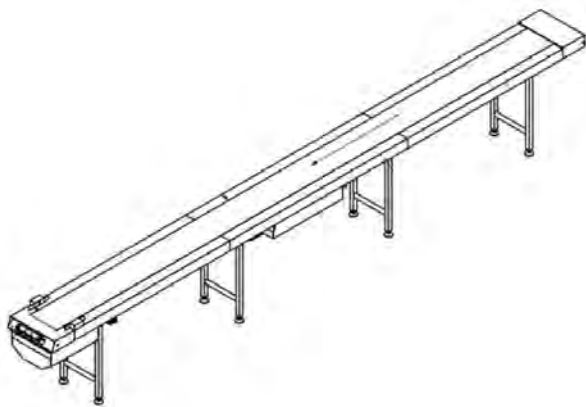


## Operating Instructions



**COMCATER**  
- foodservice equipment



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## Belt Conveyor System

SGR | SPV

# 1 Introduction

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## 1.1 Appliance Information

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Appliance designation	Belt Conveyor System
Appliance type/ -s	SGR   SPV
Manufacturer	HUPFER® Metallwerke GmbH & Co KG Dieselstraße 20 48653 Coesfeld  PO 1463 D-48634 Coesfeld  ☎ +49 2541 805-0 📠 +49 2541 805-111  <a href="http://www.hupfer.de">www.hupfer.de</a> <a href="mailto:info@hupfer.de">info@hupfer.de</a>

Read these operating instructions thoroughly and attentively to ensure safe operation and avoid any damages! Ensure that sources of danger and possible faulty operations have been pointed out to the operating staff.

### **Subject to modifications**

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

**This manual is an original edition.**

### **Manual edition**

4330053\_A4

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### 1.3 List of Abbreviations

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

## 1.4 Definitions of Terms

Term	Definition
Authorised specialist	An authorised specialist is a specialist that has been trained by the manufacturer, an authorised service dealer or a company assigned by the manufacturer.
Cook&Chill-Kitchens	"Cook and Chill": Kitchens where warm food after being cooked is chilled as quickly as possible.
Cook&Serve-Kitchens	"Cook and Serve": Kitchens where warm food is served immediately after being cooked or kept warm until it is consumed.
Specialist	A specialist is a person who can evaluate work assigned and can individually recognise any possible dangers due to the professional training, specialist knowledge and experience as well as knowledge of the respective guidelines.
Gastronorm	Gastronorm is a measurement system applied worldwide, for instance, in food processing plants or large-scale kitchens and catering establishments. The use of standardised sizes makes possible to exchange food pans. The basic size of the gastronorm (GN) 1/1 is 12.8×20.9" (325×530mm). Items are available in different depths.
Control	Compare with certain conditions and/or characteristics such as damages, leaks, filling levels, heat.
Machine safety	The term of machine safety means all the measures used to avert injury to persons. The basis for this are national as well as EC-wide valid directives and laws for protecting users of technical devices and systems.
Passive layer	A non-metallic protective layer on a metallic material that prevents or slows down material corrosion.
Check	Compare with certain values such as weight, torque, content, temperature.
Qualified person, qualified staff	Qualified personnel are persons who due to their professional training, experience and instruction as well as their knowledge of the respective standards, guidelines, accident prevention regulations and operating conditions have been authorised by a person responsible for system safety to carry out required activities and can recognise and prevent any possible danger (definition of specialists according to IEC 364).
Schuko®	The abbreviation of the German term "Protective contact" that indicates a system of domestic plugs and sockets equipped with protective earthed contacts used in most of Europe.
Instructed persons	An instructed person is a person who has been instructed on the possible risks resulting from improper behaviour when carrying out the assigned task as well as on the necessary protective equipment and protective measures and trained for this task if necessary.

## 1.5 Orientation Guide

### The front

"The front" means the side where members of the staff place trays (beginning of the belt).

### The rear

"The rear" means the side where members of the staff remove trays from the belt. The operating elements of the conveyor system are fitted here (end of the belt).

### The right

The side named "the right" means the right side of the conveyor system in relation to the conveying direction.

### The left

The side named "the left" means the left side of the conveyor system in relation to the conveying direction.




## 1.6 Notes on Use of Manual

### 1.6.1 Notes on the manual structure

This manual is structured in functional and task orientated chapters.

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

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

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

## 2 Safety Instructions

---

### 2.1 Introduction

---

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

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

The following symbols can be used:

	General hazardous area
	Hazardous electrical voltage
	Risk of pulling in

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### 2.3 Safety Instructions for Appliance Safety

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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.
- Only operate the conveyor system when all the safety devices or emergency stop devices are available and function properly. There should be easy access to the emergency stop button. Do not remove safety devices.
- Comply with the safety instructions and hazard warnings on the conveyor system and make sure they are easy-to-read.
- The appliance must be checked for external visible damages and defects whenever it is put into operation. In case of damages, inform immediately the competent bodies and switch off the conveyor system.
- Modifications or retrofits of the equipment are only permitted in consultation with the manufacturer and on receipt of his written agreement.
- Stationary conveyor systems are designed for permanent installation.



### 2.3.1 Special safety instructions for mobile conveyor systems

- The conveyor systems are designed only for manual transport. Transport using any kind of devices is not permitted.
- Conveyor systems can start moving on their own and randomly if the total brakes are not applied.
- Switch off the conveyor system and pull out the mains plug before transporting it.
- Never pull the mains plug out of the socket by the wire.
- Before moving the conveyor system release the locking brakes. Moving the appliance with the applied locking brakes can damage the chassis!
- Do not move the appliance over inclined surfaces or stairs. When approaching walls and moving round obstacles always pay attention to persons in the way.
- When transporting the conveyor system, do not move it faster than a walking pace. It is difficult to brake and steer heavily laden appliances. If necessary, ask for assistance when transporting the appliance.
- When moving the conveyor system 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 conveyor system.
- Secure the conveyor system against rolling away by applying the total brakes before putting it into operation.
- Do not stop the appliance on sloping floors. Before placing the appliance in position make sure that the floors are level and even and the conveyor system is level.
- A maximum belt length of 23 ft (7 m) should not be exceeded.

## 2.4 Safety Instructions for Transport and Installation

---

The following points are to be observed when transporting the conveyor system:

- When loading, use only hoists and load lifting devices approved for appliances 1,5 times heavier than the appliance to be lifted.
- Use transport vehicles that are approved for the weight of the conveyor system.
- Use transport vehicles that are approved for the weight of the conveyor system.
- Parts that have possibly been dismantled prior transport must be fitted back and fastened before putting the appliance into operation.
- Even in case of a minor relocation switch off the conveyor system at the mains or disconnect it from any power supply.
- In accordance with the legal regulations the buyer bears the risk of transportation. Ask the deliverer to write down visible damages in the waybill.
- In no case put a defective appliance into operation and inform the supplier immediately.

## 2.5 Safety Instructions for Maintenance and Care

---

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

- Take the conveyor system out of operation, switch it off and secure against unauthorised reactivation before performing maintaining or troubleshooting operations. When operating on the electrical installation, the appliance is to be switched off at the mains and secured against reactivation.
- Only persons with qualifications and knowledge of electrical engineering may perform maintenance and repair work on electrical devices.
- If it is required to maintain or repair live parts, you should in any case call in a second person.
- You have to meet the deadlines for maintenance and care specified in the operating instructions.
- Before proceeding with maintenance and repair work close the maintenance area and the access to the working area for unauthorised persons. If necessary place an indication sign that draws attention to the running maintenance and repair work.

- Observe the valid product safety regulations when handling oils, greases and other chemical substances.
- Lubricants must be compatible with foodstuffs like, for example, edible oil.
- Carry out all the checks and inspections of the appliance on a regular basis. Remedy immediately deficiencies, such as loose screw connections or melted cables.
- Fit the dismantled safety devices back to the appliance and check them for proper functionality after completing maintenance and repair work.
- For reasons of hygiene the cleaning instructions shall be strictly observed.

## 2.6 Safety Instructions for Troubleshooting

---

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

- The local applicable Accident Prevention Regulations must be observed.
- Take the conveyor system out of operation, switch it off and secure against unauthorised reactivation before performing maintaining or troubleshooting operations. When operating on the electrical installation, the appliance is to be switched off at the mains and secured against reactivation.
- Observe the valid product safety regulations when handling oils, greases and other chemical substances.
- Wear suitable protective clothing when carrying out any repair work.
- Only authorised specialists may perform all repair work.
- Tighten the loosen screw connections and fit the safety devices back to the appliance if dismantled and check them for proper functionality after completing the repair work.
- Defective components should only be replaced with original parts.

## 2.7 Notes on Specific Hazards

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### Electrical energy

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

## 3 Description and Technical Data

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### 3.1 Performance Description

---

The conveyor system is designed to convey trays loaded with crockery. The conveyor system conveys the trays to the following work step. Depending on the type used, the conveying system conveys either clean trays loaded with portioned meals or trays containing dirty crockery.

The crockery return belt system (SGR) is used mainly to hold up gastronorm and euronorm trays and to clear away continuously and quickly trays with dirty crockery, cutlery, glasses and napkins. Members of the operating staff clear away the trays loaded with dirty crockery items that are conveyed to the washing area.

The food distribution belt system (SPV) is used mainly to hold up gastronorm and euronorm trays and to load continuously and quickly trays with portioned meals, crockery, cutlery, glasses and napkins. Serving devices and operating staff that stays at the conveyor system load trays and serve portions on crockery items. To serve meals up to the guest area, you can use other peripheral devices at the end of the belt.

Owing to the modular design and the wide number of standard components, the conveyor system can be perfectly suited to any premises. You can use a lot of other peripheral devices and optional accessories with the conveyor system that will make your work processes significantly easier. Components suitable for use with foodstuffs and easy-to-clean construction ensure the highest hygienic standard.

### 3.2 Intended Use

---

The conveyor system is mainly designed to hold up gastronorm and euronorm trays. Any other use is not permitted.

The crockery return belt system (SGR) is used to hold up and to convey away trays with dirty crockery, cutlery, glasses and napkins.

The food distribution belt system (SPV) is used to hold up and to convey away trays with portioned meals, clean crockery, cutlery, glasses and napkins.

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

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

### 3.3 Improper Use

---

Any other use, especially loading of the conveyor system with the other loads as given, is not permitted.

In particular, transport of materials hazardous to foodstuffs is considered as unintended use.

Do not transport heavy and sharp-edged items on the conveyor system. It is not permitted to convey stacked crockery items.

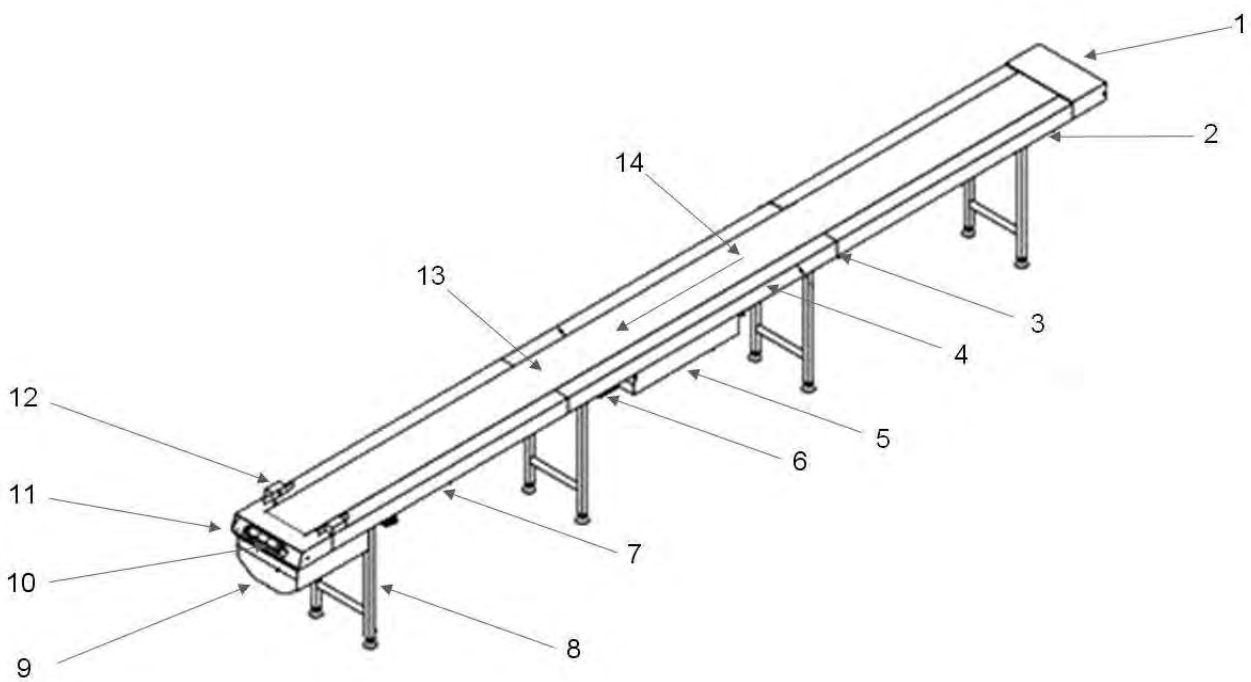
Do not allow people to sit or store objects on the conveyor system. Transport of people is not permitted.

It is not permitted to modify or retrofit the conveyor system. Such modifications can pose safety hazard and are considered as unintended.

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

## 3.4 Appliance Description

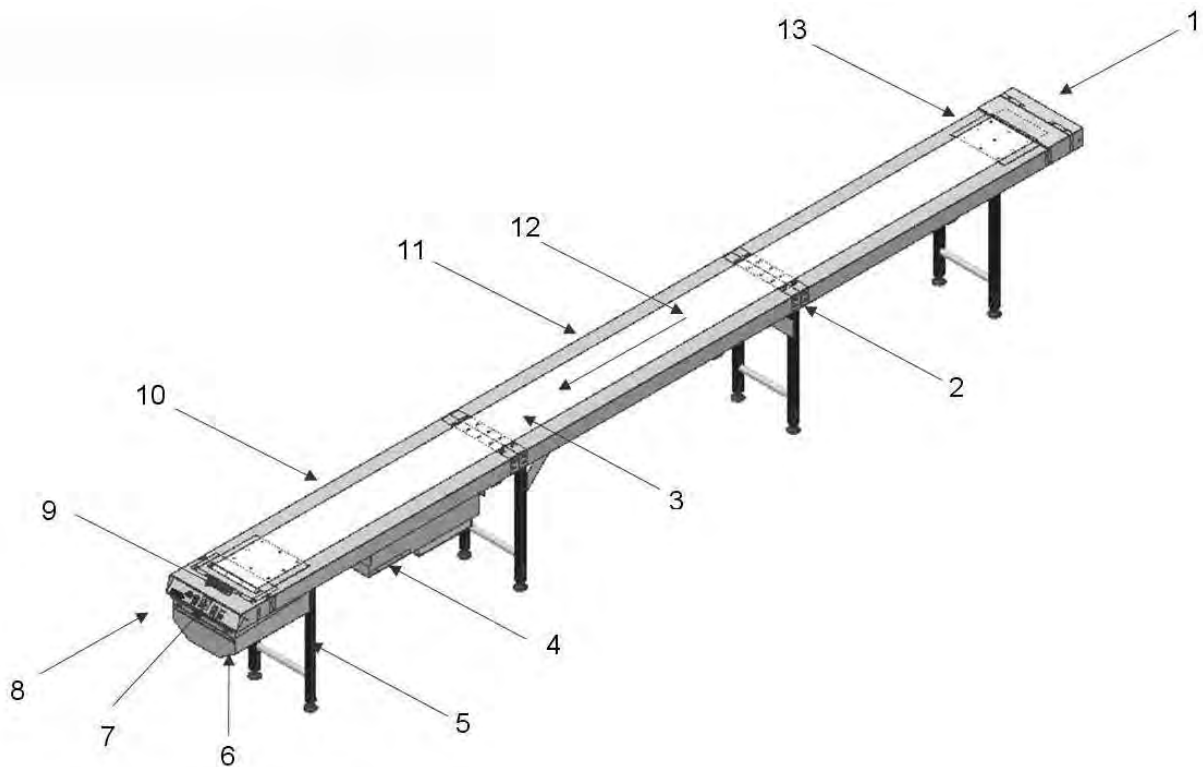
### 3.4.1 View of the crockery return belt system



**Figure 1** View of the appliance SGR

- |    |                                    |    |                        |
|----|------------------------------------|----|------------------------|
| 1  | Beginning of the belt              | 2  | Deflection element     |
| 3  | Connector with conveyor roller     | 4  | Intermediate part      |
| 5  | Control                            | 6  | Operating elements     |
| 7  | Drive component with drive station | 8  | Belt system leg        |
| 9  | Cleaning drawer with scraper       | 10 | Stacking unit (option) |
| 11 | End of the belt                    | 12 | Light curtain          |
| 13 | Belt                               | 14 | Conveyor system        |

### 3.4.2 View of the food distribution belt system



**Figure 2** View of the appliance SPV

- |    |                       |    |                                    |
|----|-----------------------|----|------------------------------------|
| 1  | Beginning of the belt | 2  | Connector with conveyor roller     |
| 3  | Belt                  | 4  | Control                            |
| 5  | Belt system leg       | 6  | Cleaning drawer with scraper       |
| 7  | Control panel         | 8  | End of the belt                    |
| 9  | Limit switch          | 10 | Drive component with drive station |
| 11 | Intermediate part     | 12 | Conveyor system                    |
| 13 | Deflection element    |    |                                    |

### 3.4.3 Standard equipment

The standard design of the conveyor system includes a dirt scraper and a cleaning drawer that are fitted at the end of the belt underneath the operating elements.

The dirt scraper is necessary to clean the belt regularly. It is fitted so that the clearance between the belt and dirt scraper is sufficient to remove leftovers and impurities from the belt without damaging it. Finally, leftovers and impurities wiped off by the scraper fall down into the cleaning drawer.

### 3.4.4 Equipment and optional accessories

You can install and fit the conveyor system with optional accessories in various ways:

- **Types of installation (SGR and SPV):**  
The standing alone model of the conveyor system is mounted on stands. A combination of wall and base installation is possible.  
A mobile model includes 2 swivel casters per belt system leg. All the swivel casters have total brakes for safety reason.
- **Plastic shelves in the base (SGR and SPV)**  
The plastic shelves are to be used as store place in the base. Put the elements on to the long rails in the base of the conveyor system. The shelves can be used even at maximum load (up to 10kg/m) for longer time at the temperature between -22°F and 158°F (-30°C and +70°C).
- **Limit box with limit rocker switch (SGR and SPV)**  
The limit rocker switch is fitted in the limit box of the frame surface at the end of the belt. In case of

mechanical strain the limit rocker switch will be pressed down thus generating an electric signal and the belt will stop moving. After releasing the limit rocker switch the belt will start moving automatically. The switch mechanism is protected on all sides against ingress of liquids and dirt particles.

- **Light curtain (SGR and SPV)**  
The light curtain prevents the further movement of trays beyond the end of the belt; depending on the setting with or without crockery items.  
The light curtain is fitted on the end of the belt as a height restriction (crockery detector) inserted together with the reflector into covers made of stainless steel. They are fastened facing each other and flush on the bar of the edge of the well. Adjust the optic sensors after consultation; the minimum height is approx 0.2" (5 mm) below the edge, the maximum height is approx. 0.8" (20 mm) above the edge. Place the light curtain at the middle, about 14" (350 mm) from the end of the belt.
- **Foot switch (SPV only)**  
The foot switch allows to start and stop the conveyor belt. It is used in addition to the operating elements on the control panel.
- **Patient card drawer (SPV only)**  
The patient card drawer holds up patient cards and can be quickly and completely taken out without any tools. It is fitted under the conveyor belt at the beginning of the belt system. Do not exceed the maximum load of 55 lbs (25 kg).
- **Rotary table (SPV only)**  
Use the rotary table that is fitted on the beginning of the belt at about 10" (250 mm) from the front side to keep your records or other information. The rotary table and the support tube rotate independently of each other. Rotate the rotary table only when there are no objects on its surface and there are no people around it. Do not exceed the maximum load of about 11 lbs (5 kg). The rotary table is delivered disassembled. To assemble the rotary table, insert the support tube into the plastic part.
- **Hinged board (SPV only)**  
The hinged board is an additional storing shelf and is fitted flush at the end of the belt. You can fold up the board lifting it slightly up and raising it to an angle of 90°. There should be no objects on the board when folding it down. Do not exceed the maximum load of about 22 lbs (10 kg), otherwise there is a risk of damage to materials.
- **Sorting bridge (SGR only)**  
The sorting bridge is used for a safe storage on the opposite belt casing. You can fold up the sorting bridge lifting it lightly up and raising it to an angle of 90°. The unfolded sorting bridge is flush with the belt casing. The hinged model without a chute but with a sound absorbing panel attached at the bottom can be fitted on the belt upon agreement. The maximum load of the sorting bridge is 55 lbs (25 kg).

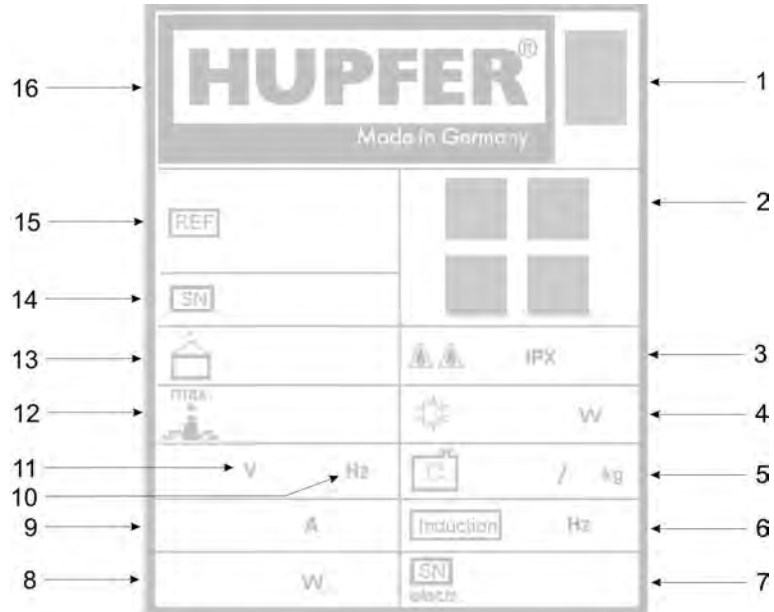
### 3.5 Technical Data

SGR   SPV	Value	Dimension	Note
Structure length (min/max)	118 to 472" (3000 to 12000)	in (mm)	
Conveyor length (min/max)	100 to 455" (2550 to 11550)	in (mm)	The real structure length is calculated from the structure length minus 10" (250 mm) at the input area and 10" (250 mm) at the output area.
Width	20" (500)	in (mm)	
Total height	35" (900)	in (mm)	
Weight	approx. 20	kg/m	plus 85 kg (control and drive)
Number of legs	3 to 6	Pc.	depending on the length of the conveyor system
Belt width	12" (300)	in (mm)	
Motor power	0.25	kW	Bevelled gear drive motor with frequency converter fitted outside (FUG)
Protection class of motor	IP 55		Thermal class F, protect against overheating by thermal contact switch
Speed range	13 to 65 (4 to 20)	ft/min (m/min)	continuous setting
Switch box / Protection class Switch box	IP 65		Plastic switch cabinet, sizes: SPV cold distribution, SPV I, SPV II and SPV III depending on quantity of sockets and electrical variations
Electrical connection	400	V 3N AC 50 Hz	
Types of sockets	230 230 400 400	V Schuko® V CEE V CEE 16 A V CEE 32A	Basic construction without sockets
Power consumption (without sockets)	0.18	kW	The total power of the belt systems without sockets depends on the type and number of consumers. Basically, 3,6 kW per socket, but depending on the cross section and as a result protection of the supply line in connection with the load diversity factor.
Operating and ambient conditions	41 to 131 (+5 to +55)	°F (°C)	

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

### 3.6 Rating Plate

The rating plate of the conveyor system is fitted on the inner side of the door of the switch cabinet arranged at the bottom of the conveyor system.



**Figure 3** Rating plate

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



## 4 Transport, Assembly, Putting into Operation and Decommissioning

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### 4.1 Transport

---

The delivered conveyor system with the length of up to 19.5 ft (6 m) is completely assembled, wired and set so that it is ready for operation.

Conveyor systems with the length of more than 19.5 ft (6 m) will be delivered segments that have to be assembled.

When loading, use only hoists and load lifting devices approved for appliances 1,5 times heavier than the conveyor system to be lifted. Only the transport vehicles may be used that are approved for the weight of the appliance.

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

### 4.2 Assembly

---

Conveyor systems with the length of more than 6 m will be delivered segments that have to be assembled.

#### 4.2.1 Assembly of segments

##### ATTENTION

##### Injury to persons and/or damage to property



There is a risk that parts of the conveyor system fall down during the assembly. This can result in injuries to persons and damage to property.  
Ask for help when assembling the segment and work at least in pair.

##### ATTENTION

##### Damage to property



Do not place the segments onto the floor with the surface facing down, since they can get scratched or damaged.  
Use a suitable piece of material to place the segments.

##### 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.


After packing material is removed, you can set up the conveyor system.

Perform the following work steps when assembling the segments of the conveyor system:

- Before assembling make sure that the floors are level and even and the conveyor system is level.
- You can uniformly adjust the height of the conveyor system by means of the screw feet. Adjust deviations with a spirit level in the cross direction. Normally, the height is 35.5" (900 mm).
- When assembling begin with the end of the belt. When doing this, place the first segment on the marked position.
- Screw the segment under the next part of the belt. When doing this, the first person should hold the segment while the second person is pushing the next part of the belt on to the connector of the segment the first person is holding.
- Put together the edges of the segments so that they are flush and screw them together from below.
- Continue with the assembly as described above.

- Check again the inclination and align the conveyor system horizontally with the spirit level until it is level.

#### 4.2.2 Pulling up the belt

<b>ATTENTION</b>	<b>Damage to property</b>
	Do not overstretch the belt, otherwise this will ruin it. Make sure that the belt is not overstretched.
<b>NOTE</b>	<b>Arranging the belt</b>
	Make sure that the smooth PVC surface is at the top when unrolling and arranging the belt while the rough surface is on the rollers. Do not twist the belt when arranging it.

After the conveyor system has been assembled, pull up the belt.

Proceed as follows:

- Remove the packing material from the belt.
- Remove the boxes at the beginning and at the end of the belt and place the belt on the top of the conveyor system.
- Pull the belt (the chain is already connected) to the deflection pulley at the beginning of the conveyor system.
- Put the belt onto the conveyor rollers under the conveyor system and move along the driving roller until it will reach the limit rocker switch at the beginning of the belt.
- If the chains are not fastened, you can move the belt over the driving rollers in the reversed sequence. There is no obligatory sequence how to arrange the belt.
- Pull the belt over the upper side until the ends of the belt are facing each other at the middle of the conveyor system.
- Join both ends of the belt together and fasten with the plastic strips (connection elements). The plastic strips hold now the both ends of the belt together.
- Check the position of the belt and adjust it so that it lies exactly at the top of the conveyor system.

#### 4.2.3 Stretching the belt


After the belt has been fastened, you have to stretch it:

- Mark a distance of 39" (1000 mm) on the belt with a pencil (no pen).

<b>NOTE</b>	<b>Length of the belt</b>
	A length of a perfectly stretched belt is from 39.5 to 39.6" (1003 to 1005 mm) at a strain from 0.5 to 0.7% (pay attention to the marks made with the pencil).

- To adjust appropriately the belt turn both tensioning nuts on the threaded rods at the deflection.
- The belt must be stretched so that the clearance between both ends of the belt is not more than 0.08" (2 mm).
- After you have stretched the belt appropriately, if needed cut the plastic strips protruding on the sides so that they are uniform with the width of the belt.
- Finally, scorch and seal these both places with a small flame (e.g., with a lighter), so that the plastic strips cannot slip out any more.

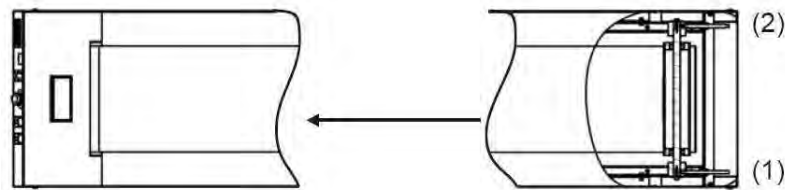
#### 4.2.4 Adjusting the belt

<b>ATTENTION</b>	<b>Rotating machine parts</b>
	<p>There is a risk of crush injuries and injuries caused by being pulled into the appliance when adjusting the drive drum.</p> <p>Never catch the running belt and never wear wide clothes while aligning or adjusting the drive drum.</p>
<b>NOTE</b>	<b>Adjusting the belt</b>
	<p>Before adjusting 2 members of the staff should keep watching the belt and switch it off immediately if necessary, for instance, if the belt is running out of the area of the drive drum or the belt is dragging along the surface of the conveyor system.</p>

The conveyor system is to be connected to the mains to align and adjust the belt.

To align and adjust the belt, proceed as follows:


- Switch on the conveyor system and allow the belt to start slowly and carefully running (at most the level three).
- Adjust the movement of the belt by turning the tensioning nuts on the threaded rods at the deflection. When adjusting, turn the tensioning nuts only slightly. A ¼ of a turn is usually enough.
- The belt moves always to the side of the smallest clearance of the axles. It is the side where the drive drum and the deflection pulley are closer together.



**Figure 4** The belt runs obliquely

If the belt runs to the right, so you have to stretch the right side (2) or to release the left side (1).

If the belt runs to the left, so you have to stretch the left side (1) or to release the right side (2).

<b>DANGER</b>	<b>Hazardous electrical voltage</b>
	<p>The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.</p> <p>All work on electrical installations or operating materials should only be carried out by a certified electrician or by trained personnel under supervision and monitoring of a certified electrician according to the certain electro-technical regulations.</p> <p>Switch off the conveyor system and secure it against unintended reactivation after the belt has been adjusted.</p>

- After the belt has been taken out of operation, you can fit back the limit boxes and other removed parts. Screw and fasten the counter nuts on the threaded rods.
- Switch on the conveyor system and allow the belt to start slowly and carefully running.
- Pay attention to the proper run of the belt and unusual noises. The belt may not drag along the top of the belt system, the limit boxes or other parts.

After you have made all settings you can put the conveyor system into operation. There should be no loads on the system while putting it into operation. This is the only way to detect causes of initial start-up difficulties.

## 4.3 Putting into Operation

### DANGER



### Hazardous electrical voltage

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

All work on electrical installations or operating materials should only be carried out by a certified electrician or by trained personnel under supervision and monitoring of a certified electrician according to the certain electro-technical regulations.

Before starting work switch live parts voltage-free. Ask another person to assist you that can press the Emergency Stop button in case of emergency.

Check the premises before setting up the conveyor system. Flaws can be detected and improved at an early stage. Observe the following points before setting up the conveyor system:

- The floors in the premises where the appliance is to be set up must be level and correspond to the required load-bearing capacity of 196 N/m<sup>2</sup> (20 kg/m<sup>2</sup>).
- We do not recommend dowelling the conveyor system with the floor of the premises because of the moisture barrier layer existing in the most of cases.
- There must be a possibility after consultation to connect the conveyor system to the mains.

The user of the conveyor system must take other measures beforehand to ensure the safety of the operating staff:

- Specify the field of application and draw up corresponding safety instructions.
- Instruct the operating staff in safety.
- Give the operating staff training.
- Mark hazardous areas.

### 4.3.1 Connecting the conveyor system

The following points are to be observed when connecting the conveyor system:

- Have the power supply installed and the conveyor system earthed in a professional manner.
- Protect power supply cables against exposure to moisture.
- In case of unintended reactivation, stop the appliance by using the control system.

Technical specifications of the mains in some countries deviate from those given in these operating instructions. Thus, the connecting data of the conveyor system should be harmonized with the data of the local power mains. Compare the specification given in the rating plate with the local electrical specifications.

To connect the conveyor system, proceed as follows:

- Connect the connecting cable with the distributor of the conveyor system.
- Connect the three-phase motor so that it rotates in a specified direction.

Electrical connections SPV/SGR					
Control system and power distribution	SGR	SPV cold	SPV-I	SPV-II	SPV-III
Number of 230 V sockets	-	0	8	12	18
Electrical supply	230V~, N/PE	230V~, N/PE	400V 3~, N/PE	400V 3~, N/PE	400V 3~, N/PE
Cable cross section Q	3x2,5 mm <sup>2</sup>	3x2,5 mm <sup>2</sup>	5x6,0 mm <sup>2</sup>	5x10,0 mm <sup>2</sup>	5x16,0 mm <sup>2</sup>

The cable cross sections given above are a recommendation of HUPFER®. Dimensions of cross sections depending on the length and consumption can vary considerably.

#### 4.3.2 Measures for putting the appliance into operation

There should be no loads on the system while putting it into operation.

Check the following while putting the conveyor system into operation to ensure the safety:

- Pay attention to unusual noises.
- Check whether the belt is moving straight.
- Conveyor system, light curtain and limit switch must be free of foreign objects.
- Unlock the Emergency stop button.
- Set the potentiometer.

In case of proper functionality you can put the conveyor system into operation.

## 4.4 Decommissioning, Storage and Recycling

---

To take the conveyor system out of operation, proceed as follows:

- Take the conveyor system out of operation and secure it against unauthorised reactivation.
- Switch off the conveyor system and the motor at the mains.

The conveyor system must be temporarily stored in a dry and frost-free environment. The conveyor system 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.

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

To dismantle the conveyor system, proceed as follows:

- Remove the belt.
- Dismantle the control and operating elements.
- Unscrew the segments of the conveyor system beginning with first one at the beginning of the belt.
- Dismantle all segments up to the end of the belt system.
- Clean the machine parts to remove used lubricants.

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

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

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

## 5 Operation

### ATTENTION

#### Rotating machine parts



There is a risk of crush injuries and injuries caused by being pulled into the appliance.

Never catch the running belt during operation.

### ATTENTION

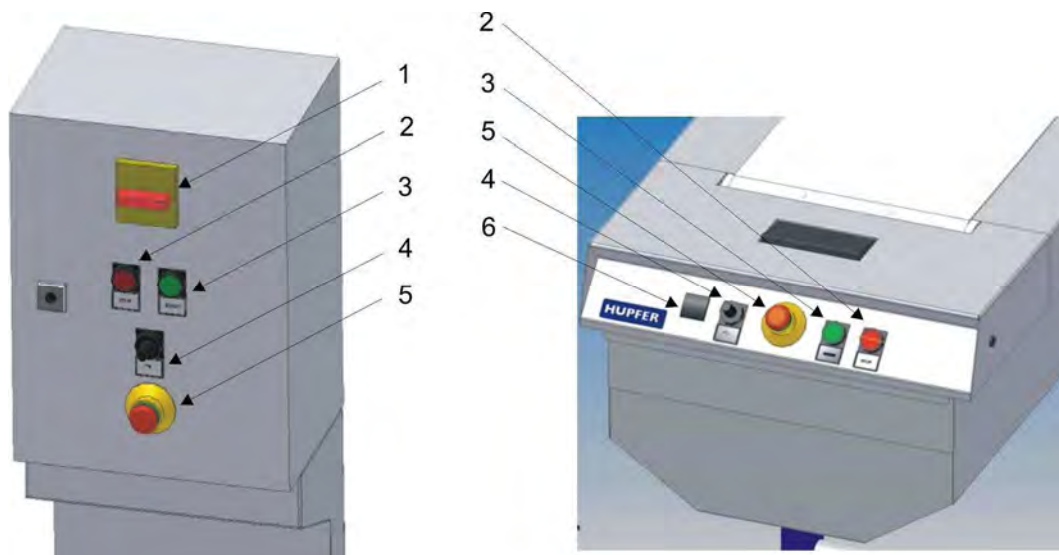
#### Belt can restart



There is a risk of injuries and damages to property.

Before switching on the conveyor system make sure there no risk of reactivation of the belt.

### 5.1 Arrangement and Function of the Operating Elements



**Figure 5** Operating elements

- |   |                        |   |  |
|---|------------------------|---|--|
| 1 | Main switch (SGR only) | 2 | Stop button                                |
| 3 | Start button           | 4 | Potentiometer                              |
| 5 | Emergency stop button  | 6 | Switch for reverse mode (option, SPV only) |

Position digit	Operating element	Function
1	Main switch (SGR only)	Switches the conveyor system on.
2	Stop button	Stops the conveyor system if needed.
3	Start button	Starts the conveyor system.
4	Potentiometer	Controls the speed of the belt: V min = 4m/min V max = 20m/min.
5	Emergency stop button	Is used to switch off quickly the appliance in case of emergency. If you have pressed the Emergency stop button, the power supply will be disconnected.
6	Switch for reverse mode (option, SPV only)	Switches on the reverse mode of the belt.

## 5.2 Operation

---

Place the trays on the belt uniformly to ensure a smooth transport.

The conveyor system keeps on running automatically. If required you can manually influence the conveying process by means of the operating console.

Switching on:

- Set the main switch (1) on the SGR from the switch position 0 to the switch position 1. The system is switched on and ready for operation.
- Set the belt speed on the potentiometer (4) to the value 1-2.
- Press the green start button (3) or the foot switch (option) to start the conveyor system.

Switching off / stop:

- The belt of the conveyor system will automatically stop moving, if the light curtain has been interrupted.
- Press the red stop button (2) or the foot switch (option) to stop the conveyor system if required.
- Set the main switch (1) on the SGR from the switch position 1 to the switch position 0. As a result, the conveyor system will switch off.

## 5.3 Measures at the End of Operation

---

### ATTENTION

### Rotating machine parts



There is a risk of crush injuries and injuries caused by being pulled into the appliance.

Wait until the belt comes to a standstill.

---

To take the conveying device out of operation, proceed as follows:

- Do not put further trays onto the conveying device and make sure that the conveyor belt is cleared up.
- Switch off the conveyor system on the control panel.
- Disconnect the conveyor system from the mains with the main switch.

## 6 Fault Detection and Troubleshooting

### 6.1 Security Measures

**DANGER**



#### Hazardous electrical voltage

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

Before looking for faults, take the conveyor system out of operation and secure it against unauthorised reactivation.

### 6.2 Notes on Troubleshooting

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

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

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

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

### 6.3 Fault and Action Table

Only a specialist staff authorised by HUPFER® may perform troubleshooting work.

Fault	Cause	Measures
The conveyor system does not run	Defective on site fuses	Have the fuses checked and replaced if required by an electrician
	Defective mains connecting cable or mains plug	Have interruption checked and repaired by an electrician
	Defective switch device	Have interruption checked and repaired by an electrician
	Emergency stop button has been pressed (you can't see the green ring)	Unlock the Emergency stop button (the green ring is visible)
	Main switch is not turned on	Turn on the main switch
	Defective fine fuses	Have the fault checked and repaired by an electrician
	Energy optimisation device switches on	Have the fault checked and repaired by an electrician
You can't regulate the speed	Foot switch is not activated	Press the foot switch
	Defective potentiometer or control unit	Have the fault checked and repaired by an electrician
Motor does not run	Fuse is blown	Have the fuses checked and replaced if required by an electrician
	Overload protection has been triggered	Switch on the overload protection and if needed have the fault checked and repaired by an electrician
	Defective motor control unit (frequency converter)	Have the control unit checked and replaced if required by an electrician
	Defective motor	Have the motor checked and replaced if required by an electrician






Fault	Cause	Measures
The conveyor system does not convey	The conveyor belt is overloaded, the drive spins around	Take some loads from the conveyor belt and if needed check and restretch the belt
The conveyor system conveys too quickly	Frequency converter setting is too high	Change potentiometer settings
The conveyor systems does not switch off	Defective relay	Have the fault checked and repaired by an electrician
	Defective light curtain	Have the fault checked and repaired by an electrician
	Defective button	Have the fault checked and repaired by an electrician
	Defective control system	Have the fault checked and repaired by an electrician
Running noises	There is a lot of free space for the belt or the belt is stretched too much	Check and if needed adjust the tension
	Defective bearings in the rollers	Have the fault checked and repaired by an electrician
	Dirty surface	clean
Conveyor belt run, one-sided	The belt is stretched on one side	Check and adjust the tension
	Impurities between the belt and driving roller and/or deflection pulley	Clean and readjust the driving roller and/or deflection pulley
The belt runs obliquely	The tension is too low	Check and adjust the tension

## 7 Care and Maintenance

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### 7.1 Security Measures

---

<b>DANGER</b>	<b>Hazardous electrical voltage</b>
	<p>The electrical voltage may be considerably dangerous to limb and life of persons and lead to injuries.</p> <p>Before performing cleaning and maintenance work, take the conveyor system out of operation and secure it against unauthorised reactivation.</p>
<b>ATTENTION</b>	<b>Rotating machine parts</b>
	<p>There is a risk of crush injuries and injuries caused by being pulled into the appliance.</p> <p>Take the conveyor system out of operation and secure it against unauthorised reactivation.</p>
<b>ATTENTION</b>	<b>Risk of damages to property</b>
	<p>Due to poor maintenance there is a risk of injury and damages to property.</p> <p>Meet the maintenance intervals and the specified deadlines for regular checks and inspections.</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 trays.

### 7.3 Notes on Care and Maintenance Measures

---

Never clean the running conveyor system.

Do not clean the conveyor system with steam-jet or high-pressure washers.

Take the conveyor system out of operation and switch it off at the mains in any area where steam-jet or high-pressure washers are to be used.

Dry well the conveyor system after the wet and moist cleaning to avoid the development of mould and growth of germs and bacteria.

Let the belt dry well after cleaning.

The use of degreasing, chlorine-free agents (e.g. soapy water used normally in kitchens) and cleaning cloth is sufficient for cleaning.

In no case clean the PVC surfaces with solvents and aggressive substances.

---

<b>INFO</b>	<b>Cleaning recommendations</b>
	HUPFER® recommends cleaning products by ECOLAB.

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### 7.3.1 Table of care measures

Care and inspection measures	Action	daily	weekly	monthly	interval
Top and bottom of the belt	clean	x			
Surface of the conveyor system	clean	x			
Cleaning drawer and scraper	clean	x			
Impurities between rollers and the belt	remove			x	

### 7.3.2 Maintenance table

To ensure a long-lasting lifetime of the conveyor system, the regular maintenance is required. Appeared faults or damages should be immediately eliminated.

Maintenance measures	Action	daily	weekly	monthly	interval
Visual inspection of the conveyor system for mechanical damages	perform		x		
Belt between the rollers and the belt for impurities	check		x		
Visual inspection of the electrical installation	perform				x <sup>1</sup>
Connecting cable and mains plug for mechanical damages	check				x <sup>1</sup>
Protective earth conductor	check				x <sup>1</sup>
Function of the main switch	check			x	
Function of the Emergency stop button	check			x	
Engine box and deflection box	clean			x	
Function of the mechanical parts	check			x	
Belt for damages and wear	check			x	
Belt tension	check			x	
Bearing of the drive and deflection side	check			x	
Function of the limit switch	check			x	
Function of the conveyor rollers	check			x	
Chain tension	check			x	
Chain	lubricate			x	

x<sup>1</sup> = every 6 months

## 7.4 Special Care Instructions

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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 solution)

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 rinsing thoroughly with copious fresh water. Afterwards, the surface should be thoroughly dried.
- Do not bring parts made from stainless steel into contact with concentrated acids, seasonings, salts etc. for longer than is absolutely necessary. Acid fumes which generate during cleaning of tiles also promote the corrosion of "refined stainless steel".
- Avoid damaging the surface of the stainless steel, particularly by metals other than stainless steel.
- Residues of extraneous metals produce extremely small amounts of chemical elements which can cause corrosion. In any case, contact with iron and steel should be avoided because that leads to extraneous rust. If stainless steel comes into contact with iron (steel wool, steel particles from pipes, water containing iron), this can be a trigger for corrosion. Therefore, for mechanical cleaning use exclusively refined steel wool or brushes with natural, plastics or refined steel bristles. Steel wool or brushes with unalloyed steel lead to extraneous rust due to abrasion.

## 8 Spare Parts and Accessories

### 8.1 Introduction

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

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

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

We must inform you that a perfect functionality of the appliance can only be ensured if you use recommended original parts by **HUPFER®**.

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

Drawing number	Item designation	Type	Q-ty
5222002	Limit rocker switch	Plastic, black	1
91128732	Holder for magnet	PE 500 black	1
91042205	Magnet		3
91168897	Z profile	50/85/57 kpl.	1
91086628	Drive drum	Stainless steel $\varnothing 76/320/440/\varnothing 20$ , spec. H3351224	1
91086625	Deflection pulley	Stainless steel $\varnothing 76/320$ , belt	1
91005891-1	Socket strip	SGR-SGV	1
91013208	Emergency stop button		1
91034932	Push button "ON"		1
91034944	Push button "OFF"		1
5000420	Potentiometer		1
91051515	Auxiliary switch „S“		2
91016283	Holder for built-in module		1
910162277	Modular contact blocks		1
91016275	Modular contact blocks		1
5000187	Pneumatic foot switch		1
5000192	Compressed air hose	L = approx. 2 m	1
91015212	O ring		4
5223000	Plastic easy-running roller		1
4002525	Adjustable leg, complete		2
5000158	Lower belt roller		1
91029491	Gear motor		1
91002548	Shaft, drive		1
91030248	Chain sprocket		1
91075894	Drive chain		1
5223024	Double cranked link		1
5223023	Connecting link		1

## 9 Annex

### 9.1 Monthly Maintenance Checklist

Conveyor belt systems (Belt)		Function	Cleanness	Condition/ wear	Replace part	Date and maintenance
1	Check the function of the main switch					
2	Check the function of the emergency stop button					
3	Clean the engine box and deflection box					
4	Check the function of the mechanical parts					
5	Check the belt for damages and wear					
6	Check the belt tension					
7	Check the bearing of the drive and deflection side					
8	Check the function of the limit switch					
9	Check the function of the conveyor rollers					
10	Check the chain tension					
11	Lubricate the chain					

## 9.2 Safety Instruction Protocol

---

The following staff members have been instructed in safety procedures. They have read and understood the operating instructions.

Last name	Signature / date

### 9.3 EC Declaration of Conformity

# CE Konformitätserklärung

Declaration of CE-Conformity | Déclaration de conformité CE



Gegenstand | Object | Objet

**Geschirr-Rücklaufband | crockery return belt | Bande de retour de la vaisselle**

Artikelgruppe | Article category | Groupe d'articles

**SGR**

Typ | Type | Type

Ohne Heizung/Kühlung | without heating/cooling | sans chauffage/refroidissement

Es wird bescheinigt, dass das/die zuvor näher beschriebene/n Produkt/e der/den im Folgenden aufgelisteten EU-Richtlinie/n entspricht/entsprechen:

**98/37/EG, 2006/95/EWG, 2004/108/EG**

Darüber hinaus wurden folgende harmonisierte Normen angewandt:

**EN ISO 14121-1, EN ISO 12100-1, EN ISO 12100-2, EN 614-1, EN 1037, EN 349, EN ISO 13857, EN 60204-1, EN 61140, EN 61000-6-2, EN 61000-6-4**

Im Übrigen wird bescheinigt, dass das/die Produkt/e weder Störungsquellen noch störungsanfällige Bauteile im Sinne der EMV-Richtlinie enthält/enthalten.

It is certified that the product/s described in detail before, conform/s to the requirements of the European Union directive/s listed in the following:

**98/37/EC, 2006/95/EWG, 2004/108/EC**

Furthermore, the following harmonised standards have been applied:

**EN ISO 14121-1, EN ISO 12100-1, EN ISO 12100-2, EN 614-1, EN 1037, EN 349, EN ISO 13857, EN 60204-1, EN 61140, EN 61000-6-2, EN 61000-6-4**

Incidentally, it is certified that the product/s contain/s neither sources of disturbance nor components liable to disturbances according to the EMC directive.

Il est certifié que le/s produit/s décrit/s en détail ci-dessus, correspond/ent aux directive/s de l'UE énuméré/es dans ce qui suit:

**98/37/CE, 2006/95/EWG, 2004/108/CE**

En outre, les normes harmonisées suivantes ont été appliquées:

**EN ISO 14121-1, EN ISO 12100-1, EN ISO 12100-2, EN 614-1, EN 1037, EN 349, EN ISO 13857, EN 60204-1, EN 61140, EN 61000-6-2, EN 61000-6-4**

Il est certifié aussi, que le/s produit/s ne contient/contiennent ni des sources de perturbation ni des éléments de construction exposés à des perturbations correspondant aux directives de l'AECM.

Coesfeld, 09.08.2010

**Helmut Schumacher**  
Vorname, Nachname

**Geschäftsführung**  
Position

Unterschrift

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Diese Konformitätserklärung ist eine original Konformitätserklärung in deutscher Sprache und kann gleichlautende Übersetzungen in weiteren EU-Sprachen enthalten. This declaration of conformity is an original declaration of conformity in the German language and can contain identical translations in the other EU languages. Cette déclaration de conformité est une déclaration de conformité originale en langue allemande et peut contenir des traductions conformes en d'autres langues de l'UE.

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# CE Konformitätserklärung

Declaration of CE-Conformity | Déclaration de conformité CE

Gegenstand | Object | Objet

Speisenverteilerband | food distribution belt | Tapis de distribution des repas

Artikelgruppe | Article category | Groupe d'articles

SPV

Typ | Type | Type

Ohne Heizung/Kühlung | without heating/cooling | sans chauffage/refroidissement

Es wird bescheinigt, dass das/die zuvor näher beschriebene/n Produkt/e der/den im Folgenden aufgelisteten EU-Richtlinie/n entspricht/entsprechen:

2006/42/EG, 2006/95/EWG, 2004/108/EG

Darüber hinaus wurden folgende harmonisierte Normen angewandt:

EN ISO 14121-1, EN ISO 12100-1, EN ISO 12100-2, EN 614-1, EN 1037, EN 349, EN ISO 13857, EN 60204-1, EN 61140, EN 61000-6-2, EN 61000-6-4

Im Übrigen wird bescheinigt, dass das/die Produkt/e weder Störungsquellen noch störungsanfällige Bauteile im Sinne der EMV-Richtlinie enthält/enthalten.

It is certified that the product/s described in detail before, conform/s to the requirements of the European Union directive/s listed in the following:

2006/42/EG, 2006/95/EWG, 2004/108/EC

Furthermore, the following harmonised standards have been applied:

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Il est certifié aussi, que le/s produit/s ne contient/contiennent ni des sources de perturbation ni des éléments de construction exposés à des perturbations correspondant aux directives de l'AECM.

Coesfeld, 09.08.2010

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Position

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