

# Pallet Pull-Out

*Dynamic storage solutions for pallets*



# The Pallet Pull-Out unit

## PICKING PERFORMANCE - EFFICIENT STOCK HANDLING

The Pallet Pull-Out is a drawer system for pallets, which facilitates a higher density, scalable and more accessible storage system compared to the standard solution offered by pallet racking.

The Pallet Pull-Out gives a more dynamic, efficient and ergonomic way to organize and maximize the storage and pick area compared to traditional shelving/racking.

Storage space is more easily zoned according to primary and secondary locations, where pick faces can be manually operated without constant interruption from forklift trucks. This has both a considerable time, safety and cost benefit where fewer forklift trucks are needed.

The Pallet Pull-Out is designed for several pallet types and can be fitted with trays and or compartments. It is possible to install three layers of pallet pull out units vertically, such that they are ergonomically accessible.

The Pallet Pull-Out allows you to manually slide a pallet back- and forward just like a drawer, with a full load up to 1.500 lbs.\*

When extended, a person can easily access the entire pallet from three sides. No more bending or ducking under beams to access goods at the rear of the pallet.

\* Standard model, models with higher load can be made on request, a surcharge is applicable.





# Major benefits

## HEALTH AND SAFETY

With Pull-Outs, you create a better working environment, reducing the risk of accidents, protecting your employees and avoiding possible sick day pays.

The Pallet Pull-Out improves the ergonomic picking posture, allowing continuous picking routines without having to strain their back or placing themselves within the pallet racking.

Furthermore, the pull out greatly reduces the need for trucks and other handling equipment in the pallet racking aisles. This reduces the risks and injuries associated with trucks or other handling equipment in the aisles. At the same time, congestion and waiting time while picking is greatly reduced. Importantly storage space can be more easily zoned according to primary and secondary locations, where pick faces can be manually operated without forklift trucks.

This reduces the total number of forklifts needed in the warehouse, which has an overall safety implication. Where gas trucks are used this has a noticeable effect on air quality in the DC/warehouse.

## Current solution



### RED AREA

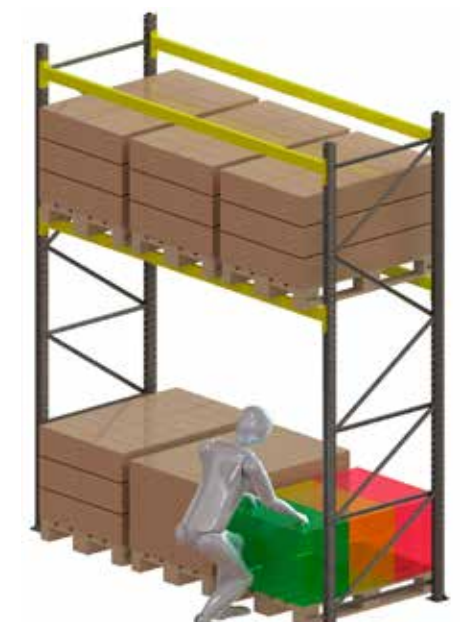
Avoid picking or crawling within the racking. Avoid tripping over the pallet

### YELLOW AREA

With heavy goods, pulling or dragging goods to the pick aisle is undesirable.

### GREEN AREA

Maintaining the proper lifting technique is only realistic at the front or side of the pallet.



# Major benefits

## INCREASE OF PRODUCTIVITY

The Pallet Pull-Out brings several advantages to stock handling and order picking. Order picking is faster, easier, safer, more ergonomic with an increase in productivity.

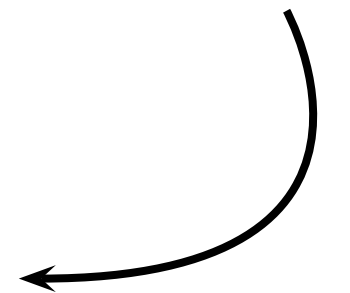
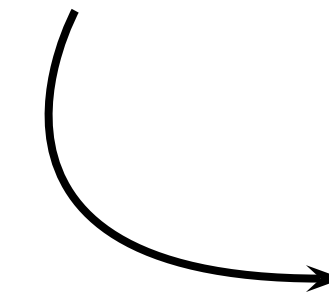
The need for forklifts or pallet jacks in the pick areas is reduced, which increases performance. Extension eliminate wasted space between shelves, maximizing the volume utilization in the DC or warehouse.

In your warehouse or distribution center, hundreds or thousands of picks are made every day or even the hour. Most items or goods typically comes on pallets, which need to be re-handled into shelving/racking or other picking equipment.

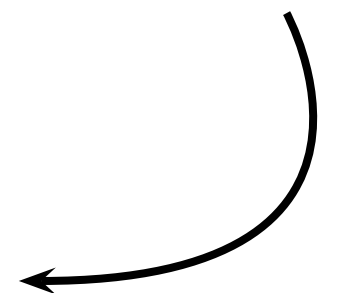
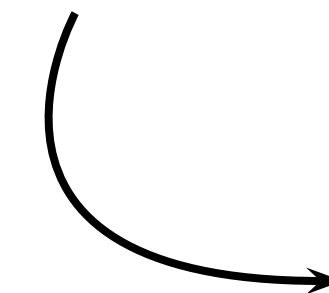
With pallet pull outs installed, little or no time is needed to prepare your goods for picking. Just place the pallet directly on the Pull-Outs, and start picking with full access to the goods.

Time spent on re-palletizing/organizing stock is spent on picking.

# Optimizing the solution



FLOOR model



BEAM model



# Major benefits

## MAXIMIZE STORAGE CAPACITY

Using the same amount of space, the Pull-Out units increases the number of both pallet and picking locations in your pallet racking system.

The extension function reduces the height between the shelves/beams, utilizing more of the overall volume of the DC or warehouse. The pallet pull out can realistically save 30 % storage space or increase your existing warehouse or DC capacity by up to 30 %.

Your storage is more compact and efficient, shorter operation distances allows for faster and more efficient picking, whilst at the same time freeing up valuable floor space. No need for pallet jacks or forklift trucks to turn the pallets to allow easy access; get a full overview of the contents of the pallet when extended from the rack.

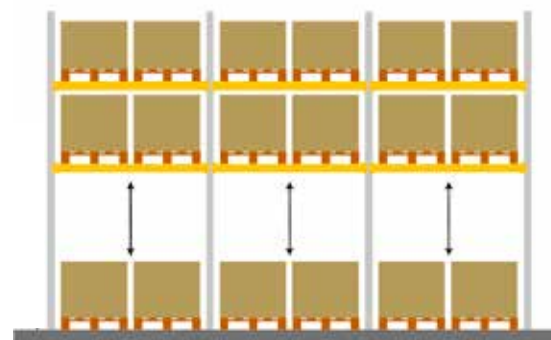
By using our units, your employees will significantly reduce the number of miss-picks, inventory overview and general layout of the facility is improved.

The picking route distance is considerably reduced further optimizing the warehouse or DC productivity/capacity per unit length.

**" We use a lot of Pallet Pull-Outs from Hans Schourup A/S, in reality, you could say that the floor model is free.**

The reason for this, is that with the floor model, we save a set of beams in the racking. Where the beams were previously mounted, the extra height can now be utilized, both the height of the beam plus the space underneath. On average we save a minimum of 30cm per bay, per pallet rack with the floor model, and this extra space can we certainly use."

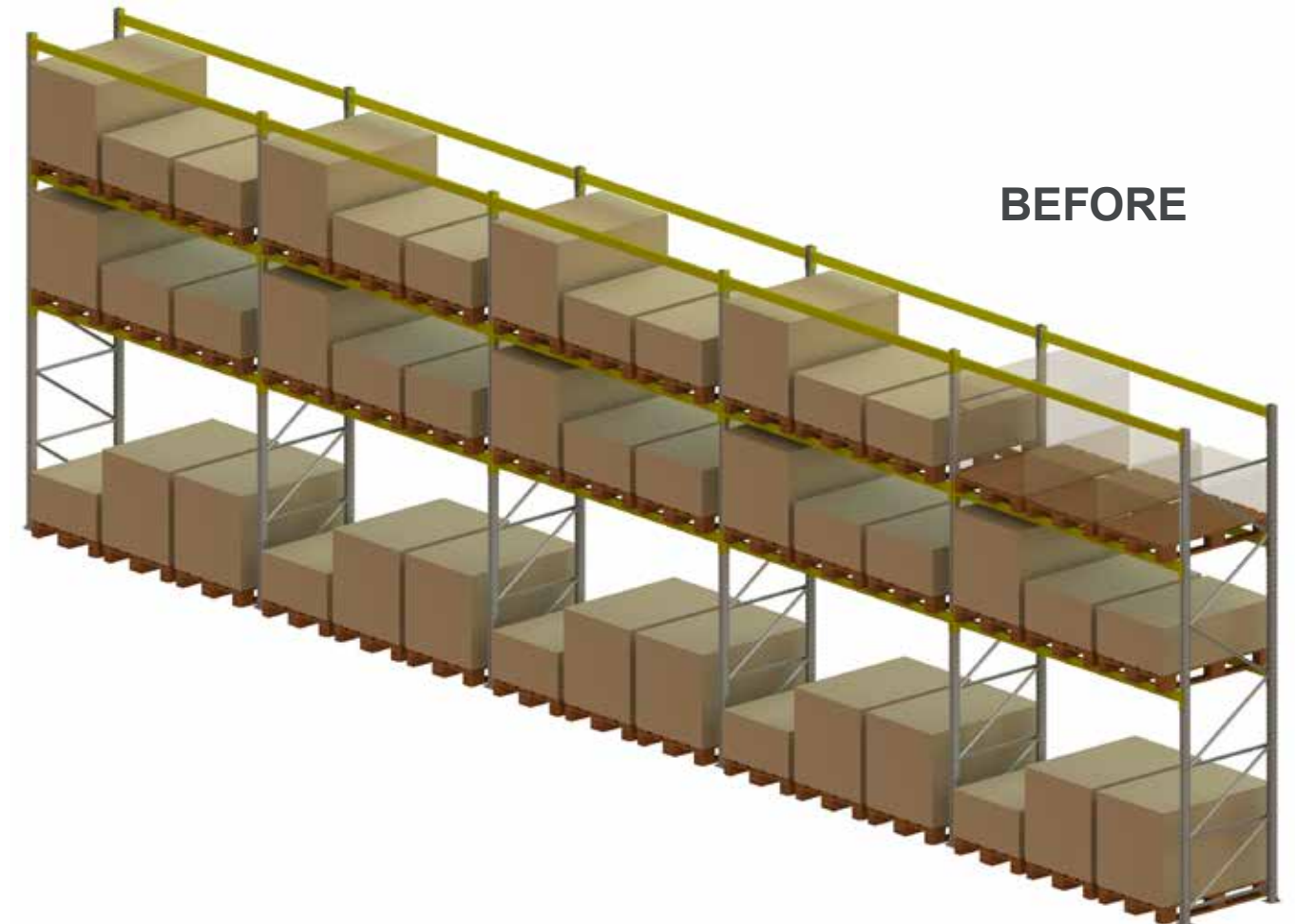
BEFORE



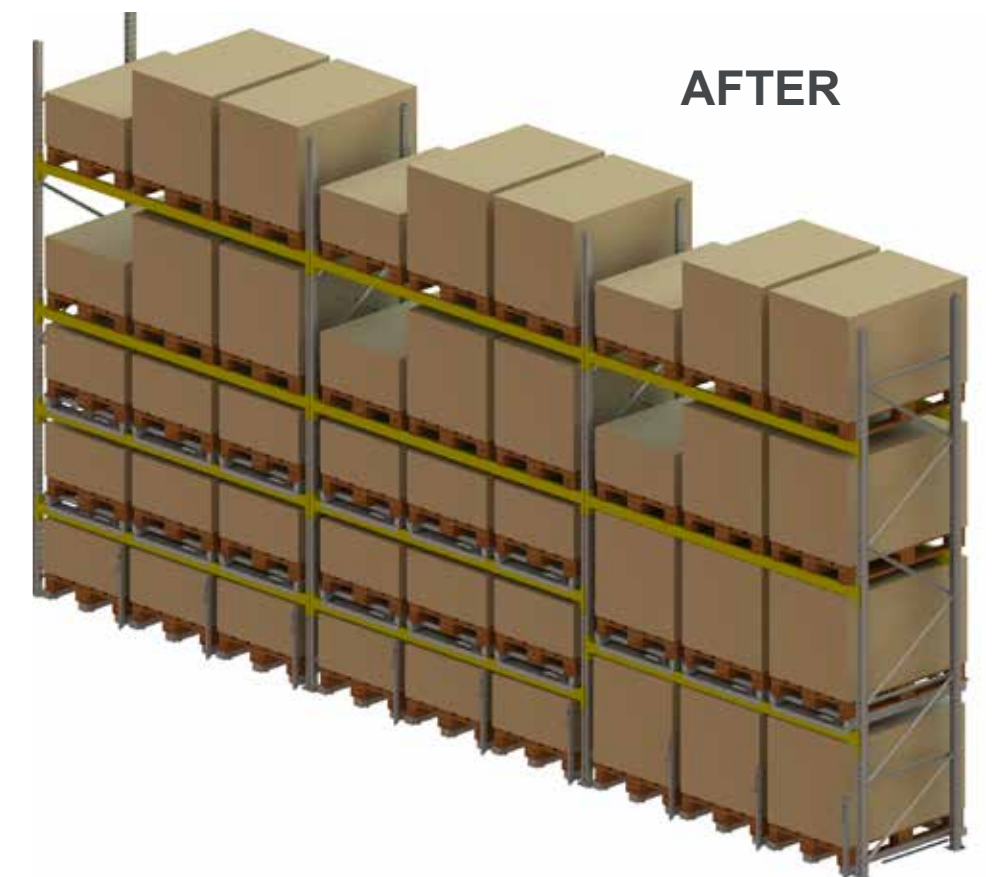
AFTER



BEFORE



AFTER



**SAVES**  
**30%**  
storage space

# Product assets and specifications

## THE PULL-OUT UNIT COMES IN A BEAM AND A FLOOR VERSION.

The beam model installs on the supporting beams in most types of pallet racking and works well in combination with pallet frames.\*

The floor version installs directly on hard surface flooring with two floor mounted guide rails. Extension is more easily facilitated with an upright pull handle

Normal operating forces of the 600 kg model are approximately 26kgf (57lbs of force), the operating forces for a 1000 kg model are approximately 33kgf (73lbs of force).

This is the maximum force required to return the pallet pull out to the closed position.

The 600 kg (1320 lbs.) model can be used on standard racking beams where the load capacity is designated to 1000 kg (2200 lbs.) per pallet. Extension and the tipping forces transferred to the front beam are within the load limit of 1000kg/1320 lbs. of a typical standard beam. Locking devices are an accessory that can be fitted to the drawers to prevent more than one pallet pull out being extended per section.

The 1000 kg beam model requires racking beams where the minimum load capacity is 1500 kg (3300 lbs.)

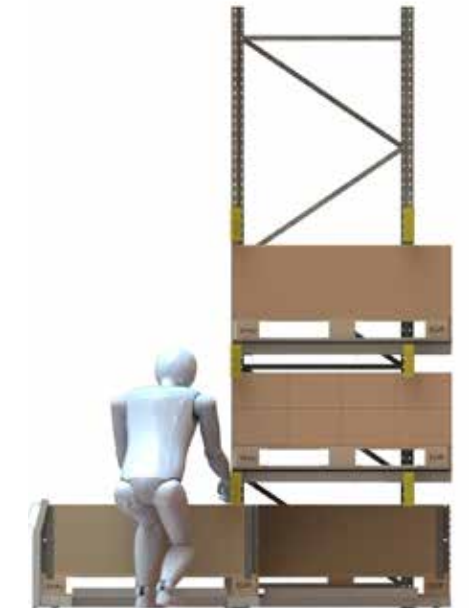
The 1000 kg floor model is designed to be operable with 70% extension at this load.

\* This can be supplied to fit on standard pallets to provide a price conscious functional drawer system.

## BEAM model



## FLOOR model



Beam and floormodel with pallets



Beam and floormodel with wood/metal plates





# Product assets and specifications

## PRODUCT ASSESTS

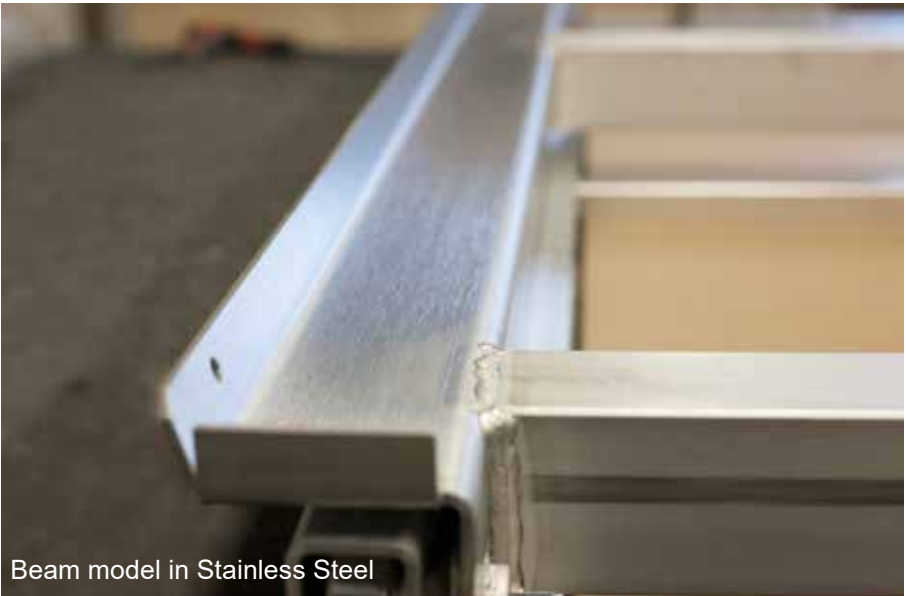
- Incoming pallets are placed directly onto the drawer systems, reducing the double handling of goods in warehouse.
- Eliminates dead space by utilizing a drawer system.
- Substantial increase in pick rates.
- Increases storage capacity/density by up to 30%. Where the primary pick zone utilizes pallet pull outs, secondary stock locations can be condensed with mobile racking, the space savings here can be up to 50%.
- Shortened pick line distances increase labor efficiency.
- Ergonomic handling of goods is vastly improved, reducing injuries and accidents.

The pallet pull out is designed for several pallet types and can be fitted with trays and or compartments. We are experienced in designing and manufacturing the solution you need, contact our design engineer for ideas, RFP's & RFQ's.

### Product Improvement

We continually adapt and improve our products, part of this is ongoing testing. We advise an absolute maximum operating force of approximately 350 Newtons. With special designs, we produce a prototype, which we then test, to ensure functionality and that the unit is operable.

Tested in collaboration with Danish Technological Institute.



Beam model in Stainless Steel



Heavy load test

# Product range - customized solutions

The Pallet Pull-Out has been designed for heavy loads on pallets. We have a range of sizes for both the European and American market.

EUROPEAN MARKET			
Model	Max load	Dimensions, mm (WxL)	
Beam	600 kg	800x1200 mm	Euro pallet
Beam	1000 kg	800x1200 mm	Euro pallet
Beam	600 kg	1200x800 mm*	Euro pallet, side mounted model
Beam	500 kg	600x800 mm*	Half Euro pallet
Beam	600 kg	1000x1200 mm*	ISO pallet
Floor	1000 kg	800x1200 mm	Euro pallet
Floor	1000 kg	1000x1200 mm	ISO pallet

AMERICAN MARKET			
Model	Max load	Dimensions, in (WxL)	
Beam	1320 lb	40"x48"	Standard - (GMA) pallet
Beam	2200 lb*	40"x48"	Standard - (GMA) pallet
Beam	1320 lb	30"x48"	
Floor	2200 lb	40"x48"	Standard - (GMA) pallet
Floor	2200 lb	30"x48"	

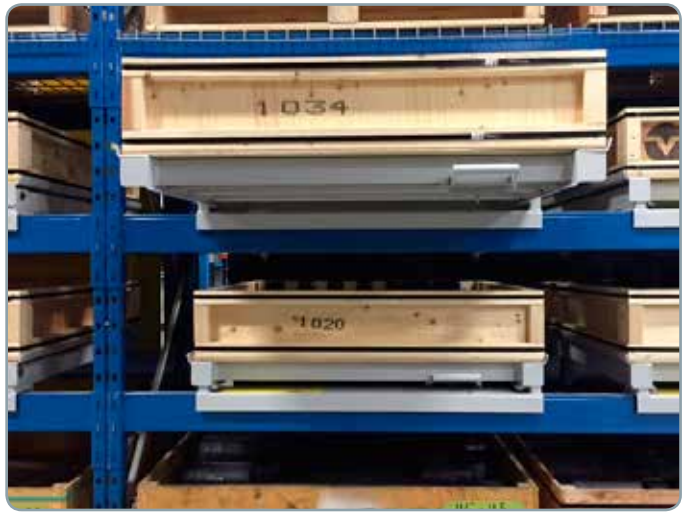
\*Other sizes can be accommodated with minimum order quantities. Lead times on these are slightly longer, due to the slight redesign and testing of a model to ensure maximum operability.

Build height on most models is below 2.3/4 inches and the Pull-Outs will fit securely on almost any kind of pallet racking on the market.

Standard color is light grey RAL7035, but other models and colors are available, please do not hesitate to contact our team.

Other variations and models exist, below are two adaptations for small/spare part picking.

With low volume/low weight goods, special warehousing pull out shelving is also possible which even further optimizes the pallet racking space, these are project solutions, please contact us for further details.



"We saved 15 % space and our picking speed and accuracy went significantly up. The pickers loves this thing, its just a solid low cost improvement"

*Aron Jackson, Warehouse Manager*

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