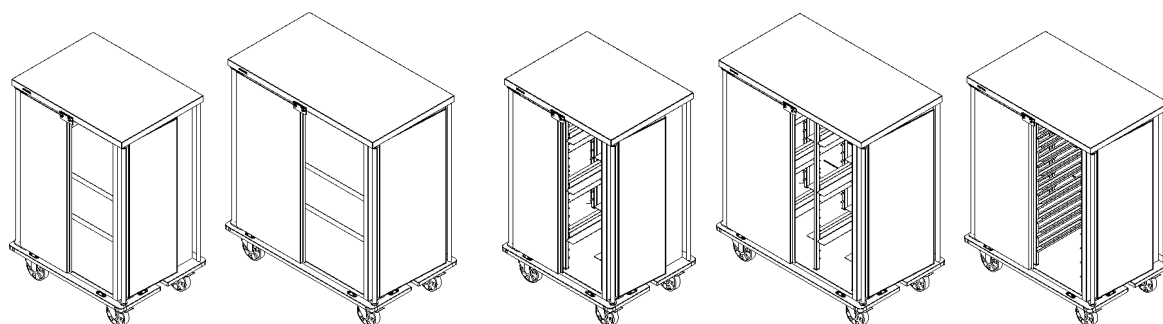




Operating Instructions



Sterile supply transport trolley |
Container transport trolley
STWS | CTWS

1 Introduction

1.1 Appliance Information

Appliance designation	Sterile supply transport trolley Container transport trolley
Appliance type/s	STWS CTWS
Manufacturer	HUPFER® Metallwerke GmbH & Co. KG Dieselstraße 20 48653 Coesfeld P.O. Box 1463 48634 Coesfeld  +49 2541 805-0  +49 2541 805-111 www.hupfer.de info@hupfer.de

Read and understand these operating instructions to ensure safe operation and avoid any damage!
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 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
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1.2 Table of Contents

1	Introduction	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 Use of 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 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 for Troubleshooting	10
3	Description 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 appliance STWS	12
3.4.2	View of the appliance CTWS	12
3.4.3	Appliance Description	13
3.4.4	Equipment and optional accessories	13
3.5	Technical Data	14
3.6	Rating Plate	15
4	Transport, 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	Operation	18
5.1	Operation	18
5.2	Measures at the End of Operation	18
6	Troubleshooting and Repair	19
6.1	Notes on Troubleshooting	19
6.2	Fault and Action Table	19

7	Cleaning and Care	20
7.1	Safety Measures	20
7.2	Hygiene Measures	20
7.3	Cleaning and Care	20
7.3.1	Cleaning and care measures	20
7.4	Special Care Instructions	21
8	Spare Parts and Accessories	22
8.1	Spare Parts and Accessories List	22

1.3 List of Abbreviations

Abbreviation	Definition
AK-BWA	Working Group Bedframe and Cart Decontamination Systems
BGR	Employer's Liability Insurance Association
BGV	Regulation of the Professional Association
DGSV e.V.	German Society for Sterile Supply
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
MPG	German Law on Medical Devices
RDG	Cleaning and disinfecting machines
StE	Sterilisation unit
ZSVA	Central Sterile Supply

1.4 Definitions of Terms

Term	Definition
Autoclave	Gas-tight, sealed pressure container used in medical environments to sterilise instruments, linen used for operations and similar.
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 articles used for treatment purposes, primarily used in medical environments such as 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	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 stated objectives.
Specialist	A specialist is a person who can evaluate work assigned and can individually recognise 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.
Check, inspect	Compare with certain conditions and/or characteristics such as damage, leaks, filling levels, heat.

Term	Definition
German 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 recognise 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 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 an 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 1.1 x 1.1" (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 example, 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 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 ultrasonic cleaning processes; consequently, the solution is often degassed in the ultrasonic 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 cavities filled with vapour are induced at small air bubbles adhering to the surfaces of an object as contaminants. When high pressure waves meet the bubbles compression causes the static pressure in the bubbles 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 100 000 bar. This cyclic formation and collapse of vapour bubbles 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	<p>The device 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).</p> <p>The exterior and interior housing are manufactured to a standard guaranteeing hermetic 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. The degree of protection IPX6 (powerful water jets) to DIN EN 60529 (VDE 0470) is guaranteed. No water remains or is carried over following the drying process.</p>
Cleaning system resistant	<p>The device is only conditionally suitable for cleaning in an automated cleaning system. It is possible to achieve a flawless, reproducible cleaning and drying result, but it cannot be guaranteed.</p> <p>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. The degree of protection IPX6 (powerful water jets) to DIN EN 60529 (VDE 0470) is guaranteed. It is possible that water can remain and be carried over following the drying process.</p>
Central sterile supply department	<p>Also central sterilisation. The task is to clean, disinfect, maintain, sort, sterilise and prepare modern medical devices.</p> <p>The 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.</p>

1.5 Orientation Guide

The front

"The front" means the side where the doors are located and at which the staff loads the appliance.

The rear

"The rear" denotes the opposite side of the front side (the front). The rating plate is arranged on this side.

The right

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

The left

"The left" denotes the left hand side when viewed from the front side (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.

DANGER	Brief description of danger
	<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. The general symbol for danger is used in this example.</p>
WARNING	Brief description of danger
	<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. The general symbol for danger is used in this example.</p>
ATTENTION	Brief description of danger
	<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 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 respective subject.</p>
INFO	Short title
	<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 Directive).

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.

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

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 damage and defects before each use. In case of damage, immediately inform the competent bodies and switch off the transport trolley.
- Modifications or retrofits of the equipment are only permitted in consultation with the manufacturer and on receipt of his written agreement.
- Release the total brakes before moving it. Moving the appliance with the total brakes locked can damage the chassis!
- Do not push the trolleys on inclined surfaces or down stairs with a gradient of more than 15°. When approaching walls and moving round obstacles, always pay attention to persons or obstacles in the way.

2.4 Safety Instructions for Operation

- The transport trolleys can start moving on their own and randomly if the casters are not locked with the total brakes.
- Before loading the transport trolley, always secure it using the total brakes to prevent it rolling away.
- When approaching walls and moving round obstacles always pay attention to persons or obstacles in the way.
- During train operation it is not allowed to move the transport trolleys faster than a walking pace. It is difficult to brake and steer heavily laden appliances.
- When moving the 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 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.
- Do not put a defective appliance into operation in any case 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 maintenance operations:

- Transport trolleys in interlocking construction are cleaning system resistant, which means they are only conditionally suitable for cleaning in an automatic cleaning system. It is possible to achieve a flawless, reproducible cleaning and drying result; however, it cannot be guaranteed. In comparison with appliances suitable for washing devices, they are designed with undercut contours. Consequently, cleaning in automatic cleaning systems is possible; however, the cleaning agents are not able to reach the entire surface area of the devices to clean them thoroughly due to their structural design.
- Under certain circumstances, transport trolleys in interlocking construction are suitable for cleaning systems and/or sterilisation. To clarify the technical options always consult **HUPFER®** before cleaning the appliance in a cleaning system or sterilising in an autoclave.
- Observe applicable hygiene regulations and guidelines.
- For reasons of hygiene, the cleaning instructions must be strictly observed.

2.7 Safety Instructions for Troubleshooting

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

- The local applicable Accident Prevention Regulations 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 deficiencies, such as loose screw connections.
- Only authorised specialists may perform all repair work.
- Defective components should only be replaced with original spare parts.

3 Description and Technical Data

3.1 Performance Description

Sealed sterile supply or container transport trolleys are designed to be used for the supply and disposal, i.e. transport, storage and intermediate storage, of sterile supplies in containers or in baskets. It is possible to manage work routines integrated within entire process chains of sterile supplies logistics considerably more efficiently and with greater economic benefit.

Sealed sterile supplies or container transport trolleys allow the hygienically safe transport of sterile supplies through non-clean areas. Used sterile supplies can also be disposed of without any risk to the environment.

Sterile supply or container transport trolleys can be configured in a wide variety of versions and may be fitted with optional accessories.

3.2 Proper Use

Sterile supply or container transport trolleys are designed and envisaged for the hygienic and economic distribution, storage and transport of sterile supplies in sterilisation unit containers or ISO containers.

It is permitted to transport objects on sterile supplies or container transport trolleys with a continuous gallery if they are stably stored in suitable transport containers and secured against falling by means of a non-slip material. The top of the trolley may be loaded with up to 55 lbs (25 kg).

Sterile supply or container transport trolleys in interlocking construction are cleaning system resistant, and are only conditionally suitable for cleaning in an automatic cleaning system. It is possible to achieve a flawless, reproducible cleaning and drying result; however, it cannot be guaranteed.

Proper use includes observing defined procedures, compliance with the stated specifications and use of supplied or additionally available original accessories.

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

3.3 Improper Use

Sterile supplies or container transport trolleys may be moved only with closed doors and only with the push bars.

Sterile supplies or container transport trolleys without a circumferential gallery are not intended to be used as a storing surface for items.

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

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

3.4.1 View of the Appliance STWS

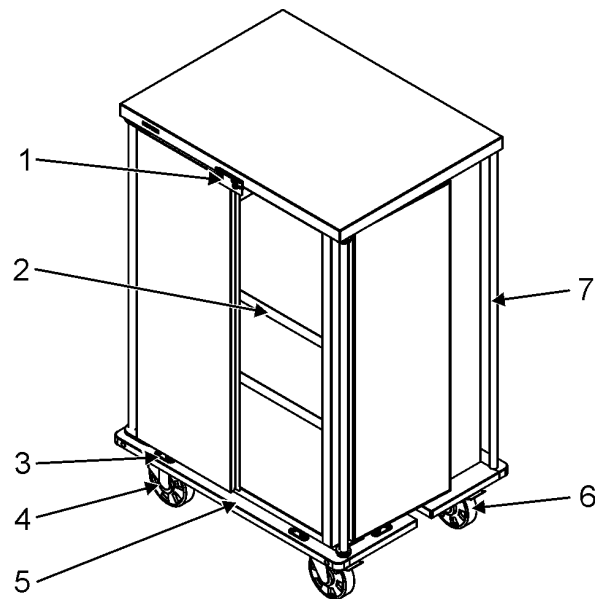


Figure 1

View of the appliance STWS

- | | | | |
|---|----------------|---|--------------------------------|
| 1 | Transport lock | 5 | Bumper strip |
| 2 | Shelf | 6 | Swivel caster with total brake |
| 3 | Door stop | 7 | Push bar |
| 4 | Fixed caster | | |

3.4.2 View of the Appliance CTWS

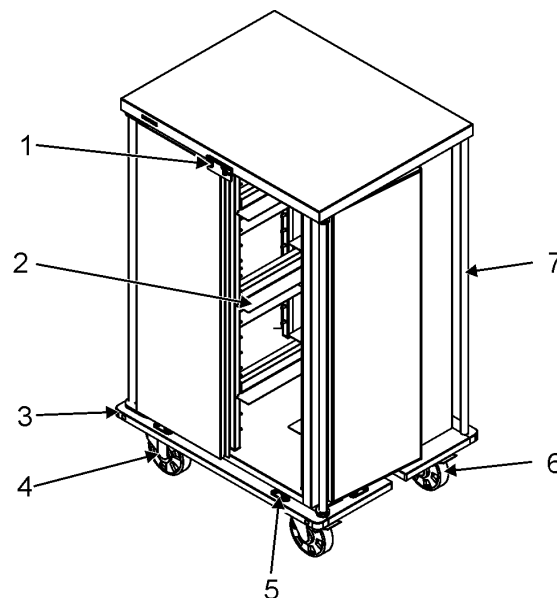


Figure 2

View of the appliance CTWS

- | | | | |
|---|----------------|---|--------------------------------|
| 1 | Transport lock | 5 | Door stop |
| 2 | Insert rails | 6 | Swivel caster with total brake |
| 3 | Bumper strip | 7 | Push bar |
| 4 | Fixed caster | | |

3.4.3 Appliance Description

Sealed sterile supplies or container transport trolleys have a sturdy, self-supporting body made of high grade stainless steel and are made in interlocking construction.

The double-walled hinged doors are pivotable up to 270°. The design with vertical push bars in the corners of the trolleys as well as two swivel casters with total brakes and two fixed casters ensures that even when fully loaded, they can easily be manoeuvred with the doors open or closed without any difficulty. Circumferential door seals provide safe protection against dust. The lower peripheral frame made of shock-resistant plastic offers an optimal bumper and it is disconnected in the middle on the right and left sides for the optional installation of the coupling and drawbar.

Casters are available in different sizes and designs and ensure optimum movement and manoeuvrability for the unit.

Sterile supply transport trolleys are equipped with two detachable, enclosed shelves.

Container transport trolleys accommodate height-adjustable and removable containers or baskets on insert rails in StE dimensions.



All sterile supplies or container transport trolleys are easy to clean as the internal parts can be easily and quickly removed.

3.4.4 Equipment and optional accessories

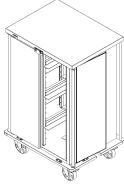
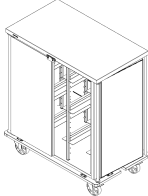
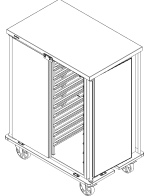
You can install and fit the sterile supplies or container transport trolleys with optional accessories in various ways.

- **Central total brake:**
The optional central total brake provides a firm hold during standby mode. One single foot control locks both swivel casters of the sterile supplies or container transport trolley.
- **Casters that can only roll in one direction (Rifix):**
Directional casters with central lock tread Casters fitted with Rifix can be fixed to roll in one direction only. This significantly facilitates the directional stability, e.g., during train operation. Not suitable for casters with Ø 4.92" (125 mm)
- **Casters made of stainless steel:**
Stainless steel housing, plastic wheel, plate attachment
- **Swivel casters made of stainless steel, Ø 6.2" (160 mm) with and without total brakes, plate attachment**
- **Coupling and drawbar:**
For the connection of several sterile supplies or container transport trolleys for traction operation. The simple version is also available in combination with casters that are movable in only one direction. The second option with friction damping enables the directional stability during train operation even in tight bends.
- **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).
- **Card holder for inserting into the gallery**
- **Paper clamp:**
To be fitted ex-works to the transport trolley. Please state position when ordering.
- **Transport lock:**
The one-hand, two-point door lock offers maximum safety during transport.
- **Sign holder:**
To be attached ex-works to the side walls of the transport trolley. Please state position and size of card when ordering.
- **Shelves:**
The STWS is equipped with two enclosed shelves as standard. As an option, further shelves or wire gratings can be used.

3.5 Technical Data

	Dim.	STWS 6	STWS 9
			
		Sterile supplies transport trolley*	Sterile supplies transport trolley*
Width*	in (mm)	37.99 (965)	49.17 (1249)
Depth*	in (mm)	29.56 (751)	29.56 (751)
Height*	in (mm)	57.91 (1471)	57.91 (1471)
Own weight	kg	see rating plate	see rating plate
Payload	kg	see rating plate	see rating plate
Hinged doors		2	2
Chassis	mm	2 swivel casters with total brakes 2 fixed casters, Ø160	
max. speed in train operation	mph (km/h)	4	4

*Equipment and dimensions are variable and can be configured individually

	Dim.	CTWS 6	CTWS 9	CTWS 2x ISO compartments
				
		Container transport trolley*	Container transport trolley*	Container transport trolley*
Width*	in (mm)	37.99 (965)	49.17 (1249)	49.17 (1249)
Depth*	in (mm)	29.56 (751)	29.56 (751)	29.56 (751)
Height*	in (mm)	57.91 (1471)	57.91 (1471)	57.91 (1471)
Own weight	kg	see rating plate	see rating plate	see rating plate
Payload	kg	see rating plate	see rating plate	see rating plate
Hinged doors		2	2	2
Chassis	mm	2 swivel casters with total brakes, 2 fixed casters, Ø160		
Max. speed in train operation	mph (km/h)	4	4	4

*Equipment and dimensions are variable and can be configured individually

3.6 Rating Plate

The rating plate is arranged on the back of the sterile supplies or container transport trolley on the right above the bumper.

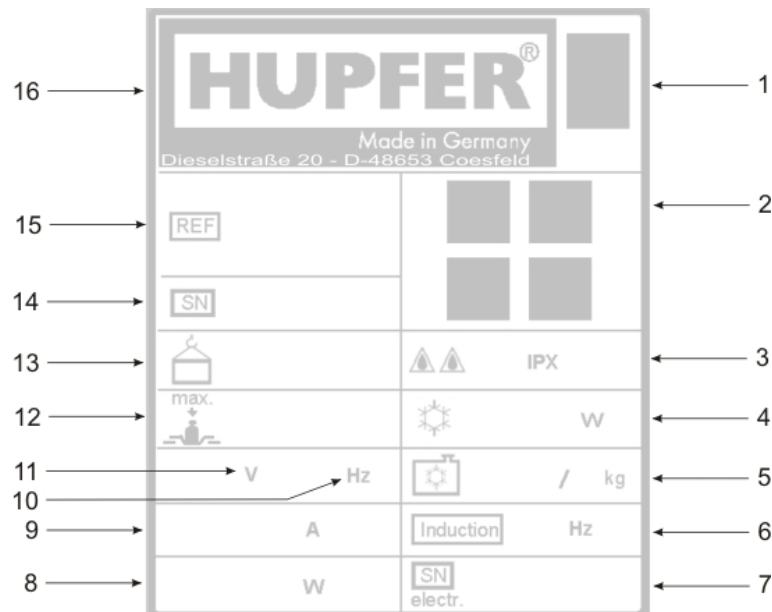


Figure 3 Rating plate

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	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 corresponding transport securing devices.

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

The transport trolley is usually delivered as an assembled unit, i.e. it is completely assembled.

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 sterile supplies or container transport trolley must only be carried out by the manufacturer or personnel authorised by the manufacturer.

The sterile supplies or container transport trolley should be thoroughly cleaned with a soft cloth before putting it into operation for the first time. Ensure the appliance is clean and dry before it is put into operation. The functioning of the operating elements must be checked before putting it into operation.

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.

4.3 Storage and Recycling

Temporary storage must take place in a dry and frost-free environment. The sterile supplies or container transport 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

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

Sterile supplies or container transport trolleys not in use for a longer period should be placed in temporary 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 sterile supplies or container transport 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. 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.


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

ATTENTION	Appliance damages
	<p>The sterile supplies or container transport trolley may only be operated when it is in perfect condition with regards to technical standards. The appliance must be checked for external visible damages and defect before each operation.</p> <p>In case of damage, immediately inform the competent bodies and do not put the sterile supplies or container transport trolley into operation.</p>
ATTENTION	Material damage resulting from contamination
	<p>Contamination is a breeding ground for germs that can endanger sterile supply.</p> <p>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.</p>

5.1 Operation

ATTENTION	Appliance damages
	<p>Heavily loaded sterile supplies or container transport trolleys can roll and tip over during the traction operation. Do not exceed the maximum traction speed of 4 km/h. The maximum speed applies for flat and dry concrete floors and a path width of at least 2.5 m.</p> <p>Up to three sterile supplies or container transport trolleys can be connected behind one another. Reduce the traction speed according to a change of a parameter.</p>

Loading

- Lock the sterile supplies or container transport trolley with the total lock brakes to prevent from rolling back.
- Place containers on the shelves or slide them into the lateral guides.
- Close the doors and lock it with the transport safety device.
- Release both total brakes.
- Carefully push or pull the sterile supplies or container transport trolley to the destination.

Unloading

- At the destination, lock the casters with total brakes.
- Unlock the doors.
- Remove the container.

5.2 Measures at the End of Operation

To switch off the sterile supplies or container transport trolley, proceed as follows:

- Carefully push or pull the sterile supplies or container transport trolley (if necessary) to the destination.
- Secure the casters with total brakes.

6 Troubleshooting and Repair

6.1 Notes on Troubleshooting

Please contact our service partners in case of malfunction and 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 certified electricians.

Service work should only be carried out by authorised specialists.

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

Always specify the data and corresponding part number indicated on the rating plate when using the after-sales 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 sterile supplies or container transport trolley pulls to the right or to the left when transporting	Damaged caster bearings	Replace defective casters
Total brakes do not have any locking action	Total brakes are worn	Either renew the total brakes or replace the defective casters
Running noise of casters	Defective caster bearings	Replace the casters
	Sticky surface of the casters	Clean with water

7 Cleaning and Care

7.1 Safety Measures

ATTENTION	Appliance damages due to washing device
	<p>Sterile supply or container transport trolleys are not suitable for washing devices.</p> <p>Devices that are not suitable for washing devices can be damaged in the washing device when cleaned.</p>

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.

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

If the sterile supplies or container transport trolley is handled with care, cleaned and maintained on a regular basis, it does not require any additional care measures.

To clean it regularly, wipe the interior and exterior of the sterile supplies or container transport trolley 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 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.

The middle wall has sufficient space for cleaning the rear wall, floor and roof of the trolley. For a more thorough cleaning you can remove the middle wall also without using tools.

To remove the middle wall proceed as follows:

- Lift the middle wall.
- Tilt the lower edge above the holder to the side.
- Remove the middle wall.

7.3.1 Cleaning and Care Measures

Cleaning and care measures	Action	daily	weekly	monthly	if required
the interior of the sterile supplies or container transport trolley	Clean	x			
the interior of the sterile supplies or container transport trolley	Disinfect		x		
the sterile supplies or container transport trolley for mechanical damage	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®** 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®**. No or only conditionally suitable spare parts may jeopardise the warranty.

Spare parts and accessories can be ordered at **HUPFER®** Service (Tel. +49 2541 805-0). When ordering spare parts or in the event of after-sales service always specify the order number and specifications on the rating plate.

8.1 Spare Parts and Accessories List

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