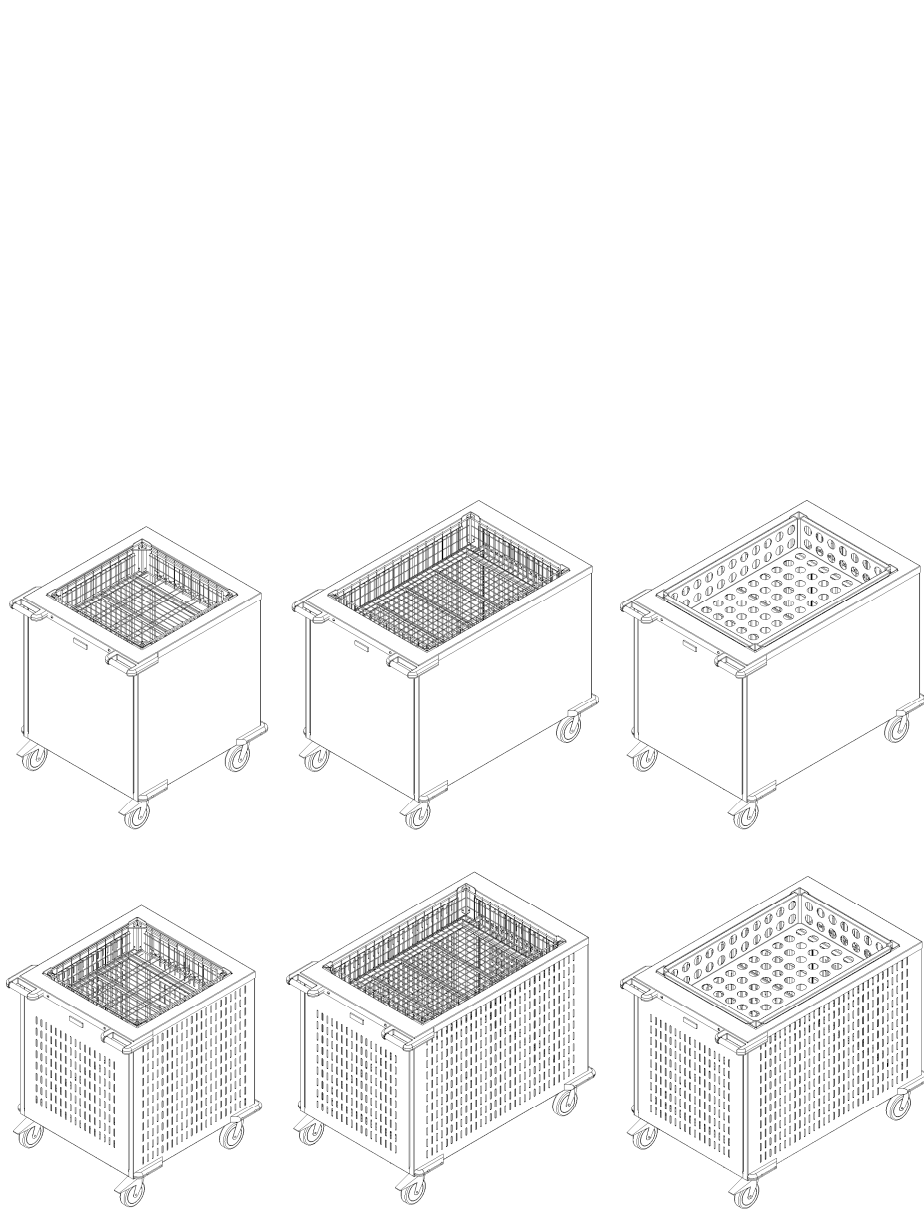


Operating Instructions



Platform dispenser for plastic items
BDK/57-57 | BDK/57-57 K | BDK/85-60 | BDK/85-60 K | BDK/85-60 FM | BDK/85-60 K FM

1 Introduction

1.1 Appliance Information

| | |
|-----------------------|--|
| Appliance designation | Platform dispenser for plastic items |
| Appliance type/ -s | BDK/57-57 BDK/57-57 K BDK/85-60 BDK/85-60 K BDK/85-60 FM BDK/85-60 K FM |
| Year of manufacture | 2013 |
| 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 these operating instructions carefully before the first operation of the appliance.

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 related technical documentation in the interests of technical progress. The data and weights as well as the description of performance and functions assured in the order confirmation as binding are always decisive.

This manual is a translation of the original edition.

Manual edition
91302354_A1

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1.3 List of Abbreviations

| Abbreviation | Definition | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|--|---|---|---|--|---|--|---|--|---|---|---|--|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---------------------------------------|--|--|---|--|--|--|---|--|
| BGR | Employer's Liability Insurance 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><tr><td>0</td><td>No protection against contact, no protection against ingress of solid foreign objects</td><td>0</td><td>No protection against ingress of water</td></tr><tr><td>1</td><td>Protection against contact with any large surface of the body such as the hand, protection against ingress of foreign objects $\varnothing > 1.97''$ (50 mm)</td><td>1</td><td>Protection against dripping water (vertically falling drops)</td></tr><tr><td>2</td><td>Protection against contact with the fingers, protection against ingress of foreign objects $\varnothing > 0.47''$ (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 $\varnothing > 0.1''$ (2.5 mm) protection against foreign objects $\varnothing > 0.1''$ (2.5 mm)</td><td>3</td><td>Protection against water drips at any angle up to 60° from the vertical</td></tr><tr><td>4</td><td>Protection against contact with tools, thick wires or similar objects of $\varnothing > 0.04''$ (1 mm) protection against foreign objects $\varnothing > 0.04''$ (1 mm)</td><td>4</td><td>Protection against water splashing from any direction</td></tr><tr><td>5</td><td>Protection against contact, protection against dust deposits inside</td><td>5</td><td>Protection against water jets (projected by a nozzle) at any angle</td></tr><tr><td>6</td><td>Complete protection against contact, protection against ingress of dust</td><td>6</td><td>Protection against temporary flooding</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></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 dripping water (vertically falling 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 temporary flooding | | | 7 | Protection against ingress of water during temporary immersion | | | 8 | Protection against pressurised water during continuous immersion |
| 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 dripping water (vertically falling 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 temporary flooding | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 7 | Protection against ingress of water during temporary immersion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 8 | Protection against pressurised water during continuous immersion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LED | Light Emitting Diode Light diode | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LMHV | Regulation on the hygiene of foodstuffs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RCD | Residual current device (RCD) The use of the English term RCD (Residual Current Device) is customary in industrial standards in the EU. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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. |
| Element formation | Also: contact corrosion. Occurs when different noble metals are in close contact with each other. This happens when a corrosive medium is between both metals, as for example water or even air humidity. |
| 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. |
| Gastronorm | Gastronorm is a measurement system applied worldwide, for instance, in food processing plants or large-scale kitchens. The use of standardised sizes makes it possible to exchange food pans. The basic size of the Gastronorm (GN) 1/1 is 12.8x20.9" (325x530mm). Items are available in different depths. |
| Lift | A movement such as the vertical movement of the stacking platform from bottom to top. |
| Control | Compare with certain conditions and/or characteristics such as damage, leaks, filling levels, heat. |
| Convection | Physical properties or mass transfer (e.g. heat or cold) through currents in gases and liquids. |
| Corrosion | The chemical reaction of a metallic material with its surroundings, e.g. rust. |
| 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. |
| Porcelain-Standard | Porcelain-Standard is a measurement system for porcelain plates drafted by HUPFER® . The basic size of Porcelain-Standard (PN) 1/1 is 8.7x6.3" (220x160mm) (1/2 PN conforms to 4.3x6.3" (110x160mm), 1/4 PN conforms to 6.3x3.1" (160x80 mm)). The lids fitting to it have the following dimension: 1/1 PN 9x6.6" (228x168mm), 1/2 PN 4.4x6.3" (111x161mm), 1/4 PN 4.4x3.2" (111x81mm). |
| Check | 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). |
| Schuko® | The abbreviation of the German term "Protective contact" that indicates a system of domestic plugs and sockets equipped with protective earthed contacts used in most of Europe. |
| Instructed persons | An instructed person is a person who has been instructed on the possible risks resulting from improper behaviour when carrying out the assigned task as well as on the necessary protective equipment and protective measures and trained for this task if necessary. |

1.5 Orientation Guide

The front

"The front" means the side where the push bars are arranged. The operating staff stays at this side to move the platform dispenser.

The rear

"The rear" denotes the opposite side of the front side (the front).

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

| | |
|---|---|
| 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 |
| | Attention is pointed to special conditions or additional important information on the respective subject. |
| INFO | Short title |
| | Contains additional information on work assisting features or recommendations on the respective subject. |

2 Safety Instructions

2.1 Introduction

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

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



Risk of hand injuries



Risk of crushing

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 when it is in perfect condition with regards to technical standards.
- All the operating and actuating elements must be in a perfect and functionally reliable condition with regards to technical standards.
- Modifications or retrofits of the equipment are only permitted in consultation with the manufacturer and on receipt of his written agreement.
- In no case may people sit or stand on the appliance. Transport of persons is not permitted.
- Before loading, the appliance dispensing height must be adjusted to the kind of plastic items used.
- The dispensing height must not fall below the upper rim of the housing to avoid injuries to the hands.
- Always load and unload the stacking platform evenly.
- Never push the stacking platform down manually into the stacking compartment (e.g. for cleaning). There is a risk of injury, if the stacking platform is released.
- The appliance is provided exclusively for manual transport. Transport using any kind of devices is not permitted. Risk of injury and damage.
- Release both total brakes before commencing transporting. Moving the appliance with the total brakes locked can damage the chassis.
- Transport should only be undertaken over level floors. Moving the appliance over very uneven floors can damage the chassis.
- Transport over inclined planes or steps is not permitted.
- When approaching walls and moving round obstacles always pay attention to persons in the way. Risk of injury.
- When transporting the appliance, always hold both handles with your hands. Never let go of the appliance while moving it.

- When transporting the appliance, do not move it faster than a walking pace. Heavily laden platform dispensers are difficult to brake and steer. If necessary, ask for assistance when transporting the appliance.
- If the platform dispenser tips over due to outside influence or inattention, never catch it manually. Risk of injury.
- Do not stop the appliance on sloping floors.
- Secure the appliance against rolling away by applying both total brakes when stopping it.
- In the case of off-site transport in a vehicle such as a lorry, the appliances must be additionally secured. The total brakes are not sufficient as a transport securing method.

2.4 Safety Instructions for Cleaning and Care

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

- For reasons of hygiene, the cleaning instructions must be strictly observed.
- Do not clean the appliance with steam-jet or high-pressure washers. Even appliances without an electrical connection should not be cleaned with running water or pressurised water.

2.5 Safety Instructions for Troubleshooting

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

- All troubleshooting work should only be carried out by authorised specialists.
- The local applicable Accident Prevention Regulations must be observed.
- Defective components should only be replaced with original spare parts.

3 Description and Technical Data

3.1 Performance Description

The BDK platform dispensers are intended to stack, transport temporarily and store light plastic insulated sets and are particularly suitable to be used on food distribution belts.

The BDK FM platform dispensers are reinforced and are intended to stack and transport heavy plastic items.

Platform dispensers with cooling slots are intended for storage of cooled plastic items. When used in the cold store, the cooling slots arranged on the side and front walls of the appliance housing ensure a rapid exchange of air and cause the cold air to be distributed uniformly inside. For this purpose, the loaded appliances must remain in cold stores for several hours.

An adjustable, spring-loaded stacking platform holds up the plastic items. A continuously increasing weight pushes down the stacking platform. When dispensing the items, the stacking platform moves up so that the next plastic item is always at hand resting at the required dispensing height. The stacking platform is moved down and guarantees the optimal storage and the high transport capacity for angular plastic items.

Depending on the size of the stacking platform, the platform dispensers may be loaded with about 400 plastic items or their partitions.

3.2 Proper Use

The BDK platform dispensers are intended exclusively for transport and storage of light plastic items ready for use. The stacking platform is only designed for light plastic items.

The BDK FM platform dispensers are also intended for transport and storage of heavy plastic items ready for use.

Only insert plastic items with high stability that are easy to stack. The items stacks must support each other. The existing space of the stacking platform should be used completely.

Always load and unload the appliance evenly.

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

The following is considered as improper use of the platform dispenser:

BDK platform dispensers are not intended for transport of items made of porcelain, toughened glass or heat-retaining trays. It is not permitted to load the appliance with other loads as given.

Strictly observe the permitted loading capacity. Due to its special design, the stacking platform must not be overloaded and can be damaged, if the load is too high.

Platform dispensers are not intended to transport the food.

In no case may people sit or stand on the appliance. Transport of persons is not permitted.

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 appliances

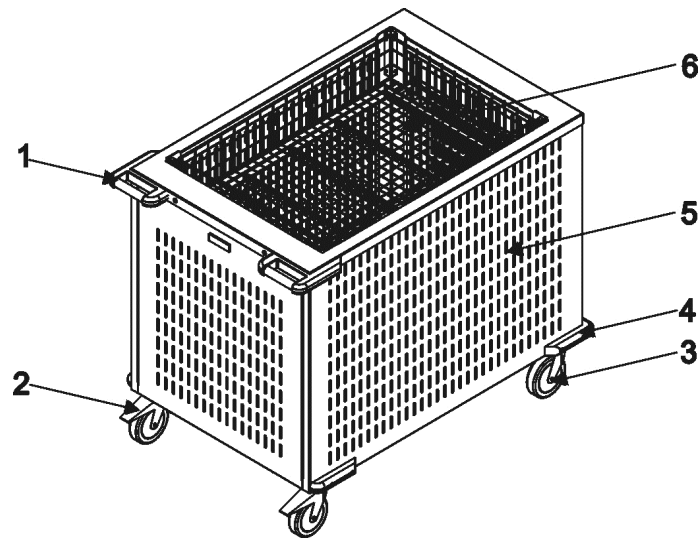


Figure 1 View of the appliance BDK 85-60 K

- | | | | |
|---|-------------------------------------|---|------------------------------|
| 1 | Push bars | 4 | Corner bumpers |
| 2 | Swivel casters with total brakes | 5 | Side wall with cooling slots |
| 3 | Swivel casters without total brakes | 6 | Stacking platform |

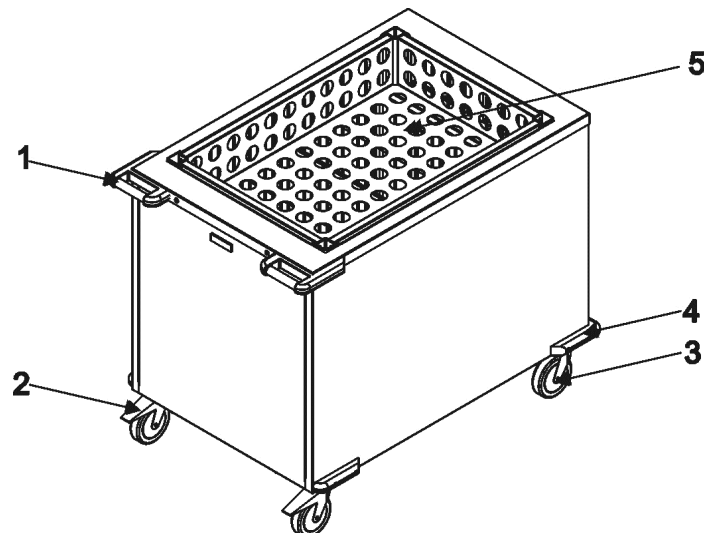


Figure 2 View of the appliance BDK 85-60 FM

- | | | | |
|---|-------------------------------------|---|-------------------|
| 1 | Push bars | 4 | Corner bumpers |
| 2 | Swivel casters with total brakes | 5 | Stacking platform |
| 3 | Swivel casters without total brakes | | |

3.4.2 Appliance description

Platform dispensers are executed in the self-supporting construction of stainless steel. They hold up plastic items in a removable spring-loaded stacking platform. Owing to the use of special springs, plastic items are moved automatically and constantly over the entire lift upwards to a uniform dispensing height. The items to be stacked must have a certain inherent stability as guide rails are not included.

The ergonomically formed push bars with integrated bumper protect the operating staff against damages to the hands. Corner bumpers on the rear protect the appliance against damages when transporting it.

The stacking platform consists of a plastic-coated stainless steel basket. A stainless steel perforated plate serves as a stacking platform in FM platform dispensers which are especially strong.

The ball bearings of the stacking platform ensure very good running characteristics even under a heavy loading. The stacking platform is removable and makes it possible to adjust the springs as well as to clean the appliance easily.


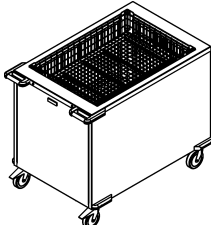
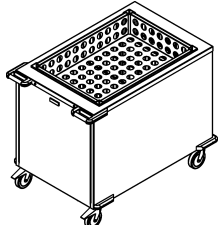
3.4.3 Optional special accessories

The following parts can be applied as optional accessories for the platform dispenser.

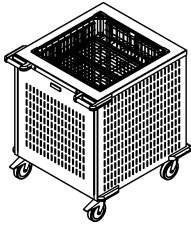
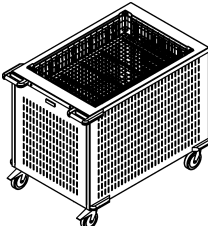
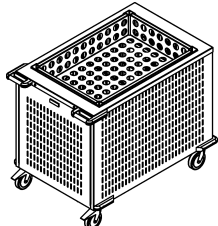
- Covers
- Corner bumpers made of impact-resistant plastic
- Casters made of corrosion-resistant and maintenance-free plastic with a thread guard, a precision ball bearing, Ø 4.9" (125 mm) with and without the total brakes, plate attachment

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

3.5 Technical Data

| | Dim. | BDK/57-57 | BDK/85-60 | BDK/85-60 FM |
|----------------------------------|----------|---|--|---|
| View of the appliance | |  |  |  |
| Dimensions w x d x h | in (mm) | 29.9 x 33.5 x 35.4 (760 x 852 x 900) | 29.9 x 49.2 x 35.4 (760 x 1175 x 900) | 29.9 x 49.2 x 35.4 (760 x 1175 x 900) |
| Own weight | lbs (kg) | 108 (49) | 143.2 (65) | 165.3 (75) |
| Payload | lbs (kg) | 176.3 (80) | 198.4 (90) | 352.7 (160) |
| Permitted total weight | lbs (kg) | 284.3 (129) | 341.7 (155) | 518 (235) |
| Operating and ambient conditions | °F (°C) | -4 to 122 (-20 to +50) | -4 to 122 (-20 to +50) | -4 to 122 (-20 to +50) |
| Chassis | in (mm) | 4 swivel casters, 2 of them with total brakes, Ø 4.9" (125) | 4 swivel casters, 2 of them with total brakes, Ø 4.9" (125) | 4 swivel casters, 2 of them with total brakes, Ø 4.9" (125) |
| Compartment inner panelling | | around vertical plastic-coated rods | around vertical plastic-coated rods | around vertical plastic-coated rods |

| | Dim. | BDK/57-57 | BDK/85-60 | BDK/85-60 FM |
|-------------------|------------|---|---|---|
| Stacking platform | in (mm) | 22.4x22.4" (570x570) Guide basket, plastic-coated protective grid made of steel conduc- tor | 33.5x23.6" (850x600) Guide basket, plastic-coated protective grid made of steel conduc- tor | 33.5x23.6" (850x600) Stainless steel tray, plastic-coated protective grid made of steel conduc- tor |
| Stack height | in (mm) | 27.9 (710) | 27.9 (710) | 25.9 (660) |
| Capacity | | up to 9 stacks, depending on the size of the plastic items | up to 12 stacks, depending on the size of the plastic items | up to 12 stacks, depending on the size of the plastic items |
| Number of stacks | | up to 306 items depending on the stack height and size of the plastic items | up to 406 items depending on the stack height and size of the plastic items | up to 406 items depending on the stack height and size of the plastic items |

| | Dim. | BDK/57-57 K | BDK/85-60 K | BDK/85-60 FM K |
|--|-------------|---|---|---|
| View of the appli- ance | |  |  |  |
| Dimensions w x d x h | in (mm) | 29.9 x 33.5 x 35.4 (760 x 852 x 900) | 29.9 x 46.2 x 35.4 (760 x 1175 x 900) | 29.9 x 46.2 x 35.4 (760 x 1175 x 900) |
| Own weight | lbs (kg) | 108 (49) | 143.2 (65) | 162 (73.5) |
| Payload | lbs (kg) | 176.3 (80) | 198.4 (90) | 352.7 (160) |
| Permitted total weight | lbs (kg) | 284.3 (129) | 341.7 (155) | 514.7 (233.5) |
| Operating and ambient condi- tions | °F (°C) | -4 to 122 (-20 to +50) | 68 to 122 (-20 to +50) | 68 to 122 (-20 to +50) |
| Chassis | in (mm) | 4 swivel casters, 2 of them with total brakes, Ø 4.9" (125) | 4 swivel casters, 2 of them with total brakes, Ø 4.9" (125) | 4 swivel casters, 2 of them with total brakes, Ø 4.9" (125) |
| Compartment inner panelling | | around vertical plastic- coated rods | around vertical plastic- coated rods | around vertical plastic- coated rods |
| Stacking platform | in (mm) | 22.4x22.4" (570x570) Guide basket, plastic- coated protective grid made of steel conductor | 33.5x23.6" (850x600) Guide basket, plastic- coated protective grid made of steel conductor | 33.5x23.6" (850x600) Stainless steel tray, plastic- coated protective grid made of steel conductor |
| Stack height | in (mm) | 27.9 (710) | 27.9 (710) | 25.9 (660) |
| Capacity | | up to 9 stacks, depending on the size of the plastic items | up to 12 stacks, depending on the size of the plastic items | up to 12 stacks, depending on the size of the plastic items |
| Number of stacks | | up to 306 items depending on the stack height and size of the plastic items | up to 406 items depending on the stack height and size of the plastic items | up to 406 items depending on the stack height and size of the plastic items |

The corresponding test marks are available from our homepage at www.hupfer.de.

3.6 Rating Plate

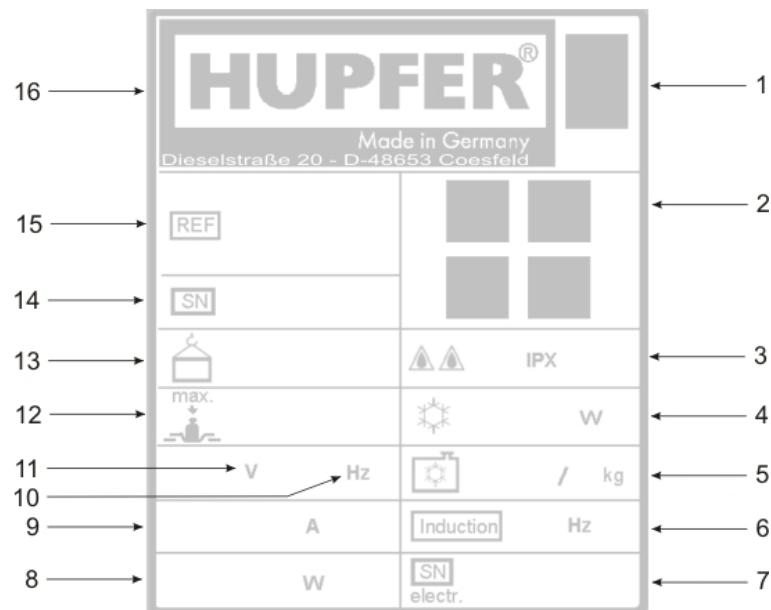




Figure 3 Rating plate

| | | | |
|---|----------------------------|----|----------------------------|
| 1 | Disposal of old appliances | 9 | Nominal current |
| 2 | Certificates/label | 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 |
|  | <p>In the case of off-site transport in a vehicle such as a lorry, the appliances should be secured properly. The total brakes are not sufficient as a transport securing method.</p> <p>If the appliances are not secured properly, there is a risk of damage to property and persons caused by squashing.</p> <p>During transport, secure all the individually standing appliances using corresponding transport securing devices.</p> |
| ATTENTION | Exposed springs |
|  | <p>When pressing down the stacking platform manually, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.</p> <p>Never press the stacking platform down manually.</p> |

4.2 Putting into Operation

Before the first use of the appliance, remove the protective plastic film from the metal plates.

| | |
|-------------|---|
| INFO | Disposal of packing material |
| | <p>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</p> |

Before putting the appliance into operation, it is necessary to check whether the appliance functions properly.

The following functions are to be checked separately:

- In all appliances: Function of the total brakes.

Ensure the appliance is clean and dry before it is put into operation.

4.3 Storage and Recycling

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

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

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

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

If the platform dispenser is required to be recycled, all the heating devices (if available) must be removed safely and completely, the recyclable materials must be separated properly and disposed in an environmentally compatible manner according to the Waste Disposal Regulations.



In any case, the local bodies responsible for disposal are to be involved for this purpose.

5 Operation

5.1 Adjustment of Stacking Platform

Basically, the appliance must be adjusted if at least one of the following parameters alters: diameter or edge length, height, stack height and weight of the plastic items.

5.1.1 Spring adjustment

| | |
|--|---|
| ATTENTION | Damage to persons and property due to improper adjustment |
|  | <p>When the dispensing height is exceeded, there is a risk of accident or injury due to tipping of the items stacks. If the level falls below the dispensing height, injuries to the fingers due to squashing can occur when removing dishes. Be careful when taking the stacking platform out and putting it back in. If it is handled incorrectly, there is a risk of crushing your fingers.</p> <p>Adjust appropriately the dispensing height by hooking or unhooking the springs.</p> <p>When adjusting springs on sharp edges, pay particular attention to the ends of the tension springs. Act carefully.</p> |
| ATTENTION | Exposed springs |
|  | <p>When pressing down the stacking platform manually, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.</p> <p>Never press the stacking platform down manually.</p> <p>Be careful when hooking and unhooking the springs. When adjusting springs on sharp edges, pay particular attention to the ends of the tension springs.</p> |

Before loading the appliance, the dispensing height must be adjusted to the kind of plastic items used. The dispensing height is adjusted by hooking or replacement of tension springs.

The dispensing height must be adjusted so that over the entire lift the uppermost plastic items are constantly moved upwards to a uniform dispensing height between 0.6" (1.5 cm) and 0.98" (2.5 cm) above the upper rim of the housing.

Step 1 - Checking the spring adjustment

- Load a stack of 15 to 20 items on to the stacking platform to test the dispensing height.
- Wait for a reaction.

If the dispensing height of the stack is about 0.8" (2 cm) above the upper edge of the appliance, the spring system is adjusted correctly.

If the stack drops down only a little or not at all, the dispensing height must be altered by adjusting the springs.

Step 2 - Changing the spring adjustment

The dispensing height is adjusted by hooking or unhooking tension springs on two attachment bars.

| | |
|-------------|---|
| NOTE | Arrangement of the springs |
| | <p>A symmetrical arrangement of springs between the attachment bars is necessary for guiding the stacking platform uniformly and without friction.</p> <p>The strong base springs (1) should be placed outside of the attachment bars, the frail base springs (2) should be placed interiorly. A slightly asymmetrical arrangement of springs within an attachment bar does not pose any problem.</p> |

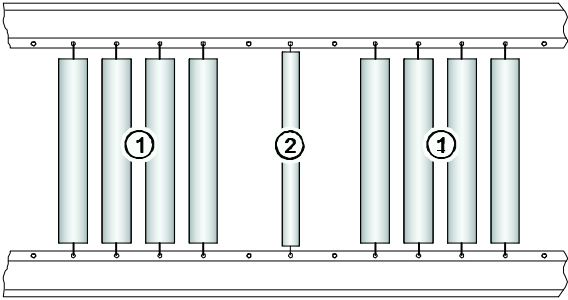


Figure 4 Attachment bar with tension springs (example)

If the dispensing height is too high, adjustable springs must be unhooked.

If the dispensing height is too low, adjustable springs must be added.

Procedure:

- Take out the inserted plastic items (if available).
- Lift the stacking platform uniformly and place it down on the appliance. Finally, grip the stacking platform with both hands and put it down in a suitable place.
- Hook or unhook adjustable springs uniformly in all groups of springs.
- Preferably unhook the adjustable springs. Always leave the base springs inserted, if possible. Always unhook the springs on the lower attachment bar.
- Then reinsert the stacking platform carefully.

Both steps must be repeated as often as possible, until the dispensing height is in the range from 0.6" (1.5 cm) to 0.98" (2.5 cm). So long as the same kind of plastic items is always used, the dispensing height only needs to be set once.

| | |
|-------------|--|
| NOTE | Maximum load-bearing capacity |
| | The stacking platform is set to a maximum load-bearing capacity of 352.8 lbs (160 kg), which is entirely sufficient for most common kinds of plastic items. In rare cases the existing springs are insufficient and additional springs must be inserted. |
| NOTE | Suitable size of the plastic items |
| | Due to small holes on the surface of the stacking platform and the compartment inner panelling made of plastic-coated rods, too small plastic items cannot be guided and, therefore, should not be used. |

5.1.2 Calculating the capacity of the platform dispenser

The total capacity of a platform dispenser depends on the plastic items loaded and the number of stacks. All the leading manufacturers give the necessary data for calculating the intermediate stack height in the following manner:

$$H_z = \frac{(H_n - H_1)}{n-1}$$

H_z : Intermediate stack height
 H_1 : Height of the first plastic item
 H_n : Height of n plastic items
 n : Number of plastic items

The capacity per stack can be calculated together with the stack height H_s of the platform dispenser:

$$K = \frac{(H_s - H_1)}{H_z} + 1$$

K : Items per stack
 H_s : Stack height of the platform dispenser

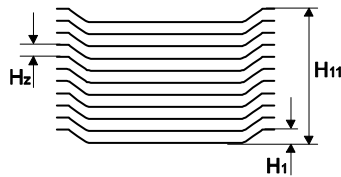


Figure 5 Intermediate stack height H_z of 11 plastic items


Example:

$$H_z = \frac{(140 - 28)}{10} = 11,2 \text{ mm}$$

$H_1 = 28 \text{ mm}$: Height of the first plastic item
 $H_{11} = 140 \text{ mm}$: Height of 11 plastic items
 $t = 11$: Number of plastic items
 $H_s = 24.6'' (565 \text{ mm})$: Stack height

$$K = \frac{(625 - 28)}{11,2} + 1 = 54 \text{ Teile}$$

5.2 Operation

| ATTENTION | Exposed springs |
|---|---|
|  | <p>When pressing down the stacking platform manually, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.</p> <p>Never press the stacking platform down manually.</p> |

Ensure the appliance is clean and dry before it is put into operation.

Before work starts, it is always necessary to check whether the platform dispenser to be operated is correctly set for the plastic items to be used.

- The correct dispensing height must be ensured, so that the staff cannot suffer injury or become trapped.
- It should be guaranteed that the plastic items are suitable and the stacks support each other.

Loading the appliance

| NOTE | Loading |
|------|---|
| | <p>Before the plastic items are inserted, the stack height must be set correctly. Insert the items individually or in small safely manageable stacks.</p> |

| NOTE | Payload |
|------|---|
| | <p>Make sure that the platform does not exceed the permitted payload.</p> |

- Fill the stacks alternately and uniformly.
- Place the first items on the centre of the stacking platform and move it down slowly.
- Put the further items precisely onto the items already placed on the appliance.

Unloading plastic items


- Remove the items evenly from each stack to avoid tilting of the stacking platform.

Moving the appliance

- Release both total brakes.
- Grip the appliance by the push bars and move it to the destination.
- At the destination, apply both total brakes in order to secure the appliance against movement.

6 Troubleshooting and Repair

6.1 Safety Measures

| ATTENTION | Exposed springs |
|---|---|
|  | <p>When pressing down the stacking platform manually, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.</p> <p>Never press the stacking platform down manually.</p> <p>Be careful when hooking and unhooking the springs. When adjusting springs on sharp edges, pay particular attention to the ends of the tension springs.</p> |

6.2 Notes on Troubleshooting

Service work should only be carried out by authorised specialists.

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

Defective components should only be replaced with original spare parts.



Regular inspection and maintenance of the appliance prevent disruptions to operation and ensure safety. Inspection and maintenance intervals depend on the use of the appliance. Consult your dealer's after-sales service department.

6.3 Fault and Action Table

| Fault | Possible cause | Action |
|---|-----------------------|---|
| Stacking platform does not move plates upwards to the dispensing height even with a low load. | Spring breakage | Replace defective springs by new ones. |
| Total brakes do not have any locking action | Total brakes are worn | Either renew the locking brakes or replace the defective casters. |

7 Cleaning and Care

7.1 Safety Measures

| | |
|---|---|
| ATTENTION | Exposed springs |
|  | <p>When pressing down the stacking platform manually, the springs are exposed. Reaching into the gaps of the exposed springs may cause hand injuries.</p> <p>Never press the stacking platform down manually.</p> <p>Be careful when hooking and unhooking the springs. When adjusting springs on sharp edges, pay particular attention to the ends of the tension springs.</p> |
| ATTENTION | Do not clean with running water |
|  | <p>The appliance should not be cleaned with running water, steam-jet or high-pressure washers. The appliance must be taken out of operation and switched off at the mains beforehand in any area where steam-jet or high-pressure washers are to be used.</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 plastic items.

7.3 Cleaning and Care

The appliance must be cleaned dry daily or wiped with a damp cloth. 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 plastic items.

The base outlet located under the stacking compartment is installed to remove objects, which have accidentally fallen down into the appliance.

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 rinsing thoroughly with copious fresh water. 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

8.1 Introduction

Service work should only be carried out by authorised specialists.
Defective components should only be replaced with original spare parts.
Always specify the data and corresponding part number indicated on the rating plate when using the after-sales service or ordering spare parts.

8.2 Spare Parts and Accessories List

BDK 57-57 | BDK 57-57 K

| | | | |
|------------|-----------------|--|--|
| 0191176895 | Push bars | 1set (left + right, 2 handles incl. fixing material) | |
| 014002110 | Corner bumpers | 1set (rear + front, 4 pcs incl. fixing material) | |
| 014055088 | Tension springs | 1 set (5 pcs, Stainless steel 20 gr.) | |
| 014040101 | Tension springs | 1 set (5 pcs, Stainless steel 10 gr.) | |
| 014000401 | Swivel caster | Ø 4.9" (125 mm), plastic with 4 nuts | |
| 014000402 | Swivel caster | with brake, Ø 4.9" (125 mm), plastic with 4 nuts | |
| 014118012 | Guide basket | plastic-coated grey | |

BDK 85-60 | BDK 85-60 K

| | | | |
|------------|-----------------|--|--|
| 0191176895 | Push bars | 1set (left + right, 2 handles incl. fixing material) | |
| 014002110 | Corner bumpers | 1set (rear + front, 4 pcs incl. fixing material) | |
| 014055088 | Tension springs | 1 set (5 pcs, Stainless steel 20 gr.) | |
| 014040101 | Tension springs | 1 set (5 pcs, Stainless steel 10 gr.) | |
| 014000401 | Swivel caster | Ø 4.9" (125 mm), plastic with 4 nuts | |
| 014000402 | Swivel caster | with brake, Ø 4.9" (125 mm), plastic with 4 nuts | |
| 014118012 | Guide basket | plastic-coated grey | |
| 014041030 | Guide roller | | |

BDK 85-60 | BDK 85-60 K FM

| | | | |
|------------|-----------------|--|--|
| 0191176895 | Push bars | 1set (left + right, 2 handles incl. fixing material) | |
| 014002110 | Corner bumpers | 1set (rear + front, 4 pcs incl. fixing material) | |
| 0144040164 | Tension springs | 1 set (5 pcs, Stainless steel 20 gr.) | |
| 014040101 | Tension springs | 1 set (5 pcs, Stainless steel 10 gr.) | |
| 014000401 | Swivel caster | Ø 4.9" (125 mm), plastic with 4 nuts | |
| 014000402 | Swivel caster | with brake, Ø 4.9" (125 mm), plastic with 4 nuts | |
| 014118011 | Guide basket | plastic-coated grey | |
| 4045014 | Guide roller | for guide basket, Ø 1" (26 mm) stainless steel | |
| 0191176895 | Sleeve | for guide roller, aluminium | |
| 014002110 | Corner bumper | plastic | |
| 0144040164 | Pan | stainless steel | |

9 Annex

9.1 EC Declaration of Conformity

CE Konformitätserklärung

Declaration of CE-Conformity | Déclaration de conformité CE

Gegenstand | Object | Objet

Geschirrstapler, Korbstapler, Bohnenst. | crockery dispenser, basket dispenser, platform dispenser | chariot niveau constant à vaisselle, chariot niveau constant à paniers, chariot niveau constant à plateforme

Typ | Type | Type

UST / KO / EBS / BD / BDK / OBK / BPN

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

Darüber hinaus wurden folgende harmonisierte Normen angewandt:

EN ISO 12100:2010, EN ISO 13857

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/EC

Furthermore, the following harmonised standards have been applied:

EN ISO 12100:2010, EN ISO 13857

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

2006/42/CE

En outre, les normes harmonisées suivantes ont été appliquées:

EN ISO 12100:2010, EN ISO 13857

Coesfeld, 12.06.2013

Helmut Schumacher
Vorname, Nachname

Geschäftsführung
Position

Unterschrift

Jürgen Gottwald
Vorname, Nachname

Leiter Normenstelle
Position

Unterschrift

Dokumentationsbevollmächtigter
Jürgen Gottwald

HUPFER® Metallwerke
GmbH & Co. KG

info@hupfer.de

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HUPFER® Metallwerke GmbH & Co KG

Dieselstraße 20 | 48653 Coesfeld | Deutschland | +49 2541 805-0 | info@hupfer.de

