

GO BEYOND THE TRADITIONAL WORKSPACE

Mobile ergonomics with Treston trolleys



Bring close to work | Enjoy the ergonomics | Customise with ease

Trolleys for any industrial and technical working environment

A quality trolley improves productivity

In industrial and technical environments, work is not always stationary and work equipment needs to be moved between workspaces. Ergonomic trolleys that are light to move make this easier, whilst simultaneously improving productivity at work. The durable Treston trolleys are modular and, using standard accessories and add-ons, they can be customised to meet any need.

Our high-quality technical products fulfil the highest requirements, offer outstanding value for money and meet the requirements of every single workspace – from production to maintenance, to in-house logistics to picking and packing, as well as ESD areas and R&D.



The guarantee period for products manufactured by Treston is 5 years (Concept battery 1 year) from the date of delivery; this excludes workbench tops, trade parts, electronic components, custom made articles and moving parts, for which there is a guarantee period of 2 years.



How to design an ergonomic, functional, and productive workspace?

The purpose of a workstation or workspace is the first factor when determining the basic requirements and accessories for it. What kind of tasks are carried out in the workspace and how? The second factor is the person doing the work. The personal needs and requirements may change considerably from one employee to another as no two people are alike. When a workstation, be it a workbench, assembly line or a trolley, is equipped for the task and adjusted to the individual's needs, each phase of the production process can be completed without a delay, with accuracy, and with maximum comfort.

Consider the following issues when designing an ergonomic, functional and productive workspace:

- What tasks are carried out at this workstation? What is the component weight & size handled at this workstation? These set the basic requirements for the workbench type, load capacity, size of work surface as well as range of accessories selected.
- Are there several people working at this workstation? Are there several different tasks carried out at this workstation that require different working postures? These have an effect on what kind of height adjustment method should be chosen for the workbench: Allen key, hand crank or electric height adjustment.
- What is the space available for use? Make sure there is enough space for all the needed equipment and materials at the workstation and that furniture and equipment are positioned for supporting smooth workflows and processes. Sufficient space should be reserved for completing the tasks and moving around in the workspace.
- How do the in-house logistics flows affect the workspace layout? How are components and materials stocked to the workspace? How do parts arrive and leave? Is there a need for mobile storage or transportation trolleys?
- Are the tasks carried out in one specific place or do you have to move around with tools & objects in the workplace? From an ergonomics point of view, avoid carrying manual loads and use tool trolleys, transportation trolleys and such aids always when possible.
- Is there a need to store other items (e.g. safety equipment, documents, quality inspection devices) at the workstation? Do these need to be on the workbench or for example somewhere close on a trolley within easy reach and access?

What to consider when selecting a trolley?

Selecting the right trolley is not complicated, but there are certain considerations to take into account to ensure you get the best possible trolley for your needs.

- 1. Why do you need the trolley? What is its purpose? Are flexibility and easy reconfiguration important features of the trolley? If you have a fixed task and fixed need for the trolley, a specific trolley for that need will most likely be the best solution for you. But if you need a trolley that can be easily adapted to changing needs and production processes, choose a trolley that has a modular structure, a wide range of accessories, and good ergonomics, which will help you flexibly adapt the trolley to a multitude of tasks.
- 2. What are the objects being handled on the trolley? Are you moving lightweight boxes of the same size and weight or bulky equipment that can differ in size and weight? The weight and shape of the objects handled determine the load capacity and shelf and work surface size of your trolley. If the size of handled objects varies, select a height adjustable work surface and/or shelves to ensure proper ergonomics no matter what size of objects you handle. Tilted shelves improve access and handling of objects, as it enables you to work from your power zone (see page 6).
- 3. How are the objects handled? Are they sorted or unsorted? Can you stack them or are they loose? Especially for unsorted and loose objects, it is better to equip the trolley shelves with edges and/or rubber mats, to ensure the goods do not fall over when moving. Remember though that shelves with edges make it more difficult to handle, lift and lay down heavy objects. Another possibility is to use a caged trolley, where the side walls of the trolley are at least partially closed in order to help keep objects in place. Mesh panels are a good option for this: they allow visual inspection and keep the construction light.
- 4. What kind of working environment is it? Do you have to enter doors with the trolley? How wide are the walkway spaces? If you have to move through doors in different workspaces and/or long distances within the space, checks the walkway and door widths to ensure sufficient space.
- 5. What type of castors should I have? A quality castor is of the appropriate size in relation to the working environment and purpose of the trolley. See the next spread of this leaflet for more information on castors.
- 6. How about handles? Trolleys that are moved around a lot and transported for longer distances should be equipped with at least one handle, to make handling, pushing and pulling easy, effortless and ergonomic. See the next spread of this leaflet for more information on handles.
- 7. How often is the trolley used? If you have a trolley in active everyday use, invest in a high quality, reliable and durable trolley with high quality castors. This might be a more expensive initial investment, but in the long run a high quality trolley will pay for itself with its long lifetime and flexibility in use.
- 8. Consult the people using the trolley in their work. They have the best hands-on experience and can give valuable input on the required features, such as size and load capacity, as well as on the accessories needed to perform the work ergonomically and efficiently. Knowing your loads helps you to buy equipment of appropriate capacity.
- 9. How ergonomic is the trolley? As a quick ergonomics check, make sure the handles, work surfaces, and accessories are easily height adjustable to adjust to the worker and task at hand to ensure proper ergonomics. Further information on ergonomics for manual handling of loads is on the next spread.

Why choose Treston trolleys?

Workspaces for happier workfaces

Treston is one of the world's leading suppliers of industrial furniture and workstations. For over 100 years we have been a pioneer in designing ergonomic furniture and work environments: we affect the work environment of over a million employees annually with over 600,000 workstations delivered over the years.

We believe that sustainable long-term business success is founded on empowered, motivated and healthy employees, and businesses' hyper-adaptability to constant change.

Our customers can rely on us to provide them with expert services for building quality ergonomic work environments. Treston trolleys comply with the philosophy of LEAN manufacturing, and our wide range of products with ESD protection is suitable for use in ESD protected areas (EPA).

Unique and universal

Treston trolleys can be accessorized and configured to store, transport and organize any type of materials. Our trolleys can be customised for a wide range of applications with various types of accessories from adjustable shelves, bins, perforated panels & hooks, IT accessories, to tool cabinets and more.

Their modular structure, easy accessory height adjustment and very wide range of accessories make the Multi and Basic trolleys unique trolleys in the market. The features of these trolleys make them universal in use: depending on the frame size and accessories selected, the same trolley can be used as mobile tool storage, materials & components stock, packing material storage, picking trolley, equipment stands, additional work surface, and transportation trolley – your imagination is the limit.

Accessories in many of our workbenches and trolleys are modular in widths M500/M750/M900 mm. These modular accessories are interchangeable and can be used both in trolleys as well as in workbenches. It does not get more universal than this!

Ergonomic and efficient

The key characteristic of Treston trolleys is easy and effortless movability while either empty or fully loaded. A trolley that is easy to manoeuvre is a joy to use and push, even over those slightly higher thresholds. High quality, large castors ensure this.

Treston trolleys are designed with the user and ergonomics in mind, for example in terms of pushing, as well as other factors that affect usability. When the trolley's push handle is the right shape and at the right height, moving the trolley when it is loaded will provide an easy power grip and does not cause physical strain. Height adjustable accessories add the final touch, making Treston trolleys an ergonomic and efficient choice.

Convenient and cost-saving

According to the philosophies of LEAN and the 5S method, the implementation of the manufacturing process should be based on optimising the organisation of tools, material flow, and people; avoiding loss and unnecessary work; and minimising setup times. The goal is to continuously improve the fluency of work processes by consulting those who do the work. Treston trolleys, of which many can be easily modified with accessories, support LEAN thinking and enable optimised process design and implementation.

Highly flexible Treston trolleys with modular structure, height adjustable and interchangeable accessories have a long lifetime, are easy to adjust to various changing needs and enable easy layout changes. Convenient and cost-saving in many ways!

BRING CLOSE TO WORK

ENJOY THE ERGONOMICS

CUSTOMISE WITH EASE

Ergonomics for manual handling of loads

Manual handling of loads (also known as MMH – manual materials handling) means moving or handling things by lifting, lowering, pushing, pulling, carrying, holding, or restraining. Manual handling of loads is generally considered to be an occupational risk factor for low back and shoulder complaints (1) and it is in fact the most common cause of occupational fatigue, low back pain and lower back injuries (2, 6). Therefore, it should not come as a surprise that paying attention to ergonomics for manual handling of loads is extremely important for the safety and health of the workers as well as for the efficiency and productivity of the processes.

Pushing and pulling from an ergonomics viewpoint

Pushing and pulling are the two physical tasks most commonly related to working on and operating trolleys. The most common risk factors, related to pushing and pulling tasks, which could hinder the ergonomics, are forceful pushing/pulling, trolley design that does not promote neutral body postures, wrong direction of exerted forces (e.g. pulling when you should be pushing), one handed pushing or pulling, too heavy loads and wrong handle height. (1, 6)

A task suitable trolley that adapts to the size of the user is the answer to reducing the risk of work related musculoskeletal disorders (WMSD), especially for lower back, knee and shoulder injuries. (3, 4) When selecting a trolley for the task, you should always consider the human body power zones, where people have the greatest strength and most comfort working. See the image on the right as a reference. Trolley design should ensure that pushing and pulling can be done from the optimal height, between the knuckle and shoulder height of the worker, with the arms as close to the body as possible. Working in your power zone reduces the start force needed for pushing and pulling, reduces the effort and force needed to perform work tasks, and reduces the stress on your back and shoulders.

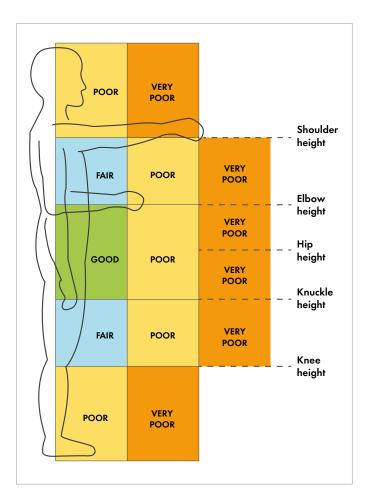


Illustration on the power zones where people have the greatest strength and most comfort, in regards of lifting and placing loads, pushing and pulling (i.e. above the knees, below the shoulders, and close to the body).

CHANGE IN THE NATURE OF MANUAL LOAD HANDLING TASKS

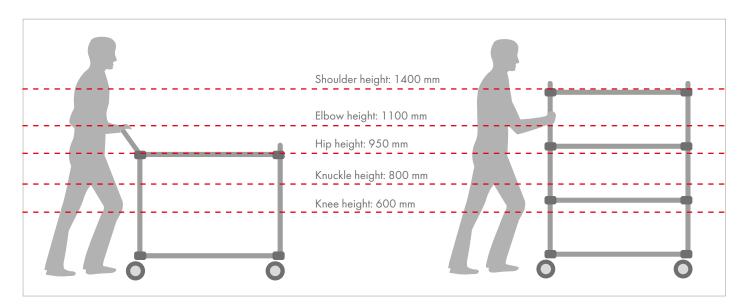
In the past decades, industrial workspaces have been mostly redesigned so that carrying objects has been replaced by transporting objects by pushing or pulling them in trolleys, carts, hand pallet trucks and such. For example, in the automotive supply sector about 10% of all working processes involve pushing and pulling on a regular and repetitive basis. (3)

In addition, the rapid growth of the e-commerce sector has increased the number of distribution centres worldwide. The primary job at these distribution centres is order picking and delivery, where manual handling aids such as carts, trolleys, hand pallet trucks and such are used to perform the tasks. The use of these aids has again eliminated carrying objects, changing the nature of manual load handling tasks predominantly to pushing and pulling.

In general, it has been estimated that nearly half of common manual load handling tasks in workplaces consist of pushing and pulling exertions performed on level surfaces and variable inclined ramps. (4)

Consider the handle position and design

Vertical handles are considered the most optimal, as every sized worker is able to grasp the handles in their unique power zone. Handles can be horizontal as well, as long as they are the correct height for the user. Preferred handle height is between the shoulder and knuckle height of the worker, optimising the force applied for pushing and pulling. See image "Elbow height is the optimal position in regard to push forces" for reference. (6) The optimal shape for handles is cylindrical and smooth, which allows the best power grip with straight wrists. The handle diameter should be big enough to enable power grip instead of pinch grip. Power grip provides up to 75% more strength compared to pinch grip. Power grip involves grasping the handle by wrapping all the fingers around it, instead of grasping with thumb and tips of the other fingers. (6)



Elbow height is the optimal position in regard to push forces. Displayed heights are indicative for average sized male.

Castors play an important role

A quality castor is of the appropriate size in relation to the working environment and purpose of the trolley. The bigger the castor, the easier it is to move the trolley. For example, big castors make it easier to push the trolley over thresholds and other similar obstacles. The tread in quality castors withstands wear and tear. The wheel/tread material is not the only factor influencing the usability and easy movability of the trolley, as the flooring material also affects how well the castor rolls and moves.



Swivel castors are also handy on a trolley, making it easy to manoeuvre even in small spaces. We recommend using four swivel castors in tight spaces, making it easier to turn and control loads. Strong castor brakes lock the trolley in position, making sure that it stays where it is supposed to be.

Castors have a big effect in minimizing the start forces needed to get the trolley moving as well as in reducing the rolling resistance and therefore play an important role in ensuring proper ergonomics. The amount of force required to move loads with trolleys depends on a number of factors:

- weight and shape of the load
- type and condition of floor surface (e.g. smoothness and density)
- route taken (e.g. slopes and obstacles)
- type of castor, especially the materials used
- size of castor
- maintenance of castors cleaning, lubricating and/ or replacing castors on a regular basis has a vital effect in maintaining the ride comfort and minimizing the push effort. (6)

Task experience is the key to reducing strain

Task experience and correct working technique in pushing and pulling play an important role in reducing some measures of biomechanical strain and therefore yield potential for reducing the risk of injury. (3) For example, pulling a lighter weight trolley at hip height, with arms outstretched, would result in very high compressive force at the lower back, as opposed to pushing a much heavier trolley between shoulder and elbow height, arms closer to body, which results in much less of a compressive force at the lower back. (1) As a reference, see the illustration on the power zones where people have the greatest strength and most comfort.

If your goal is to ensure efficient processes and ergonomic working conditions, start by selecting the correct type of trolley for the task and then orientating all workers with the physical aspects and best working techniques for the specific task at hand. No matter how fancy the features of your trolley, if your workers use bad techniques while performing their tasks with the trolley, you are sure to increase the risk of injuries and create inefficiency in processes. If necessary, modify work practices so that workers can perform their tasks and work within their power zone.

> Although there is no exact weight limit that is safe, a weight of 20–25 kg is heavy to lift for most people and it thus increases the risk of back injury. (5)

Sources

- 1. Hoozemans Marco, Kuijer P, Kingma I, van Dieën J, de Vries W, van Der Woude L, Veeger D, van Der Beek A, Frings-Dresen M. 2004. Mechanical loading of the low back and shoulders during pushing and pulling activities. Ergonomics, 15 January 2004, Vol. 47(1), pp. 1-18.
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- Argubi-Wollesen A, Wollesen B, Leitner M, Mattes K. 2017. Human Body Mechanics of Pushing and Pulling: Analyzing the Factors of Task-related Strain on the Musculoskeletal System. Safety and Health at Work, March 2017, Vol. 8(1), pp.11-18.
- 4. Nimbarte A, Sun Y, Jaridi M, Hsiao H. Biomechanical loading of the shoulder complex and lumbosacral joints during dynamic cart pushing task. Applied Ergonomics, September 2013, Vol. 44(5), pp.841-849.
- 5. https://osha.europa.eu/en/publications/factsheet-73-hazards-and-risks-associated-manual-handling-loads-workplace/view
- National Institute for Occupational Safety and Health (NIOSH). Ergonomic Guidelines for Manual Material Handling. https://www.cdc.gov/niosh/docs/2007-131/pdfs/2007-131.pdf



WHAT OUR CUSTOMERS SAY

"Our choice was based on design, ergonomics and service life. Treston's durable furniture, with Scandinavian design, was a perfect solution for us. Our employees work with small details, so they needed a comfortable workplace with an efficient organization of production space". Mr Alexey Doodin, Operational Manager of SPA StarLine.

Read all our customer stories at: https://www.treston.com/about-us/customer-stories



These Treston trolleys can be equipped and accessorised for any task and function. The modular frame structure with upright tubes ensures proper ergonomics, as all accessories are easily height adjustable to suit the user's specific needs and gives limitless accessory options with the modular M500/M750/M900 accessories. These trolleys have a long lifetime and give value for your money, as they can be easily adjusted to meet changing needs and adjustments in production processes.





Treston Industrial Multi trolley – the most adaptable trolley two frame heights and three module sizes and dozens of accessories

Treston Industrial Multi trolley is available in three different widths: M500, M750 and M900. This means that all our modulesized height adjustable accessories can be used with the trolley. Multi trolley is also two sided – possibility to accessorise both sides with different accessories. These features make Multi trolley our most adaptable trolley and thus it serves universal needs. Multi trolley supports heavy loads, but is at the same time easy to move, making it also simple to transport heavy loads, such as equipment and measuring units. Depending on the accessories chosen, it serves as transportation trolley, mobile storage, equipment rack, packing material trolley, picking trolley, tool trolley and much more!



UNIQUE: Due to its modular structure, several size options and a very wide selection of height adjustable accessories Treston Industrial Multi trolley adapts to any needs and functions

- Three frame widths, two frame heights, compatible with all M500/M750/M900 height adjustable accessories
- Select from ready made combinations or build your own configuration from a wide range of accessories.
- Sturdy shelves have height and tilt adjustment, edges, and rubber mats safe to operate as loads keep in place
- Four swivel castors, two with brakes



Fitters trolley – Sturdy and durable, low model trolley with wide range of accessories

Fitters trolley is especially handy for those tasks that are done sitting on a stool or a saddle chair and moving around the work object – the low model of the trolley keeps the tools and supplies ergonomically at the right height and easily accessible. Fitters trolley is often used in heavy duty environments, such as in maintenance and machinery assembly, but it can be easily accessorised for many different tasks and work environments.

Upright module frame



UNIQUE: Ensures proper ergonomics for tasks done sitting on a stool or saddle chair and while moving around the work object

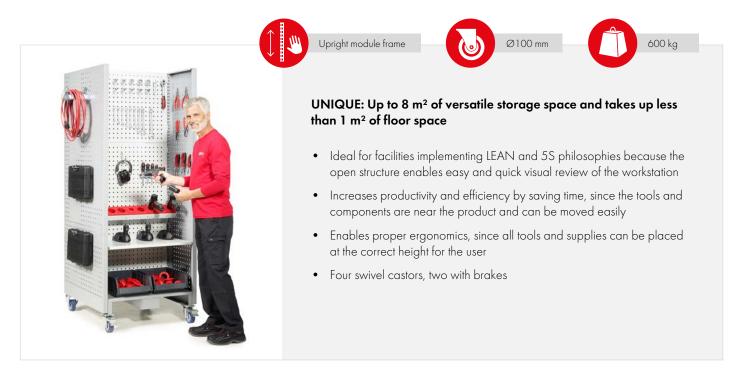
Ø100 mm

300 kg

- Four different ready-to-use combinations
- Can also be easily configured for wide range of tasks due to large selection of accessories
- All M750 module accessories are compatible with the trolley tens of options to choose from!
- Four swivel castors, two with brakes

Treston Tower storage and workstation unit – 4-sided, movable little giant for efficient storage and work

Being versatile and easily customisable for different environments and tasks, the Treston Tower storage and workstation unit is ideal for, for example vehicle and machinery assembly lines, service and maintenance departments, and for any work that requires plenty of mobile storage and workspace near the product. The frame is equipped with M750 upright frame module and thus almost all modular size M750 height adjustable accessories are compatible with this storage and workstation unit.



WATCH this animation showcasing Treston Tower <u>vimeo.com/360212786</u>



Transportation & mobile storage trolleys

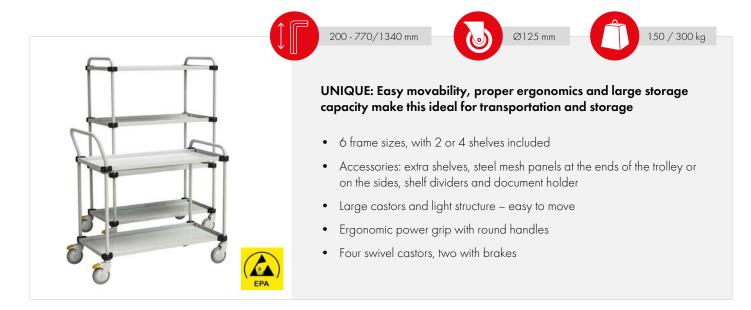
Treston selection of transportation and storage trolleys includes several different options to choose from.

These trolleys enable supplies and parts to be moved smoothly to wherever they are needed and store close to the workstation. These trolleys turn effortlessly in small spaces and have good storage capacity to be able to hold sufficient quantities of components and materials.



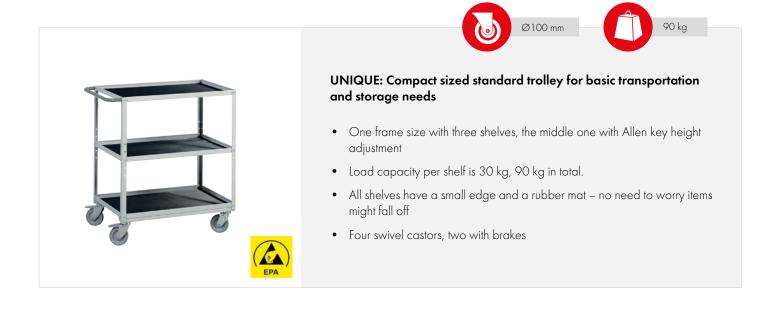
TRTA trolley – Lightweight trolley with lots of storage space and large castors - extremely easy to move around with

A sturdy and light-to-move trolley for use in transporting equipment, as intermediate storage, and in moving components and materials around in various environments. A sturdy steel frame and height-adjustable shelves make this a versatile trolley.



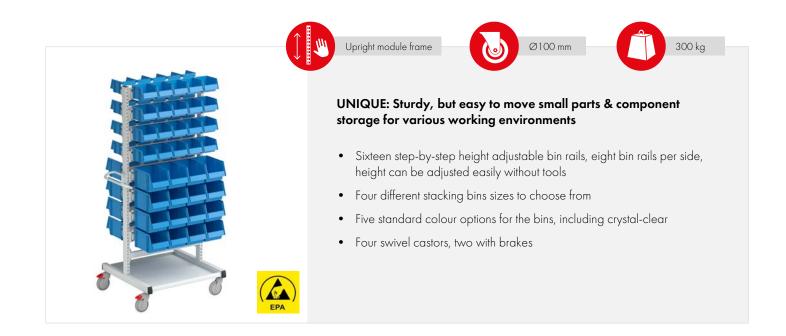
Storage trolley – cost-efficient storage solution

A standard trolley for basic storage and transportation needs. Three shelves, the middle one with height adjustment. Cost-efficient and compact in size.



Stacking bin trolley – A sturdy, double-sided trolley for stacking bins of your choice

The solid steel-frame trolley is a double-sided storage fixture for attaching four different sizes of stacking bins, to meet all kinds of needs: up to 112 stacking bins per trolley. Wide variety of M750 module height adjustable accessories can be attached to the trolley as well. Parts and products are easily accessible and in sight, and they can be effortlessly moved where needed.



Cabinet trolley – Movable small parts storage at its finest

Cabinet trolley can be equipped with 8 bin cabinets of your choice. The bottom shelf makes the trolley sturdy and it can be used as an extra storage space. Optimal for small parts storage.

Upright module frame

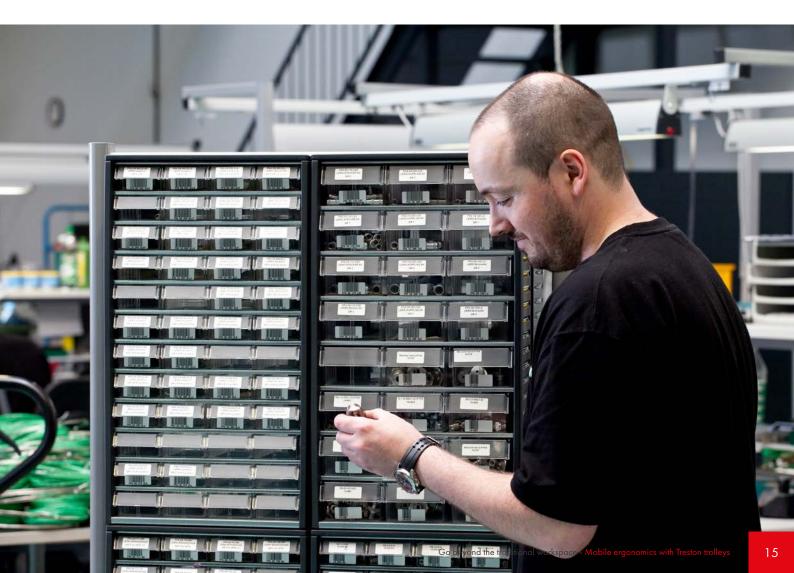


UNIQUE: Up to 480 separate bins in one trolley for maximizing your small parts storage

Ø100 mm

300 kg

- Height of the cabinet fixing rails can be adjusted easily without tools
- See-through bins with wavy bottoms enable good visibility and easy picking of products
- All M750 module accessories are compatible with the trolley tens of options to choose from!
- Four swivel castors, two with brakes



Additional storage space is often needed at a packing station for different supplies, boxes, recycled materials, and rubbish. Handy trolleys designed with packing in mind provide space to keep boxes and other materials within arm's reach, but at the same time are easily moved aside as needed. Handy solutions for the storage and use of packing materials.

Detailed product data and product codes starting from page 25.



Low carton trolley LCT – for large cartons

Three dividers can be assembled crosswise or lengthwise. The fourth divider is a push handle. Designed especially for large cartons.



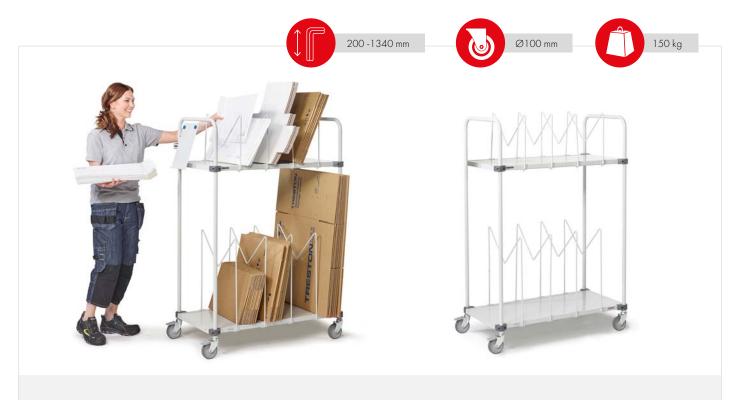
Ø100 mm

UNIQUE: Easy to move carton trolley for large cartons

- One size
- Possibility to adjust dividers crosswise or lengthwise
- Four swivel castors, two with brakes

High carton trolley HCT – Ergonomic and easy to move carton trolley for various box sizes

Height adjustable shelves and dividers with stepless horizontal adjustment allow easy adjustment of the trolley for various sizes of cartons.

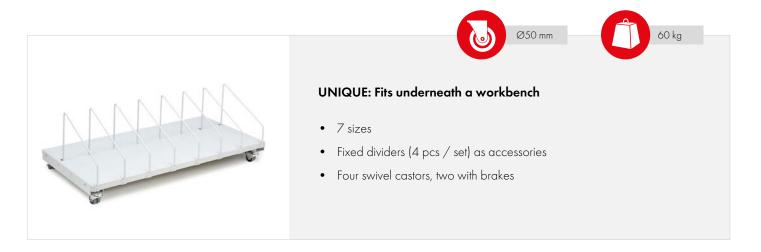


UNIQUE: Adjustable shelves and dividers allow configuration for various carton box sizes

- Includes 2 height adjustable shelves and 8 dividers in total, in two heights, with stepless horizontal adjustment
- Extra dividers as accessories
- Ergonomic power grip vertical, round handle is optimal for users of any size and height
- Four swivel castors, two with brakes

Carton trolley – underneath a workbench

Floor level storage for cartons. This trolley can be positioned out of the way, underneath a workbench, for example.



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Additional mobile work surfaces

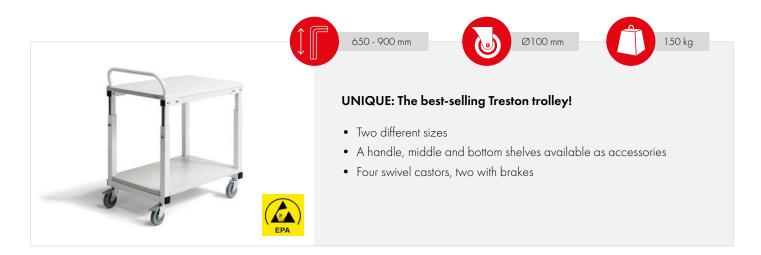
Additional worktop space (secondary working surface) is often needed in workspaces to store, for example task related equipment and devices and to provide additional workspace for tasks seldom but regularly carried out in the workstation. These extra work surfaces allow quick and easy layout changes in the workstation and production cell, if production requirements change. The primary purpose of these products is to act as additional work surfaces, that can be moved if necessary, but they are not designed for transporting and moving materials and components for long distances.

Our extensive range of additional mobile surfaces and smaller sized workbenches with castors provide a wide selection of options to choose from.

Detailed product data and product codes starting from page 26.

SAP trolley – bestseller!

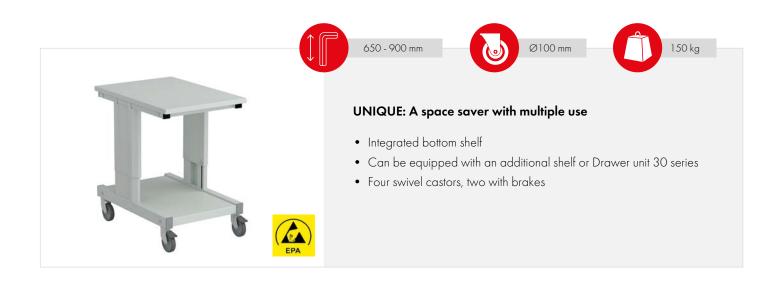
Easy to move additional work surface that can be locked in place. Available in three sizes to meet different additional work surface needs. A handle, which makes moving the trolley easier, is available as an accessory. In addition, the SAP trolley can be equipped with bottom and middle shelves. The height can be adjusted with an Allen key, which means that the trolley adapts to handling various sizes of objects. The SAP trolley is often used together with Treston TP and TPH workbenches.





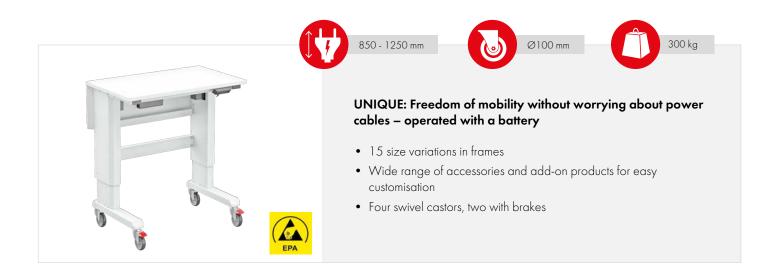
Concept trolley – sturdy steel framed work surface

A steel-framed additional work surface with height adjustment, suitable for many purposes. The integrated bottom shelf offers much needed extra storage space. Easy and effortless to move around as needed, but the castors with brakes ensure that the trolley stays firmly in place if needed. Well suited for use with Concept and WB workbenches.



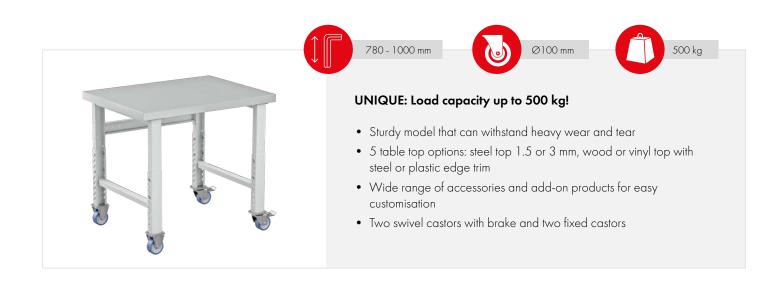
Concept bench with electric height adjustment and battery – freedom of mobility

The smaller sized Concept workbenches, such as 1000 x 600 mm, equipped with castors, electric height adjustment, and battery set are an excellent option for workspaces where you need a compact size, easily height adjustable, and mobile work surface. You get all the ergonomic benefits of easy, electric height adjustment, and freedom of mobility with the battery set – no need to worry if the power cables are long enough for moving the work surface around the workspace. Battery set sold only to EU countries.



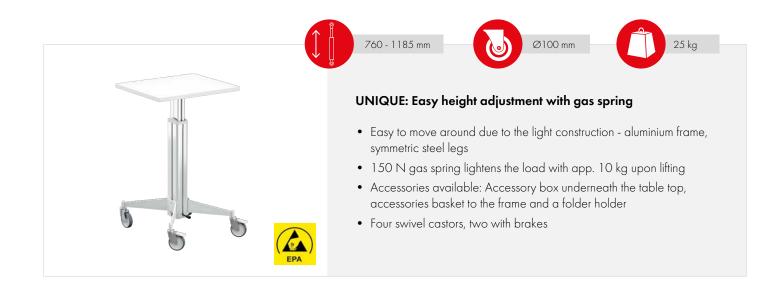
1000 mm wide Workshop bench with castors – for heavy use

The smaller sized Workshop bench with castors is an excellent choice as an additional work surface for heavier industry, for example workshops, automotive and other repair shops, maintenance units, and challenging environments in which chemicals or heavy loads are handled on a daily basis.



MLCT Mobile height adjustable work surface – for light loads and tight spaces

Compact sized additional work surface with easy gas spring height adjustment is ideal for tight spaces and tasks where easy manoeuvrability is a must. Optimal for handling light loads and small sized objects. Ideal also for laptop use. Suitable for technical and EPA environments where easy ergonomics and mobility are required.



Product data

Treston Industrial Multi trolley with adjustable shelves

| Description | Module | Size W x D x H mm | Max load kg | Code | Code ESD |
|--------------|--------|----------------------|----------------|--------------|--------------|
| 4 adjustable | M500 | 540 x 760 x 1790 | 300 | TMTH5-002-41 | TMTH5-002-49 |
| shelves | M750 | 790 x 760 x 1790 | 300 | TMTH7-002-41 | TMTH7-002-49 |
| | M900 | 943 x 760 x 1790 | 300 | TMTH9-002-41 | TMTH9-002-49 |
| 2 adjustable | M500 | 540 x 760 x 1150 | 300 | TMTL5-002-41 | TMTL5-002-49 |
| shelves | M750 | 790 x 760 x 1150 | 300 | TMTL7-002-41 | TMTL7-002-49 |
| | M900 | 943 x 760 x 1150 | 300 | TMTL9-002-41 | TMTL9-002-49 |

Treston Industrial Multi trolley with shelves

| Description | Module | Size W x D x H mm | Max load kg | Code | Code ESD |
|-------------|--------|----------------------|----------------|--------------|--------------|
| 4 shelves | M500 | 540 x 760 x 1790 | 300 | TMTH5-001-41 | TMTH5-001-49 |
| | M750 | 790 x 760 x 1790 | 300 | TMTH7-001-41 | TMTH7-001-49 |
| | M900 | 943 x 760 x 1790 | 300 | TMTH9-001-41 | TMTH9-001-49 |
| 2 shelves | M500 | 540 x 760 x 1150 | 300 | TMTL5-001-41 | TMTL5-001-49 |
| | M750 | 790 x 760 x 1150 | 300 | TMTL7-001-41 | TMTL7-001-49 |
| | M900 | 943 x 760 x 1150 | 300 | TMTL9-001-41 | TMTL9-001-49 |

| 1. Treston Industrial Multi trolley with perforated panels | 1. Treston In | dustrial Multi | trolley with | perforated | panels |
|--|---------------|----------------|--------------|------------|--------|
|--|---------------|----------------|--------------|------------|--------|

| Module | Size W x D x H mm | Max load kg | Code | Code ESD |
|--------|----------------------|-------------|--------------|--------------|
| M750 | 790 x 760 x1790 | 300 | TMTH7-005-07 | TMTH7-005-49 |
| M900 | 943 x 760 x 1790 | 300 | TMTH9-005-07 | TMTH9-005-49 |

| Module | Size W x D x H mm | Max load kg | Code | Code ESD |
|--------|----------------------|-------------|---------|----------|
| - | 820 x 760 x 1860 | 300 | TMTA-41 | TMTA-49 |

3. Treston Industrial Multi trolley with perforated tool cabinet

| Module | Size W x D x H mm | Max load kg | Code |
|--------|----------------------|----------------|--------------|
| M750 | 790 x 760 x 1790 | 300 | TMTH7-104-07 |

See <u>https://www.treston.com/trolleys/picking-and-storage-trolleys/</u> <u>treston-industrial-multi-trolley</u> for full list of accessories available, such as bin rails and bins, larger selection of shelves, perforated panels, etc.



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Treston Industrial Multi trolley frame

| Name | Module | Size W x D x H mm | Max load kg | Code | Code ESD |
|------------|--------|----------------------|----------------|-----------|-----------|
| Frame High | M500 | 540 x 760 x 1790 | 300 | TMTFH5-41 | TMTFH5-49 |
| Frame High | M750 | 790 x 760 x 1790 | 300 | TMTFH7-41 | TMTFH7-49 |
| Frame High | M900 | 943 x 760 x 1790 | 300 | TMTFH9-41 | TMTFH9-49 |
| Frame Low | M500 | 540 x 760 x 1150 | 300 | TMTFL5-41 | TMTFL5-49 |
| Frame Low | M750 | 790 x 760 x 1150 | 300 | TMTFL7-41 | TMTFL7-49 |
| Frame Low | M900 | 943 x 760 x 1150 | 300 | TMTFL9-41 | TMTFL9-49 |

Bottom shelf

| Name | Module | Size $W \times D \times H$ mm | Max load kg | Code ESD |
|-------------------------|--------|-------------------------------|-------------|-----------|
| Bottom shelf M500 x 728 | M500 | 460 x 728 x 33 | 100 | TMTLS5-49 |
| Bottom shelf M750 x 728 | M750 | 710 x 728 x 33 | 100 | TMTLS7-49 |
| Bottom shelf M900 x 728 | M900 | 863 x 728 x 33 | 100 | TMTLS9-49 |

Adjustable shelf, stepless tilt

| Name | Module | Size $W \times D \times H$ mm | Max load kg | Code ESD |
|-----------------------------|--------|-------------------------------|-------------|-----------|
| Adjustable shelf M500 x 650 | M500 | 468 x 650 x 37 | 100 | TMTAS5-49 |
| Adjustable shelf M750 x 650 | M750 | 718 x 650 x 37 | 100 | TMTAS7-49 |
| Adjustable shelf M900 x 650 | M900 | 871 x 650 x 37 | 100 | TMTAS9-49 |

Adjustable shelf, stepless depth and tilt

| Name | Module | Size $W \times D \times H$ mm | Max load kg | Code ESD |
|-----------------------------|--------|-------------------------------|-------------|------------|
| Adjustable shelf M500 x 650 | M500 | 468 x 650 x 37 | 50 | TMTSAS5-49 |
| Adjustable shelf M750 x 650 | M750 | 718 x 650 x 37 | 50 | TMTSAS7-49 |
| Adjustable shelf M900 x 650 | M900 | 871 x 650 x 37 | 50 | TMTSAS9-49 |

Mats for shelves

| Suitability | Module | Size W x D mm | Code | Code ESD |
|--------------------------|--------|---------------|-----------|-----------|
| TMTLS5-49 | M500 | 455 x 723 | 725742-00 | 725750-00 |
| TMTLS7-49 | M750 | 705 x 723 | 725739-00 | 725747-00 |
| TMTLS9-49 | M900 | 858 × 723 | 725740-00 | 725748-00 |
| TMTS5-49 | M500 | 463 x 645 | 725738-00 | 725746-00 |
| TMTS7-49 | M750 | 713 x 645 | 725735-00 | 725743-00 |
| TMTS9-49 | M900 | 866 x 645 | 725736-00 | 725744-00 |
| TMTAS5-49 and TMTSAS5-49 | M500 | 428 × 600 | 860823-00 | 860821-00 |
| TMTAS7-49 and TMTSAS7-49 | M750 | 678 x 600 | 860548-00 | 860318-00 |
| TMTAS9-49 and TMTSAS9-49 | M900 | 831 × 600 | 860550-00 | 860320-00 |

Accessories for Treston Industrial Multi trolley

| Ν | ame | Module | Size W x D x H mm | Max load kg | Code |
|----|-------------------------------|--------|----------------------|----------------|-------------|
| 1. | Shelf for packing material | | 717 x 600 x 32 | | SPM750-49 |
| | | | 870 x 600 x 32 | | SPM900-49 |
| 2. | Brackets for upright tube SPM | | | | SPMBS-49 |
| 3. | Divider hoops set SPM-shelf | | 8 × 400 × 280 | | PDH600-49 |
| 4. | Aluminium bin rail | M750 | 736 x 55 x 75 | 15 | BP750C |
| | | M900 | 889 x 55 x 75 | | BP900C |
| 5. | Tablet bracket MY | | | | MY |
| | LCD bracket MH | | | | MH |
| | Adapter set | | 200 x 110 x 60 | | AS2 |
| 6. | Auxiliary steel shelf | | 217 x 298 x 20 | 3 | ASSA4 |
| 7. | Roll holder set | M750 | | 40 | 890 547-49P |
| | | M900 | | | 890 548-49P |
| 8. | Fixed tape dispenser | | | | FTD50 |
| 9. | Basic label dispenser | | | | BLD20 |
| 10 | . Document holder A4 | | | 5 | 928 49 008P |
| 11 | . Equipment tray | | 500 x 250 x 125 | 15 | 928 49 002P |



See <u>https://www.treston.com/trolleys/</u> <u>picking-and-storage-trolleys/treston-</u> <u>industrial-multi-trolley</u> for full list of accessories available, such as bin rails and bins, larger selection of shelves, perforated panels, etc.

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Fitter's trolleys

| Name | Module | Size W x D x H mm | Max load kg | Code | Code ESD |
|-------------------------|--------|----------------------|----------------|-------------|-------------|
| Fitter's trolley 1 | M750 | 790 x 760 x 875 | 300 | C730 41 001 | C730 49 001 |
| Fitter's trolley 2 | M750 | 790 x 760 x 875 | 300 | C730 41 002 | C730 49 002 |
| Fitter's trolley 3 | M750 | 790 x 760 x 875 | 300 | C730 41 003 | - |
| Fitter's trolley, frame | M750 | 790 x 760 x 875 | 300 | C730 41 000 | C730 49 000 |

Fitter's trolley accessories

| Name | Module | Size W x D x H mm | Max load kg | Code ESD |
|---|--------|----------------------|----------------|------------|
| Lower shelf M750 x 728 | M750 | 710 x 728 x 33 | 100 | TMTLS7-49 |
| Steel shelf M750 x 650 + brackets | M750 | 718 x 650 x 33 | 100 | TMTS7-49 |
| Adjustable shelf M750 x 650 | M750 | 718 x 650 x 37 | 100 | TMTAS7-49 |
| Adjustable shelf M750 x 650, stepless depth adjustment | M750 | 718 x 650 x 37 | 50 | TMTSAS7-49 |
| Fitter's trolleys can be combined with M750 accessories. | | | | |

Cone rack M750 for tool holders HSK, Capto, ISO

| Name | Size $W \times D \times H$ mm | Max load kg | Code |
|-------------------------------|-------------------------------|-------------|------------|
| Cone rack M750 | 742 x 206 x 95 | 50 | 890 729-49 |
| Tool holders sold separately. | | | |

See https://www.treston.com/trolleys/workshop-trolleys/fitters-trolley for full list of accessories available, such as bin rails and bins, larger selection of shelves, perforated panels, etc.

Treston Tower storage and workstation unit

| Name | Size W x D x H mm | Max load kg | Code |
|----------------------------------|----------------------|----------------|------------|
| Treston Tower frame with castors | 860 x 880 x 2105 | 600 | 890 701-45 |

Examples of accessories and add-on products

| Ν | lame | Size W x D x H mm | Max load kg | Code |
|---|---|---|----------------|------------|
| 1 | Flow-through shelf + brackets M750* | 718 x 830 | 150 | 890710-49 |
| 2 | Spacer bar, M750** | | | 851 483-49 |
| 3 | Perforated back panel M750, max 3 pcs/side | 718×612 | | 861 512-49 |
| 4 | Hook set 3 (69 pcs) | | | 855 003-51 |
| | Steel shelf M750 | 740 x 400 | 50 | 852 770-49 |
| | Bin rail M750 | 742 x 100 | 50 | 859 151-49 |
| | LCD monitor holder for perforated | panel | 10 | 890715-49 |
| | Treston NaturLite Led Wing 500 | 430 x 120 x 50 (+ bracket 95/120 mm) | | TNL500W |

* A flow-through shelf can fit two 400-mm deep shelf bins successively.

** Recommended to be used with flow-through shelving.

See <u>https://www.treston.com/storage-systems/tool-storage-systems/treston-</u> tower-storage-and-workstation-unit for full list of accessories available, such as bin rails and bins, larger selection of shelves, perforated panels, etc.





Fitter's trolley 2

Fitter's trolley 3

cone racks.

Fitter 's trolley 3 includes 6



Fitter's trolley frame







Adjustable trolley TRTA

| Name | Size W x D x H mm | Shelf size W x D mm | Max load kg | Code | Code ESD |
|--|----------------------|------------------------|----------------|----------|--------------|
| 2-shelf trolley* | 890×530 × 1020 | 800 x 430 | 150 | TRTA4082 | TRTA4082 ESD |
| 2-shelf trolley* | 1090 x 530 x 1020 | 1000 x 430 | 150 | TRTA4102 | TRTA4102 ESD |
| 2-shelf trolley* | 890 x 630 x 1020 | 800 x 530 | 150 | TRTA5082 | TRTA5082 ESD |
| 2-shelf trolley* | 1090 x 630 x1020 | 1000 x 530 | 150 | TRTA5102 | TRTA5102 ESD |
| 4-shelf trolley** | 1090 x 530 x 1515 | 1000 x 430 | 300 | TRTA4104 | TRTA4104 ESD |
| 4-shelf trolley** | 1090 x 630 x 1515 | 1000 x 530 | 300 | TRTA5104 | TRTA5104 ESD |
| * Shelf adjustments between 200-770 mm | | | | | |
| ** Shelf adjustments between 200-1340 mm | | | | | |

Extra shelves TRHA

| Name | Shelf size W x D mm | Max load kg | Code | Code ESD |
|-------------|------------------------|-------------|---------|-------------|
| Extra shelf | 800 × 430 | 50 | TRHA408 | TRHA408 ESD |
| Extra shelf | 1000 x 430 | 50 | TRHA410 | TRHA410 ESD |
| Extra shelf | 800 x 530 | 50 | TRHA508 | TRHA508 ESD |
| Extra shelf | 1000 x 530 | 50 | TRHA510 | TRHA510 ESD |

End mesh panels NET2

| Name | Size $W \times D$ mm | Set | Code ESD |
|-----------------|-----------------------|---------------------------|--------------------------------|
| End mesh panel | 604 x 364 | Incl. 2 panels | NET2 |
| The mesh panels | can be installed at t | he ends of the trolley or | on the sides. An anale bracket |

The mesh panels can be installed at the ends of the trolley or on the sides. An angle bracket is set on the edge of the upper and lower shelf and the mesh is screwed into place. The 4-shelf trolley can hold 2 mesh panels on top of each other.

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| 0. | C |
| C | 2-shelf TRTA trolley and |
| | |

4-shelf TRTA trolley



TRTA with end mesh panels

| Document holder DSA4 | | | | | |
|---|------|----------|--|--|--|
| Name | Size | Code ESD | | | |
| Document holder A4 DSA4 ESD | | | | | |
| Semiconductive epoxy powder coated steel. Includes two magnets. | | | | | |

Low M-divider hoops LDH

| Name | Size | Code |
|--|-----------|------|
| Divider hoops | 460 x 315 | LDH |
| Steplessly adjustable. 4 pcs per set. M-shape (the lowest point 105 mm from shelf). Suitable only 430 mm deep shelves. | | |



Document holder



Low M-divider hoops LDH

Storage trolley

| Name | Size W x D x H mm | Max load kg | Code | Code ESD |
|-----------------|----------------------|----------------|------------|------------|
| Storage trolley | 650 x 450 x 775 | 3 x 30 | 852 773-41 | 852 773-49 |



Stacking bin trolley

| Name | Size W x D x H mm | Max load kg | Code | Code ESD |
|----------------------|--|----------------|-----------------|------------------|
| Stacking bin trolley | 790 x 760 x 1770 | 300 | BT-170B | BT-170B ESD |
| ' | steel bin rails in both s om shelf comes as sta | | ing bins must l | be ordered sepa- |



See <u>https://www.treston.com/trolleys/bin-and-cabinet-trolleys/</u> <u>stacking-bin-trolleys</u> for full list of compatible bins.

Cabinet trolley

| Name | Size W x D x H mm | Max load kg | Code | Code ESD |
|---|----------------------|----------------|---------|-------------|
| Cabinet trolley | 790 x 760 x 1770 | 300 | BT-550B | BT-550B ESD |
| This assembly holds 8 cabinets, which must be ordered separately. One steel bottom shelf comes as standard. | | | | |

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See <u>https://www.treston.com/storage/plastic-bins-and-cabinets/</u> <u>small-parts-storage-cabinets</u> for full list of small-parts storage cabinets.



Low carton trolley

| Name | Size W x D x H mm | Shelf size W x D mm | Max load kg | Code |
|--------------------|----------------------|------------------------|----------------|--------|
| Low carton trolley | 1090 x 530 x 1515 | 1000 x 430 | 150 | HCT410 |

High carton trolley

| Name | Size W x D x H mm | Shelf size W x D mm | Max load kg | Code |
|---------------------|----------------------|------------------------|----------------|--------|
| High carton trolley | 1080 x 630 x 1020 | 1000 x 630 | 150 | LCT610 |



Low carton trolley



High carton trolley

Carton trolley

| Curion noney | | | |
|--|--|----------------------|------------|
| Name | Description | Size W x D x H mm | Code |
| 1. Castor set | Castor set for carton trolley. The castor set gives you a trolley from the SPM-shelf. | 1180 x 600 x 425 | SPMCS-41 |
| 2. Shelf for packing | 600 mm deep shelf for many purposes. The | 467 x 600 x 32 | SPM500-49 |
| material | shelf can also be equipped with PDH600 divider hoops. Max load 60 kg. | 717 x 600 x 32 | SPM750-49 |
| | | 870 x 600 x 32 | SPM900-49 |
| | | 1167 x 600 x 32 | SPM1200-49 |
| | | 1317 x 600 x 32 | SPM1350-49 |
| | | 1467 x 600 x 32 | SPM1500-49 |
| | | 1773 x 600 x 32 | SPM1800-49 |
| Divider hoops set (4 pcs), SPM-shelf | Divider hoop set for the SPM-shelves. Height 280 mm. The fixed divider is tightened with the screw at the front edge of the shelf. | 8 x 400 x 280 | PDH600-49 |



Shelf for packing material, castor set and divider hoops set

SAP trolley

| Name | Size W x D x H mm | Max load kg | Code | Code ESD |
|---|----------------------|----------------|--------|------------|
| SAP trolley | 700 x 500 | 150 | SAP507 | SAP507 ESD |
| SAP trolley | 1000 x 700 | 150 | SAP710 | SAP710 ESD |
| Lower shelf for SAP trolley | 700 x 500 | 40 | AT507 | AT507 ESD |
| Lower shelf for SAP trolley | 1000 x 700 | 40 | AT710 | AT710 ESD |
| Extra shelf for SAP trolley | 700 x 500 | 40 | LT507 | LT507 ESD |
| Extra shelf for SAP trolley | 1000 x 700 | 40 | LT710 | LT710 ESD |
| Handle for SAP trolley | depth 500 | | PUSH50 | PUSH50 |
| Handle for SAP trolley | depth 700 | | PUSH70 | PUSH70 |
| Equipped with four swivel castors (ø 100 mm), two of which have brakes. | | | | |





SAP trolley with lower shelf, extra shelf and handle

Concept trolley

| Name | Size W x D x H mm | Max load kg | Code | Code ESD | |
|------------------------------------|---|----------------|-------------|-------------|--|
| Concept trolley | 500 x 700 x 650-900 | 150 | CONT705-41 | CONT705-49 | |
| Extra shelf for Concept trolley | 400 x 500 | 25 | CONTS504-49 | CONTS504-49 | |
| Drawer unit 30/15 | 300 × 454 × 150 | 10 | 859 330-49 | 859 330-49 | |
| Drawer unit 30/22 | 300 × 454 × 220 | 10 / drawer | 890 340-49 | 890 340-49 | |
| Drawer unit fastening set | | | 890 653-49 | 890 653-49 | |
| Equipped with four swivel | Equipped with four swivel castors (ø 100 mm), two of which have brakes. | | | | |



Concept trolley, extra shelf and drawer unit 30/15

Concept workbench frame, motor adjustable

| Name | Frame size W x D mm | Bench frame max load kg | Code |
|-----------------|------------------------|----------------------------|-------------|
| Workbench frame | 1000 x 600 | 300 | 103 49 015P |
| Workbench frame | 1000 x 750 | 300 | 103 49 030P |
| Workbench frame | 1000 × 900 | 300 | 103 49 062P |

Concept bench tops

| Name | Size W x D mm | Code HPL | Code LPL | Code ESD |
|-----------|---------------|-------------|-------------|-------------|
| Bench top | 1000 x 600 | TT10060-HPL | TT10060-LPL | TT10060-ESD |
| Bench top | 1000 x 750 | TT10075-HPL | TT10075-LPL | TT10075-ESD |
| Bench top | 1000 x 900 | TT10090-HPL | TT10090-LPL | TT10090-ESD |

Castor set for Concept bench

| Name | Code | Code ESD |
|-----------------|-----------|------------|
| Castor set Ø100 | 834734-00 | 860 429-00 |

Battery set for Concept motor bench

| Name | Code |
|--|--------|
| Battery set | BSC001 |
| Battery set sold only to EU countries. | |



Concept workbench frame, motor adjustable

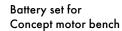


Laminate bench top -HPL Laminate bench top -LPL



ESD bench top





Workshop legs

| Name | Height mm* | Code | | |
|--|------------|------------|--|--|
| Adjustable H-leg for castors (1 pc) | 730-950 | 836 029-49 | | |
| Swivel castor with brake** (1 pc) | Ø100 | 1987 | | |
| Fixed castor** (1pc) | Ø100 | 1988 | | |
| * Height without bench top (including 100 mm castors). | | | | |

** Load capacity: 500 kg for benches 1000 mm and 1500 mm wide, 300 kg for benches 2000 mm and 2250 mm wide.



Workshop bench tops

| Bench top size W x D mm | Steel top 1,5 mm | Max load kg | Steel top 3 mm | Max load kg | Vinyl top with steel edges | | Vinyl top with plastic edges | Max load kg | Wood top | Max load kg |
|----------------------------|---------------------|----------------|-------------------|----------------|-------------------------------|-----|---------------------------------|----------------|------------|----------------|
| 1000 x 750 | 836 720-74 | 750 | 852 652-74 | 750 | 836723-79 | 750 | 836729-79 | 500 | 836 720-82 | 600 |



top



Workshop steel

Workshop top with steel edges



Workshop top with plastic edges



Workshop wooden top



See <u>www.treston.com/workshop-</u> workbench/workshop-workbench for full list of accessories available

Mobile and height adjustable work surface

| Name | Size WxDmm | Height mm | Code | Code ESD | |
|--|---------------|-----------|------------|----------------|--|
| Mobile and height adjustable work surface | 600 × 500 | 760-1185 | MLCT 605PG | MLCT 605PG ESD | |
| 150 N gas spring lightens the load with app. 10 kg upon lifting. | | | | | |

Mobile workstation accessories

| Name | Description | Code |
|--------------------|--|-------------|
| Binder mount | Fits a single 75 mm wide binder. | FH 1 |
| Binder mount | Fits three 75 mm wide binders. | FH3 |
| Accessories basket | Blue bin, int. dim. 230 x 155 x 140 mm | AB1930 |
| Accessory box | With grey shelf bin 4020-3 | AB4020-3 |
| Accessory box | With ESD shelf bin 4020-4ESD | AB4020-4ESD |



Binder mount FH1



Binder mount FH3



Accessories basket





Accessory box, 2 pcs

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NORWAY

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