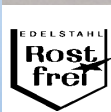


SPECIALISTS IN KITCHEN LOGISTICS



# Tray trolley...

...the new single-walled ETTW from HUPFER® - practical and economical!



ETTW 2/20 L-EN to hold 530 x 370 mm Euronorm compact trays.  
The internal space consists of two 10-tray compartments = 20 trays. The trays lie 115 mm apart.



## ETTW 2/20 L-EN

Smooth sidewalls ensure excellent cleaning properties and therefore maximum hygiene. The doors being located within the outer limits of the trolley are thus optimally protected from damage. The doors can be locked at two points.



Generously sized guide rails to compensate for tray tolerances.

The single-walled HUPFER® ETTW series transport trolleys/ward trolleys provide an economical solution to the transportation and serving of food wherever required. They are constructed from stainless steel, material 1,4301. Models are available for lengthwise insertion of 16 EN trays, 20, 24 or 30 GN or EN trays. The tray guide rails are especially generous in size to make optimal provision for tray tolerances - ensuring safe tray handling during transportation. The tray guide rails are spaced 95, 105 or 115 mm apart.

Other tray spacings can be provided if desired. The double-walled swinging doors can pivot through 270°. Two vertical pushing rails are fitted on either side of the trolleys. Two sturdy peripheral protective bumpers protect both the trolley and its contents from damage. Even when held in the open position, the doors always lie within the area protected against jarring. All models are fitted with two fixed castors and two steering castors in corrosion-proof housings, Ø 160 mm.

# **HUPFER® TTW double-walled...**

**...the modular tray trolley range for even greater efficiency!**



The double-walled tray trolleys/ward trolleys of the modular HUPFER® TTW series have been designed and developed with the latest ergonomic features. Models are available for sideways insertion of 16, 20, 32 or 40 and for lengthwise insertion of 16, 20, 24 or 30 EN or GN trays. All TTW models are produced from stainless steel, material 1.4301. They consist of individual modules. This is particularly economical because, if damaged, both the top as well as the side wall,

rear wall and doors can easily be replaced. They undergo processing of the usual high standards you expect from HUPFER®. This means that these models are easily able to withstand rough daily handling but are also particularly easy to clean - in compliance with the strict hygiene regulations which apply to food handling. The tray guides inside the trolley are available at spacings of 95, 105 or 115 mm, depending on the model.



# User-friendly design...

...fully modular construction!



The middle wall can easily be removed at any time without the need for tools.

**TTW 2/40 B-EN** to hold 530 x 370 mm Euronorm trays or 530 x 325 mm GN trays. The interior consists of two compartments each holding 2 x 10 trays = 40 trays. The trays lie 115 mm apart. They are shown here with the barrier rail which is available as an accessory, and with two-point door locking (transport latch). A 32 tray capacity version of this model is also available.



The floor structure allows for a variety of different castor arrangements and combinations - just as the user requires - and can be altered on site at any time.



The middle wall of the modular series, which is spaced apart from the floor and top, offers the greatest ease of cleaning for maximum hygiene.

The TTW series is fitted with double-walled overlapping doors which can pivot through 270°. Vertical pushing rails are fitted to the corners of the trolley and extend from the top to the floor of the trolley - an ergonomic advantage ensuring optimal posture for users of almost any height. The HUPFER® tray trolleys TTW are designed in such a way that they are easy and light to manoeuvre even when the doors are open. The doors are set back within the outer limits of the trolley both when closed

and also when held open. They therefore always lie within the protected area - protected above by the trolley top and at the bottom by the protective bumpers. The TTW models are fitted as standard with a collision guard consisting of two sturdy peripheral protective bumpers of impact-resistant plastic. The trolley top can also optionally be provided with a peripheral protective bumper.

## Maximum ergonomic design...

...excellent hygiene properties and a high degree of safety - HUPFER® tray trolley!



The ergonomically formed, top-to-bottom handle on the door is very user-friendly.



The overlapping doors of the HUPFER® tray trolleys assist in the hygienic transportation of trays containing portions of food.



The two-point door locking arrangement offers maximum safety during transportation (special fitting).



The doors always lie within the protected area both when closed and when held open.

The top-to-bottom handle for opening the trolley doors fulfils the highest ergonomic requirements. An additionally available two-point door locking arrangement (transport latch) which can be operated with one hand ensures maximum safety during transportation and intermediate storage. The tray transport trolleys of this series are fitted with two steering castors, which can be fully locked, and two fixed castors in corrosion-proof housings, Ø 160 mm.

# Advanced evening distribution...

*...with passive cooling as a fitting option you can work efficiently and save costs!*



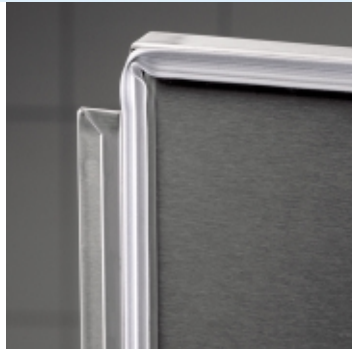
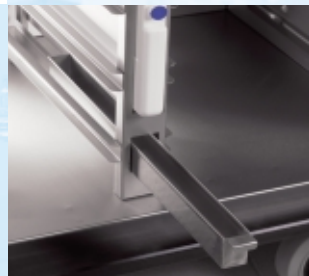
By preparing your food for evening distribution in advance you can reduce staffing costs and therefore optimise the efficiency of your kitchen operation.

HUPFER® offers passive cooling for a very wide range of models. The special intermediate wall of these passive cooling (PK) models is fitted with cold-storage plates which are inserted to keep the prepared food cold. These models are provided with door seals which ensure that the inside of the trolley always stays cold.

The middle wall of the TTW model range is set apart from the floor and top; this facilitates cleaning and ensures greater hygiene in handling food. A tipping protection arrangement integrated into each rail ensures safe tray handling.



The guide rails are designed to prevent the trays from tipping which ensures absolutely safe tray handling in busy daily operation.



HUPFER® offers a middle wall fitted with cold-storage plates as a fitting option.

The removable trough which is made from stainless steel and integrated into the middle wall of the passive cooling models serves to collect condensation from the cold-storage plates, thus ensuring that the trolley floor remains dry.

The peripheral door seal in the models with passive cooling (PK) ensures that the inside of the trolley remains cold.

## Advantages and benefits in overview

- Large model range (single-walled and double-walled designs).
- Suitable for Gastronorm, Euronorm or system part compact trays.
- Trolleys can be manoeuvred using vertical pushing rails even when the doors are held open.
- Wide range of castors for all running surfaces.
- Overlapping doors for optimum exclusion of dust.
- Door seals for better cold retention (PK models).
- Passive cooling can be incorporated retrospectively at any time.
- User-friendly top-to-bottom door handle.
- Easy-to-clean walls with tray tipping protection (modular series).
- Large-surface tray rails compensate for tray tolerances.
- Doors can be easily latched to hold them open and closed.
- Replacing the middle wall permits either EN or GN trays to be inserted lengthwise.
- Comprehensive accessory range.
- Customisation on request.



# The HUPFER® TTW-V series...

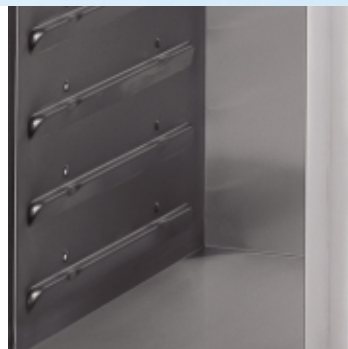
*...with fully welded interior for maximum hygiene!*



**TTW-V 2/40 B-EN** to hold 530 x 370 mm Euronorm trays or 530 x 325 mm GN trays. The interior consists of two compartments each holding 2 x 10 trays = 40 trays. The trays lie 115 mm apart. They are shown here with plastic protective corners - special colour grey.



The clean lines of the TTW-V model ensure optimum cleaning.



The fully-welded interior of the TTW-V series fulfils the highest hygiene requirements.

The HUPFER® TTW-V series tray transport trolleys have a welded interior and are produced from stainless steel, material 1.4301. Their special construction means that these models are fully able to meet strict hygiene requirements. The range includes TTW-V models for sideways insertion of up to 40 EN or GN trays and for lengthwise insertion of up to 30 EN or GN trays. The tray guides inside are seamlessly deep-drawn and are spaced apart at a height of 95, 105 or 115 mm.

The double-walled doors also lie within the protected area of the outer limits of the trolley in these models when they are held open and when they are closed. However, in contrast to the TTW models, in the TTW-V models they can additionally be latched in the 260° position so that when cleaning with a lance, hose or high pressure cleaner there are no areas excluded from the washing jet - thereby ensuring maximum hygiene.



## Suitable for washing...

**...the fully welded interior ensures the best cleaning features!**



A holding mechanism permits the doors to be latched at 260°. This permits optimal cleaning where no areas are excluded from the washing jet, which would compromise hygiene.



HUPFER® tray trolley of the TTW-V series (internally fully welded) are suitable for washing. The TTW-V model series is internally and also externally fully welded and therefore optimally suited for cleaning in an automated washing system. The stainless steel, material 1.4301, and processing to the highest level of manufacturing technology enable these trolleys to withstand the roughest handling in day to day use.

The tray trolleys are automatically drawn into the customer's automated washing system.

The TTW-V models also have vertical pushing rails with which they can be moved satisfactorily even with the doors open. The castor arrangement consists of two steering castors with full locking capabilities and two fixed castors, each ball bearing-mounted in corrosion-proof housings, Ø 160 mm. The internally and also externally fully welded models TTW-VV can be supplied to meet the greatest demands. Models for sideways insertion of 20 or 40 EN/GN trays and models for lengthwise insertion of 20, 24 or 30 EN trays are available.

### **Advantages and benefits in overview**

- The fully welded interior is suitable for washing (model TTW-V).
- Highest hygiene standard achieved with the TTW-VV model series (internally and externally fully welded) which can be washed in an automated washing system.
- Doors can be held open at 260° to avoid any areas being excluded from the washing jet.
- Two-point door locking which can be operated with one hand, and smooth door surfaces.
- Peripheral frame sealing for maximum insulation and dust exclusion.

# Fittings and accessories...

...for individual requirements and customisation!



The accessory range for all the HUPFER® brand tray trolleys includes a 30 mm high gallery rail also a Multigrip anti-slip mat of easy-to-clean polyethylene - e.g. for transportation of bottles or glasses on the top of the trolley.



An EN insert basket made from plastic-coated stainless steel is available as an accessory for the models permitting EN lengthwise or sideways insertion. The basket mesh width is 26 x 26 mm, dimensions: W x D x H = 530 x 370 x 108 mm



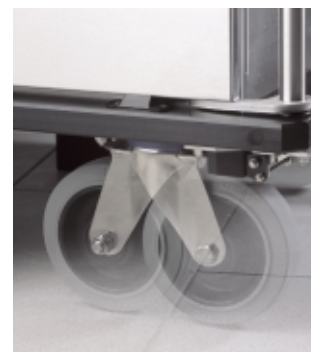
The document clip, which is made from stainless steel, material 1.4301, is available as an accessory, helps maintain order and provide a clear overview.



The tray trolleys can be labelled and an optimal overview achieved in logistical processes using sign holders in DIN A 4 and DIN A 5 formats. Both models are made from stainless steel, material 1.4301, and are easy to clean.



The optional central locking mechanism allows two castors to be braked simultaneously by operation of a central foot lever.



The optional Rifix castor fitting enables the steering castors to be locked in a fixed direction, facilitating straight running.

All HUPFER® tray trolleys can be complemented practically and effectively by a wide range of optional fittings and accessories. On the one hand, this maximises ease of use and, on the other, ensures that processes are simplified and operations facilitated.

All tray trolleys can thus be fitted with a gallery rail of stainless steel, material 1.4301, a label holder for ward signs, different castor sets, a hanging device, a document clip or the passive cooling system. HUPFER® tray trolleys can therefore be

optimally tailored to individual user requirements. The Multigrip anti-slip mat, available as an accessory, used together with a gallery rail ensures safe transport of e.g. cutlery baskets on the top of the trolley. The EN insert basket completes the range.

## Transportation and safety...

*..from safe in-line conveyance to new safe transportation in a lorry!*



The friction-damped HUPFER® coupling ensures that the trolleys are towed in line - even where a number of tray transport trolleys are involved.



We provide an additional TTW impact protection feature for securing trolleys in a lorry using a transport securing bar.



An additional securing capability for transportation off-site by lorry is provided by the optional transport securing feature (latch).



Secure connection of the towing bar and coupling pin is always ensured by an upwardly directed spring force.



When uncoupled the towing bar is automatically held in the upright position.

The transportation of trolleys holding prepared trays is often a considerable logistical problem. HUPFER® offers safer solutions for both on-site and off-site transportation. All TTW models can additionally be fitted with a door securing feature (latch) in addition to the standard door lock. The trolleys are towed in-line using a truck and an optional standard towing bar and coupling pin - made from stainless steel or in galvanised version.

Use of the HUPFER® Twin-Brake means that in-line conveyance with inadvertently braked castors is avoided. Even the use of Rifix castors in in-line conveyance does not pose a problem with HUPFER® - we offer a unique solution. The friction-damped coupling which is available on request ensures in-line conveyance of a number of tray trolleys.



# Compatible with AGV systems...

*...HUPFER® tray trolleys can be integrated into any automated trolley transport system!*



Automated trolley transportation is economically practical in large concerns. In both top-mounted automated trolley transport systems and ground-based driverless transport systems we adapt our tray trolleys to the conditions on site to create a smoothly functioning transport cycle.

## Induction hook-up unit...

*...hook up TTWs, regenerate and serve food - for maximum food quality!*



HUPFER® tray trolleys filled with trays containing chilled food can be hooked up to the specially developed induction docking stations. For further active cooling it is possible to fit the induction docking stations with an active circulating air cooling facility. During the regeneration process only the food to be served hot becomes hot and the cold items remain cold - all in

accordance with HACCP standards. The stationary induction technique means that individual induction carts are no longer needed. Standard tray trolleys can be used. This not only saves weight but investment costs as well.

# HUPFER® TTW-FreeZeo® ...

*...mobile cooling, adjustable and requiring no mains power during the active cooling process!*



Mobility independent of mains power, this is indispensable when transporting prepared food from the central kitchen to individual wards in an unrefrigerated lorry. TTW FreeZeo® makes this possible. The system is unaffected by high ambient temperatures and varying humidity. A great advantage where HACCP guidelines are concerned. It is not sensitive to jarring. The cooling temperature of TTW FreeZeo® can be adjusted easily and simply, even by untrained staff, using the controls specially developed for this technology.



## HUPFER® TTW FreeZeo®

Supply a satellite kitchen from a central kitchen. A TTW FreeZeo® filled with large containers is prepared at the steaming system.



Easy-to-use display-based controls.



Mobility - independent of the mains power, this really proves its worth during transport in an unrefrigerated lorry.

## Advantages and benefits in overview

- Chilling at the touch of a button and independently of mains power.
- User-friendly, very simple operation - regardless of the quantities to be cooled and point of usage.
- Flexible adaptation to changes in procedure - anywhere, any time.
- Considerably lower investment and operating costs than with any conventional mobile cooling systems.
- Closed system with no components which pose a risk to health or the environment.
- The cooling process is food-safe, independent of mains power, mobile and yet adjustable.
- Full cooling capability without pre-cooling.
- Uniform, uninterrupted cooling process - independent of high ambient temperatures and varying humidity.
- After the process is terminated there is a cooling buffer which lasts for hours.
- No frosting effects - the temperature distribution is always constant and uniform.
- Cooling unit meets HACCP standards.
- The system is virtually maintenance-free and wear-free.
- The cooling processes is virtually silent.
- Light, compact construction.
- Expensive pre- and safety installations are not required.



## *The complete process chain...*

*...using cutting-edge technology!*



The HUPFER®TABLOMAT II for automated placement of trays containing food onto tray trolleys/ward trolleys uses cutting-edge technology to facilitate work and rationalise processes on the food distribution belt. Earlier in the process the HUPFER®TABLOMAT I can be used for automated placement of trays and crockery onto the food distribution belt - the HUPFER® brand leads the way in kitchen logistics.

# The complete process chain...

...ensures long-term success!



**S T O R A G E**



**T R A N S P O R T A T I O N**



**P R E P A R A T I O N**



**O R G A N I S A T I O N**



**D I S T R I B U T I O N**



**K E E P I N G F O O D W A R M**



**R E G E N E R A T I O N**



**S E R V I N G**

It is not the individual components but the entire system which guarantees you a complete process chain. In addition to the HUPFER® tray trolleys we offer you a complex and highly-developed product range, specially tailored to the individual logistics functions such as storage, transportation, preparation, organisation, distribution, keeping food warm, regeneration and serving.

**We are the specialists in kitchen logistics.  
With us you have your process chain under control!**

