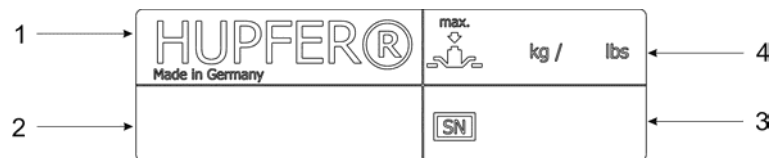


Figure 7 Rating plate

- | | | | |
|---|------------------------------------|---|---|
| 1 | Manufacturer | 3 | Serial number |
| 2 | Short description of the appliance | 4 | Load bearing capacity per bottom and intermediate shelf |

4 Transport, Putting into Operation and Decommissioning

4.1 Transport

ATTENTION



Damage to appliances caused by improper transport

Appliances should be safely secured when transported off site inside a vehicle such as a truck. The total locks are not suitable for securing the appliances when they are transported in a vehicle.

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

Secure each individual separate appliance using suitable transport securing devices.

Serving Trolleys are delivered as an assembled unit, i.e. they are completely assembled.

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

The scope of delivery is specified in the shipping documents in accordance with the valid purchase agreement and included with the delivery item.

4.2 Putting into Operation

Remove the original packaging and check whether the appliance is complete and undamaged. Do not put a defective appliance into operation under any circumstances and inform the supplier immediately in such a case.

Always place the Serving Trolley on firm and level floors when unpacking and operating it. Apply the total locks 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 accordingly. The different materials should be separated and disposed of in an environmentally friendly manner. The local agencies responsible for disposal must be contacted regarding removal.

The Serving Trolley should be thoroughly cleaned with a soft cloth before putting it into operation for the first time. Ensure that the appliance is clean and dry before putting it into operation.

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

- the functioning of the total locks.

4.3 Storage and Recycling

Appliances must be kept in a dry, frost-free environment when placed in temporary storage. The Serving Trolley 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 damage and corrosion every 6 months.

NOTE

Condensation

Ensure that there is sufficient ventilation and no major variations in temperature in the storage location, so that condensation is prevented from forming.

The appliance must be clean and dry before it is placed back into use.

If the Serving Trolley is recycled, all operating and auxiliary materials must be disposed in an environmentally compatible manner. The recyclable materials must be properly separated and disposed of in an environmentally compatible manner according to the local Waste Disposal Regulations. The local agencies responsible for disposal must be contacted regarding removal. Separate the reusable materials of the appliance (casters and plastic parts) before disposing of or send the appliance to a recycling centre.


We offer our customers to dispose of 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 request it from [HUPFER®](#) - Service.

5 Operation

The Serving Trolley must be checked for external visible damages and defects before each operation.

Loading

ATTENTION	Damage to appliances
	<p>If the maximum surface loads of the top surface or the shelves is exceeded, deformation in the sheet metal surface cannot be excluded.</p> <p>Avoid concentrated loads when loading.</p> <p>Always adhere to the maximum surface load per shelf.</p>

Moving

- Release the total locks.
- Take hold of the push bars on the Serving Trolley and move the appliance to its destination.
- Upon arrival at the destination, apply both total locks and make sure they are locked and the appliance is secured against unintended movement.

Measures at the End of Use

- Apply both total locks, make sure they are locked and the appliance is secured against unintended movement.

6 Troubleshooting and Repair

6.1 Instructions regarding Fault Repair

Please contact our service partners in the event of a malfunction or complaints within the warranty period. Even after the warranty period is expired you can have necessary repair work done by our service partners.

Servicing should be carried out by authorised specialists only.

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

Always specify the information and corresponding part number indicated on the rating plate when contacting the after-sales service or ordering spare parts.

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

6.2 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.

7 Cleaning and Care

7.1 Hygiene Measures

It is essential for serving staff to act in the correct manner to ensure optimal hygiene.

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

Use a waterproof plaster to cover wounds on hands and arms.

Never sneeze or cough on clean crockery or meals.

7.2 Cleaning and Care

If the Serving Trolley is handled with care, cleaned and maintained on a regular basis, it does not require any additional care measures. For thorough and quick cleaning, wipe the Serving Trolley with a soft cleaning cloth or an uncoated sponge as well as soap water suitable for use in the kitchen. Use degreasing liquid cleansers that are approved for food industry. Never use high-pressure cleaners, chloride-based cleaning agents, abrasive cleaning powder or other dry cleaning agents, steel wool, steel sponges and/or sharp-edged items.

7.3 Special Care Instructions

Resistance to corrosion in stainless steels is provided by a passive layer which is formed on the surface when oxygen is absorbed. The oxygen in air is sufficient to form the passive layer, so that damage caused by physical action is eliminated automatically.

The passive layer develops or is renewed more quickly when the steel comes into contact with water containing oxygen. The passive layer can be chemically damaged or breached by agents which have a reducing (oxygen-consuming) effect when they come into contact with steel at concentrated levels or at high temperatures.

Such aggressive substances include:

- 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 handling appliances made of "refined stainless steel":

- Always keep the surface of appliances made from stainless steel clean and open to air.
- Use cleaning agents suitable for stainless steel. Never use bleaching cleaning agents or any containing chlorides.
- Remove layers of lime scale, grease, starch and egg-white by cleaning daily. Corrosion may occur underneath these layers due to lack of air absorption.
- After each cleaning operation remove all cleaning agent residues by wiping thoroughly. The surface should be thoroughly dried after wiping.
- Do not bring parts made of stainless steel into contact with substances such as concentrated acids, seasonings and salts for longer than is absolutely necessary. Acid fumes emitted when tiles are cleaned also cause corrosion in "refined stainless steel".

- Avoid damaging the surface of the stainless steel, especially by bringing into contact with metals other than stainless steel.
- Residues from other metals produce extremely small amounts of chemical elements which can cause corrosion. Contact with iron and steel must be avoided at all costs, because it will cause extraneous rust. If stainless steel comes into contact with iron (steel wool, steel particles from pipes, water containing iron), this can trigger corrosion. You must therefore use refined steel wool or brushes with natural, plastics or refined steel bristles only for physical cleaning. Steel wool or brushes with unalloyed steel cause extraneous rust due to abrasion.

8 Spare Parts and Accessories

8.1 Introduction

Servicing should be carried out by authorised specialists only.

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, always specify the data and corresponding item code provided on the rating plate.

Always state the order number and corresponding part number when ordering replacement parts. The order number of the Serving Trolley can be found on the rating plate at the bottom.

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

014000182	Swivel caster	Ø 4.9" (125 mm) A1 pin	Ball bearings / galvanised / identical to pneumatic casters
014000183	Swivel caster	Ø 4.9" (125 mm) pin A1 with lock	Ball bearings / galvanised / identical to pneumatic casters
91240876	Disc bumper	PP Ø3.9 (100)/22 w. bore Ø1.0 (25) grey	
91159850	Screw	DIN 933 Sct A2 M6/16 KL	with clamp