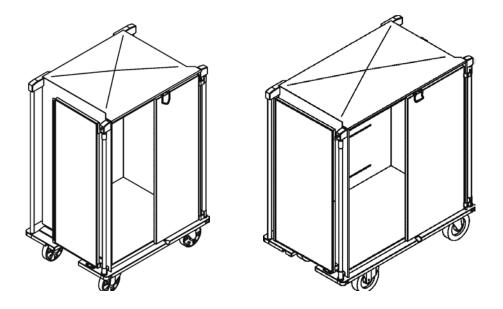


# **Operating Instructions**



# Fully welded all-purpose transport trolley

91327714\_A0

# 1 Introduction

### 1.1 Appliance information

Appliance name Appliance type/s Manufacturer Fully welded all-purpose transport trolley

ATW VV

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Read and understand these operating instructions 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 taking into consideration the requirements of the market and the latest technology. HUPFER<sup>®</sup> reserves the right to modify its products and associated technical documentation insofar 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

91327714\_A0



### 1.2 Table of Contents

1	Introd	luction	2
	1.1	Appliance information	2
	1.2	Table of Contents	3
	1.3	List of Abbreviations	5
	1.4	Definitions of Terms	5
	1.5	Orientation Guide	7
	1.6	Notes on Using the Manual	8
	1.6.1	Notes on the Manual Structure	8
	1.6.2	Notes and their Illustrations used in the Chapters	8
2	Safety	y Instructions	9
	2.1	Introduction	9
	2.2	Warning Symbols Used	9
	2.3	Safety Instructions for Appliance Safety	9
	2.4	Safety Instructions for Operation	10
	2.5	Safety Instructions for Transport	10
	2.6	Safety Instructions for Cleaning and Care	10
	2.7	Safety Instructions regarding Troubleshooting	10
3	Descr	iption and Technical Data	11
	3.1	Performance Description	11
	3.2	Proper Use	11
	3.3	Improper Use	11
	3.4	Appliance Description	12
	3.4.1	View of the all-purpose transport trolley	12
	3.4.2	Standard equipment	12
	3.4.3	Equipment and optional accessories	13
	3.5	Technical Data	14
	3.6	Rating Plate	15
4	Trans	port, Putting into Operation and Decommissioning	16
	4.1	Transport	16
	4.2	Setting up and putting into operation	16
	4.3	Storage and Recycling	16
5	Opera	ation	18
	5.1	Operation	18
	5.2	Measures at the End of Operation	19
6	Troub	leshooting and Repair	20
	6.1	Instructions regarding Troubleshooting	20
	6.2	Fault and Action Table	20



7	Clean	ng and Care	21
	7.1	Safety Measures	21
	7.2	Hygiene Measures	21
	7.3	Cleaning and Care	21
	7.3.1	Cleaning and care measures	21
	7.4	Special Care Instructions	22
8	Spare	Parts and Accessories	23
	8.1	Spare Parts and Accessories List	23



### 1.3 List of Abbreviations

Abbreviation	Definition
AK-BWA	Arbeitskreis Bettgestell- und Wagendekontaminationsanlagen (Working Group Bedframe and Cart Decontamination Systems)
BGR	Berufsgenossenschaftliche Regel (Rule of the Employer's Liability Insurance Association)
BGV	Berufsgenossenschaftliche Vorschrift (Regulation of the Employer's Liability Insurance Association)
DGSV e.V.	Deutsche Gesellschaft für Sterilgutversorgung (German Society for Sterile Supply)
DIN	Deutsches Institut für Normung German Institute for Standardisation, technical regulations and technical specifications
EC	European Community European Community
EN	Europäische Norm (European Standard) Harmonised standard for the EU market
E/V	Ersatz- bzw. Verschleißteil (Spare and wearing part)
MPG	Medizinproduktegesetz (German Law on Medical Devices)
RDG	Reinigungs- und Desinfektionsgeräte (Cleaning and disinfecting machines)
StE	Sterilguteinheit (Sterilisation unit)
ZSVA	Zentrale Sterilgutversorgung (Central Sterile Supply)

### 1.4 Definitions of Terms

Term	Definition
Autoclave	Gas-tight, sealed pressure container used in medical environments to sterilise in- struments, linen used for operations and similar items.
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.
Container washing system	Automated disinfection (cleaning and chemical/thermal disinfection) of different items used for treatment purposes, primarily used in medical environments such as in transport trolleys, sterilisation containers, OP clogs and so forth. Procedure is carried out under defined conditions (solution concentration, temperature, contact duration).
Disinfect	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	The primary objective is to create a uniformly high standard of quality in the prepara- tion 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 medi- cal 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 evaluate work assigned and can individually recog- nise any possible dangers due to professional training, specialist knowledge and experience as well as knowledge of the respective guidelines.
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.
Cavitation	The generation and implosion of steam bubbles in liquids induced by rapid changes in pressure.



Term	Definition
Check, inspect	Compare with certain conditions and/or characteristics such as damage, leaks, filling levels, heat.
Medizinproduktegesetz (Ger- man Law on Medical Devices)	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.
Verify, test	Compare with certain values such as weight, torque, content, temperature.
Qualified person, qualified personnel	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 recog- nise and prevent any possible danger (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 I 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.
Sterilisation	A validated process to produce devices free from viable micro-organisms. Sterilisation, sterilising and sanitation denote processes used to free materials and objects from living micro-organisms including those in their dormant state (for exam- ple, spores). The condition that the material and objects are said to achieve through these processes is called sterile. Generally speaking, steam sterilisation processes (autoclave) are utilised.
Sterilisation container	Sterile-sealed containers used for sterilisation, transport, storage and supply of sterilised surgical instruments. Sterilisation containers can also be used for dry disposal of used instruments and devices.
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 who has been trained for this task, if necessary.
Ultrasonic cleaning	Used to clean small, complex and intricately structured components. This cleaning principle is based on cavitation. Soft cavitation is not desired in ultra- sonic cleaning processes; consequently, the solution is often degassed in the ultra- sonic cleaning system using a special, integrated degassing programme before the cleaning process. 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. 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.



Term	Definition
Suitable for washing devices	The appliance is suitable for cleaning in an automated cleaning system without restrictions. Following agreement with the manufacturer the cleaning system must achieve a hygienic, constant cleaning and drying result, which is to be approved by a third party (client).
	The exterior and interior housing are manufactured to a standard guaranteeing her- metic sealing. It is not possible for water jets to ingress into hollow spaces in the appliance. Installed electrical components and electrical wiring are protected by appropriate sealing against any form of penetration by water. Protection class IPX6 (powerful pressurised water) to DIN EN 60529 (VDE 0470) is guaranteed. No water remains or is carried over following the drying process.
Cleaning system-resistant	The suitability of the appliance for cleaning in an automated cleaning system is limited. It is possible to achieve a flawless, reproducible cleaning and drying result, but it cannot be guaranteed.
	The exterior and interior housing are produced to standard specifications. Water ingressing hollow spaces resulting from the design of the appliance can run off without hindrance. Water collection in hollow spaces is avoided. Installed electrical components and electrical wiring are protected by appropriate sealing (for example, labyrinth edges, sealing profiles, cable channels) against any form of penetration by water. Protection class IPX6 (powerful pressurised water) to DIN EN 60529 (VDE 0470) is guaranteed. It is possible that water remains and is carried over following the drying process.
Central Sterile Supply de- partment	Also Central Sterilisation. The department is responsible for cleaning, disinfecting, maintaining, sorting, sterilising and preparing modern medical devices.
	Central Sterile Supply is divided into clean and unclean areas, which are hygienically separated from one another. This approach prevents cleaned instruments from being contaminated.

### 1.5 Orientation Guide

### The front

"The front" refers to the side of the all-purpose transport trolley where the doors are located and at which the appliance is loaded.

### The rear

"The rear" refers to the opposite side of the front side (the front).

### The right

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

### The left

"Left" refers to the left hand side when viewed from the front side (front).



### 1.6 Notes on Using the 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.

DANGER	Brief description of danger
	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.
	The type of danger is indicated by a symbol and explained in the accompany- ing text in more detail. The general symbol for danger is used in this example.
WARNING	Brief description of danger
	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.
	The type of danger is indicated by a symbol and explained in the accompany- ing text in more detail. The general symbol for danger is used in this example.
ATTENTION	Brief description of danger
$\underline{\land}$	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.
	The type of danger 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.
NOTE	Brief description of additional information
	Attention is pointed to special conditions or additional important information on the respective subject.
INFO	Short title
	Contains additional information on work assisting features or recommenda- tions on the respective subject.



# 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 him-self/herself and the operator with the new regulations.

### 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 can be used:



General hazardous area

### 2.3 Safety Instructions for Appliance Safety

Safe operation of the appliance depends on correct and careful 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 damage and defects before each use. In case of damage, immediately inform the competent bodies and switch off the appliance.
- Modifications or retrofits of the equipment are only permitted in consultation with the manufacturer and upon receipt of his written confirmation.
- Release the total brakes before moving it. Moving the appliance with the total brakes locked can damage the chassis!
- Do not push the trolleys down stairs or on inclined surfaces with a gradient of more than 15°.



### 2.4 Safety Instructions for Operation

- All-purpose transport trolleys can start moving on their own and at random if the casters are not locked with the total brakes.
- Before loading the all-purpose transport trolley, always secure it using the total brakes to prevent it from rolling away.
- When approaching walls and moving round obstacles, always pay attention to persons or obstacles in the way.
- During traction operation it is not allowed to move the all-purpose transport trolleys faster than at walking pace. It is difficult to brake and steer heavily laden appliances.
- When moving the all-purpose transport trolleys make sure that the appliance will not tip over due to outside influences or inattention. If, nevertheless, it tips over never try to catch the all-purpose transport trolley.

### 2.5 Safety Instructions for Transport

The following points are to be observed when transporting the appliance:

- 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 appliance.
- In no case put defective appliances into operation and inform the supplier immediately.

### 2.6 Safety Instructions for Cleaning and Care

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

- Fully welded all-purpose transport trolleys are suitable for cleaning in washing devices including in automatic cleaning systems. In comparison with cleaning system-resistant appliances, they are designed without undercut contours. Due to the design of the device, cleaning agents can reach and clean the entire surface of the appliance so that it is possible to guarantee a hygienically flawless, reproducible cleaning and drying result.
- Certain preconditions must be fulfilled before all-purpose transport trolleys can be cleaned in a cleaning system:
   The appliances are equipped with casters made of stainless steel (not standard!).
   To ensure the cleaning agents reach the entire surface, the doors must be secured to the fitted door stop by means of an additional wire clamp.
- Observe applicable hygiene regulations and guidelines.
- The cleaning instructions must be strictly observed for reasons of hygiene.

### 2.7 Safety Instructions regarding Troubleshooting

The following points must be observed when carrying out any troubleshooting operations:

- 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 on a regular basis. Remedy deficiencies, such as loose screw connections.
- Only use original spare parts to replace defective components.



# 3 Description and Technical Data

### 3.1 Performance Description

The all-purpose transport trolley is an appliance which can be used in any clinical transport logistics setting. It can be used for transporting sterile goods, consumables and durables, pharmacy goods, laundry, food and waste.

Depending on the intended application, the all-purpose transport trolley can be fitted with suitable accessories quickly and without using tools.

### 3.2 Proper Use

The all-purpose transport trolley is intended for the efficient distribution of sterile goods, consumables and durables, pharmacy goods, laundry, food and waste.

The transport of human beings or other living creatures is not proper or intended use.

Fully welded all-purpose transport trolleys are suitable for cleaning in washing devices including in automatic cleaning systems. A flawless, reproducible cleaning and drying result can be guaranteed.

In order for all-purpose transport trolleys to be cleaned in a cleaning system, the appliances must be equipped with stainless steel casters and the doors must be secured at an angle of approx. 260° by means of a wire clamp. This angle should be slightly greater or less, depending on the on-site configuration of the cleaning system and the alignment of the all-purpose transport trolley in the cleaning system.

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

All-purpose transport trolleys may be moved only with closed doors and only with the push bars. Gallery bars are not suitable and can be damaged.

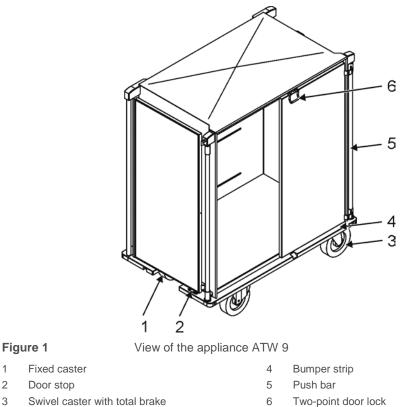
In no circumstances may persons sit down or stand on or in the appliances.

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



#### 3.4 **Appliance Description**





#### Swivel caster with total brake 6 3

#### 3.4.2 Standard equipment

1

2

The all-purpose transport trolley is a stable, self-supporting, fully welded steam-diffusion tight construction made entirely of stainless steel. The interior cavities and outer housing are produced with an hermetically sealed finish, formed seamlessly without joints or undercut contours. Jets of water cannot ingress into the hollow spaces of the appliance; no water remains or is carried over following the drying process.

The all-purpose transport trolley is loaded via two double-walled, hinged doors. The doors are attached to two stable stainless-steel hinges mounted on vertical push bars. The left-hand door is additionally fitted with a stop bead, so that together with the transport trolley profile and door seals the best-possible protection against dust is achieved for the transported goods. The door is kept open during the loading process by a door stop without additional elements that need to be operated by a hand or foot. The doors latch into place automatically. The vertically installed push bars can also be used when the doors are open. The twopoint door lock guarantees that the doors are securely locked during transport.

The design with vertical push bars in the corners of the trolleys ensures that they can easily be manoeuvred with the doors open or closed without any difficulty, even when fully loaded.

The lower peripheral frame made of shock-resistant plastic offers optimal bumper protection, and is disconnected in the middle on the right and left-hand side to allow the optional installation of a towing device.

The appliance is suitable for cleaning in an automated cleaning system without any restrictions. In cooperation with the manufacturer of the cleaning system, a constant cleaning and drying result can be achieved. No water remains or is carried over following the drying process.



### 3.4.3 Equipment and optional accessories

Optional accessories are available to expand the appliance.

- Wire shelf support, foldable: Variable support, which can either be engaged horizontally or vertically, as required.
- Rack frame for sterile goods, etc.: StE or ISO standard versions, movable on four fixed casters, available with firmly welded wire shelf supports, U-profiles or variable L-rails, can be sterilised.
- Paper clamp: To be fitted ex-works to the all-purpose transport trolley. Please state position when ordering.
- Central total brake: The optional central total brake provides a firm hold during operation and standby mode. One single foot control locks the swivel casters of the all-purpose transport trolley.
- Gallery: The gallery and a non-slip pad make it possible to use the top of the trolley as an additional and secure storage surface. The top of the trolley may be loaded with up to 55 lbs (25 kg).
- Transport securing device: The one-hand, two-point door lock offers maximum safety during transport.
- Sign holder:

For ex-works assembly to the side walls of the all-purpose transport trolley. Please state position and size of card when ordering.

- Casters that can only roll in one direction (Rifix): Casters fitted with Rifix can be fixed to roll in one direction only. This makes it significantly easier to roll straight ahead.
- Swivel casters made of stainless steel, Ø = 160 or 200 mm with and without total brakes, plate attachment



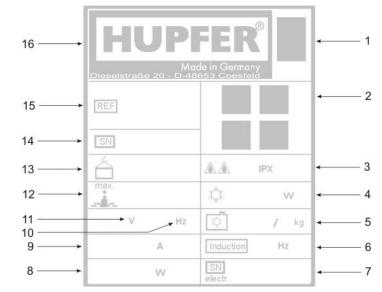
### 3.5 Technical Data

	Dim.	ATW 6	ATW 9
		Suitable for washing devices	Suitable for washing devices
Width	in (mm)	38.0 (965)	49.2 (1249)
Depth	in (mm)	29.7 (754)	29.7 (754)
Height	in (mm)	57.1 (1450)	57.1 (1450)
Own weight	lbs (kg)	189.6 (86)	220.5 (100)
Payload	lbs (kg)	231.5 (105)	374.8 (170)
Capacity (depending on ac- cessories)		e.g. 1x rack frame 6 StE 2x rack frame 3 StE	e.g. 1x rack frame 9 StE 1x rack frame 2x ISO compartments 2x rack frames 1x ISO compartment
Cupboard compart- ments	Number	1	1
Hinged doors	Number	2	2
Chassis	in (mm)	2 swivel casters with total brakes 2 fixed casters, Ø 6.3 (160)	2 swivel casters with total brakes 2 fixed casters, Ø 6.3 (160)
max. speed in trac- tion operation	mph (km/h)	2.5 (4)	2.5 (4)

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



### 3.6 Rating Plate



The rating plate is situated at the back of the all-purpose transport trolley on the right above the bumper strip.

### Figure 2

### Rating plate

1	Disposal of old appliances	9	Nominal current
2	Certification mark	10	Frequency
3	Protection class	11	Nominal voltage
4	Chilling capacity	12	Payload
5	Refrigerant	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. 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 corre-
	sponding transport securing devices.

When lifting, use only hoists and hoisting gear approved for the weight of the system components.

As a rule, the system components are delivered ex-works in an assembled condition.

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 Setting up and putting into operation

The installation and operation of the appliance must only be carried out by the manufacturer or personnel authorised by the manufacturer.

The all-purpose transport 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.

INFO	Disposal of packing material
	The packing consists of recyclable materials and can be disposed of appro- priately. Thereby, the different materials are to be separated and disposed of in an environmentally compatible manner. In any case, the local bodies re- sponsible for disposal are to be involved for this purpose

### 4.3 Storage and Recycling

Temporary storage must take place in a dry and frost-free environment. The appliance 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.

NOTE Condensed water formation		
	Ensure that there is sufficient ventilation and no large temperature fluctuations in the storage location to avoid condensed water formation.	
NOTE	Temporary storage	
	Appliances not in use for a longer period should be placed in temporarily storage with their doors open to prevent odours forming in the interior.	

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

If the appliance 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 of 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 of it or send it 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<sup>®</sup> -Service.



# 5 Operation

ATTENTION	Appliance damages		
	The appliance may only be operated when it is in a technically immaculate condition. Check the appliance for visible signs of damage and defects before each use.		
	If damage is identified, inform the person or persons responsible immediately Do not use the appliance.		
ATTENTION	Material damage resulting from contamination		

### 5.1 Operation

### Preparation

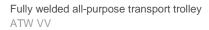
Depending on the application, the all-purpose transport trolley must be prepared prior to its operation.

The foldable wire shelf support can be inserted both horizontally and vertically. A horizontally engaged wire shelf support is suitable for transporting and distributing consumables and durables, whereas a vertically inserted wire shelf support can be used for transporting and disposing of laundry or waste.



Figure 3

Examples of possible applications: foldablewire shelf support





If the all-purpose transport trolley is to be used with insert racks, the wire shelf support can quickly and easily be removed and stored on the inside of the back panel until its next use.



Figure 4

Example of how to use the insert rack

### Loading

- Lock the all-purpose transport trolley with the total lock brakes to prevent from rolling back.
- Insert the goods to be transported.
- Close and lock the doors.
- Release the total brakes.
- Carefully push or pull the all-purpose transport trolley to its destination.

### Unloading

- Release the total brake and roll the all-purpose transport trolley to its destination.
- At the destination, lock the casters with total brakes.
- Open the doors.
- Remove the transported goods.

### 5.2 Measures at the End of Operation

Proceed as follows to switch off the all-purpose transport trolley:

- Push or pull the appliance to its destination (if required).
- Secure the casters with the total brakes.



# 6 Troubleshooting and Repair

### 6.1 Instructions regarding Troubleshooting

Please contact our service partners in the event of a malfunction or complaints within the warranty period. Even after the warranty period has expired, you can have necessary repair work carried out by our service partners and qualified electricians.

Service work should only be carried out by authorised specialists.

Defective components should only be replaced with HUPFER<sup>®</sup> original parts or identical spare parts. Always specify the data and corresponding part number indicated on the rating plate when using the aftersales service or ordering spare parts.

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

### 6.2 Fault and Action Table

Fault	Possible cause	Action		
The appliance pulls to the right or to the left when transporting	Damaged caster bearings	Replace defective casters		
Total brakes do not have any locking action	Locking brakes are worn	Either renew the locking brakes or replace the defective casters Replace the casters		
Running noise of casters	Defective caster bearings			
	Sticky surface of the casters	Clean with water		



# 7 Cleaning and Care

### 7.1 Safety Measures

ATTENTION	Material damage resulting from contamination		
	Contamination is a breeding ground for germs that can endanger sterile supply.		
	To prevent contamination with germs, it is imperative to observe and comply with the regulations and information contained in the Hygiene Directive 93/43/EEC as well as national regulations on hygiene in the country of use.		
NOTE	Cleaning in the cleaning system		
	When equipped with casters made of stainless steel, fully welded all-purpose transport trolleys are suitable for cleaning in an automatic cleaning system without any restrictions.		
	To ensure hygienic cleaning, the doors must be secured at an angle of 255° by means of a wire clamp to enable the cleaning agents to reach the entire surface of the appliance. This ensures a constant cleaning and drying result. It is not possible for jets of water to ingress into the hollow spaces of the appliance; no water remains or is carried over following the drying process.		

### 7.2 Hygiene Measures

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.

### 7.3 Cleaning and Care

If the appliances are handled with care, cleaned and maintained on a regular basis, they do not require any additional care measures.

To clean them regularly, wipe the appliances with a soft cloth. Use a soft cleaning cloth or an uncoated sponge for cleaning. Use degreasing liquid cleansers that are approved for food industry. Never use chloride-containing cleaning agents, abrasive cleaning powder or other dry cleaning agents, steel wool, steel sponges and/or sharp-edged items.

Dry well the appliance after carrying out wet cleaning, in order to prevent the development of mould, uncontrolled growth of germs and bacteria and, consequently, contamination of the appliance.

### 7.3.1 Cleaning and care measures

Cleaning and care measures	Action	daily	weekly	monthly	if required
Interior of the all-purpose transport trolley	Clean	x			
Interior of the all-purpose transport trolley	Disinfect				x
Appliances for mechanical damages	Check			x	



### 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 of stainless steel into contact with substances such as concentrated acids, seasonings and salts 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

Service work should only be carried out by authorised specialists.

Defective components should only be replaced with HUPFER<sup>®</sup> original parts or identical spare parts. That is the only way to guarantee a safe operation. We must inform you that a perfect functionality of the appliance can only be ensured if you use recommended original parts by HUPFER<sup>®</sup>. No or only conditionally suitable spare parts may jeopardise the warranty.

Spare parts and accessories can be ordered at HUPFER<sup>®</sup> -Service. When ordering spare parts or in the event of after-sales service always specify the order number and specifications on the rating plate of the all-purpose transport trolley.

### 8.1 Spare Parts and Accessories List

014000158	Fixed caster	Ø 6.3" (160 mm) T3/160, ball bearing UEP stainless steel	(Package contents: 1 piece 4000158-B)
014000152	Fixed caster	Ø 6.3" (160 mm) T1/160, caster bearing, galvanised	(Package contents: 1 piece 4000152-B)
014000157	Swivel caster	Ø 6.3" (160 mm) T3/160 with brake, ball bearing UEP stainless steel	(Package contents: 1 piece 4000157-B)
014000151	Swivel caster	Ø 6.3" (160 mm) T1/160, with total brake, caster bearing, galvanised	(Package contents: 1 piece 4000151-B)
014000156	Swivel caster	Ø 6.3" (160 mm) T3/160, ball bearing UEP stainless steel	(Package contents: 1 piece 4000156-B)
014000150	Swivel caster	Ø 6.3" (160 mm) T1/160, caster bearing, galvanised	(Package contents: 1 piece 4000150-B)
014000175	Swivel caster	Ø 6.3" (160 mm) T3/160 ball bearings, suitable for wash ma- chines, with thread guard, smooth-running plastic wheel, Rifix, stainless steel	
014000250	Swivel caster	Ø 6.3" (160 mm) plate T3 housing, stainless steel, suitable for wash machines, with thread guard, smooth-running plastic wheel/ball bearings, total lock, stainless steel	(Package contents: 1 piece 4000250)
014000208	Fixed caster	Ø 7.9" (200 mm) T3/200, ball bearing/UEP stainless steel	
014000202	Fixed caster	Ø 7.9" (200 mm) T1/200, caster bearing /galvanised	(Package contents: 1 piece 4000208-B)
014000206	Swivel caster	Ø 7.9" (200 mm) ball bearing/UEP stainless steel	(Package contents: 1 piece 4000202-B)
014000200	Swivel caster	Ø 7.9" (200 mm) T1/200, caster bearing /galvanised	(Package contents: 1 piece 4000206-B)
014000207	Swivel caster	Ø 7.9" (200 mm) T3/200 m with brake, ball bearing/UEP stainless steel	(Package contents: 1 piece 4000200-B)
014000201	Swivel caster	Ø 7.9" (200 mm) T1/200 m, with brake, caster bearing / galvanised	(Package contents: 1 piece 4000207-B)
014000224	Swivel caster	Ø 7.9" (200 mm) T3/200 ball bearings, suitable for wash ma- chines, with thread guard, smooth-running plastic wheel, Rifix, stainless steel	(Package contents: 1 piece 4000201-B)

