

► Dispenser systems & Furniture





Chapter 11

11.1	Interesting facts about dispenser systems	190 – 191
11.2	Dispensers made of acrylic for disposable articles	192
11.3	Dispensers made of stainless steel for disposable articles	195
11.4	Dispensers for disinfectants	196
11.5	Dispenser automats for disposable overshoes	197
11.6	Chairs & stools	198 – 199
11.7	Worktables made of stainless steel	200 – 201
11.8	Plug shelving systems and storage solutions	202 – 204
11.9	Gowning room racks and benches	205
11.10	Storage and multi-purpose carts	206 – 208
11.11	Ladders and steps made of stainless steel	209
11.12	Product recommendations referring to cleanroom classes	209





General Information

Dispenser systems can be used in various shapes, materials and designs in locks as well as in different grade controlled areas. They are used for the storage and proper dispensing of consumables such as disposable garments, wipes, gloves, disinfectants etc.

Beside their convenient features, dispenser systems can also be used as „flag-ships“ for the correct implementation of the required cleanliness requirements. Optimally placed they easily attract attention and hence serve as a visual reminder for the required dress code, especially for visitors.

General Requirements

- ▶ good processing and high quality materials
- ▶ easy handling for filling and dispensing
- ▶ professional and easy cleaning due to the product design
 - rounded edges
 - rounded and easy accessible corners
 - no unnecessary unevenness (particle trap)
 - wide opening lids



Design specific characteristics

Most dispenser systems can be used standing on the desktops as well as being hung up. On some models, small rubber feet prevent them from slipping to easily.

Material specific characteristics

Acrylic

- ▶ economical
- ▶ partly removable base
- ▶ antistatic models available
- ▶ use only suitable cleaning products

Stainless steel

- ▶ generally 1.4301 quality
- ▶ stable under mechanical stress
- ▶ large dimensions feasible
- ▶ autoclavable
- ▶ disinfection resistant surface

Dispensers made of acrylic for disposable articles

11.2

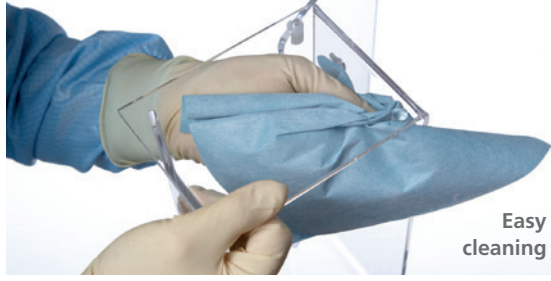


Special solutions are possible on request!

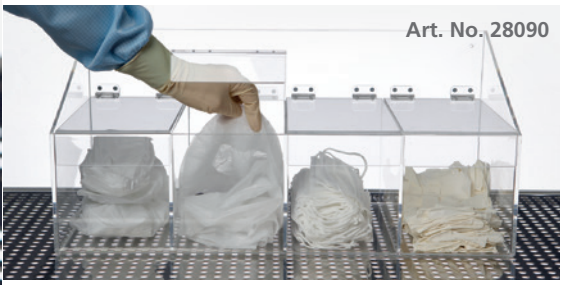
Product description	Dimensions in mm (W x H x D)	Lid	Base removable	Wall mounting	Art. No.
with partition, e.g. for finger cots	200 x 250 x 200	yes	no	yes	28010-01
e.g. for non-woven fabric caps	300 x 300 x 300	yes	yes	yes	28020
e.g. for disposable face masks and disposable overshoes	240 x 200 x 130	yes	yes	yes	28030
antistatic, e.g. for disposable face masks, swabs	200 x 120 x 120	yes	yes	yes	28031A
e.g. for cleanroom wipes	250 x 120 x 250	yes	yes	yes	28040
e.g. for disposable overshoes	300 x 120 x 160	yes	yes	yes	28050
e.g. for sterile gloves	320 x 260 x 160	no	no	yes	28060
e.g. for box packed gloves	130 x 65 x 240	no	no	yes	28073
4 panels, e.g. for gloves	665 x 180 x 300	yes	no	yes	28090
antistatic, 3 panels, e.g. for gloves	410 x 310 x 300	yes	no	yes	28092A

This is only a small extract of our models. Available on request:

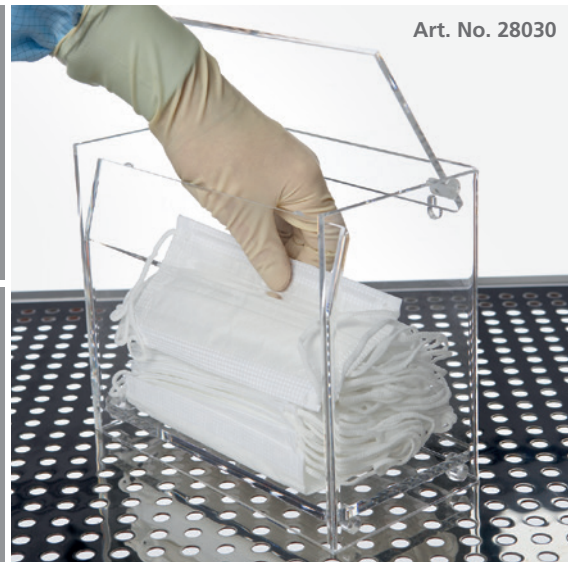
- ▶ other dimensions
- ▶ divisions (2, 3 or 4 compartments)
- ▶ antistatic and autoclavable versions
- ▶ alcohol and acid resistant versions
- ▶ first-in-first-out (FIFO) withdrawal
- ▶ special solutions



Easy cleaning



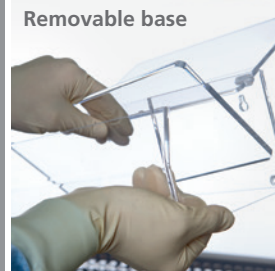
Art. No. 28090



Art. No. 28030



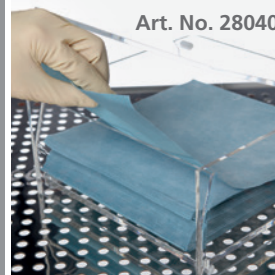
Art. No. 28060



Removable base

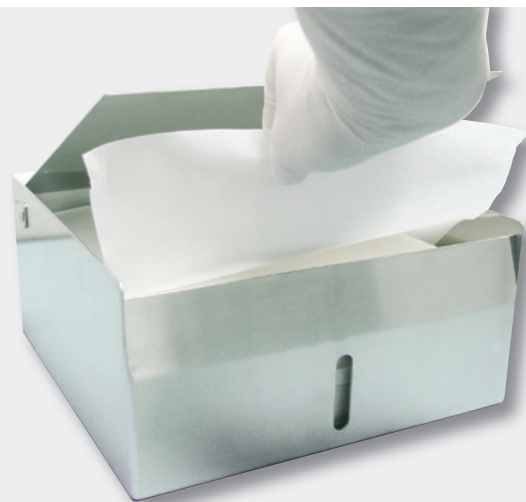
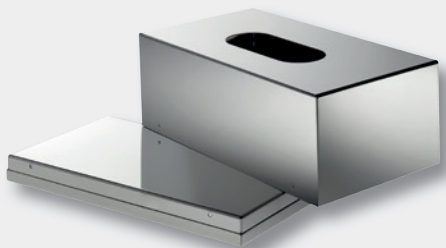
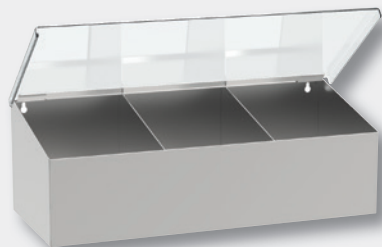


Art. No. 28050



Art. No. 28040

Art. No.
281505



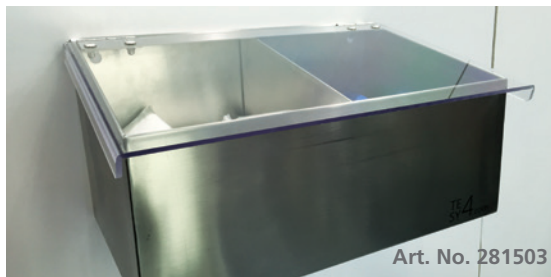
Art. No.
281400



Art. No. 28121



Art. No. 281503



Art. No.
281401



Dispensers made of stainless steel for disposable articles



Due to the higher stability of stainless steel compared to acrylic, dispenser units made of stainless steel can be manufactured in larger dimensions. Therefore constructions are easily feasible for bulky garments such as disposable coveralls, disposable coats or similar.

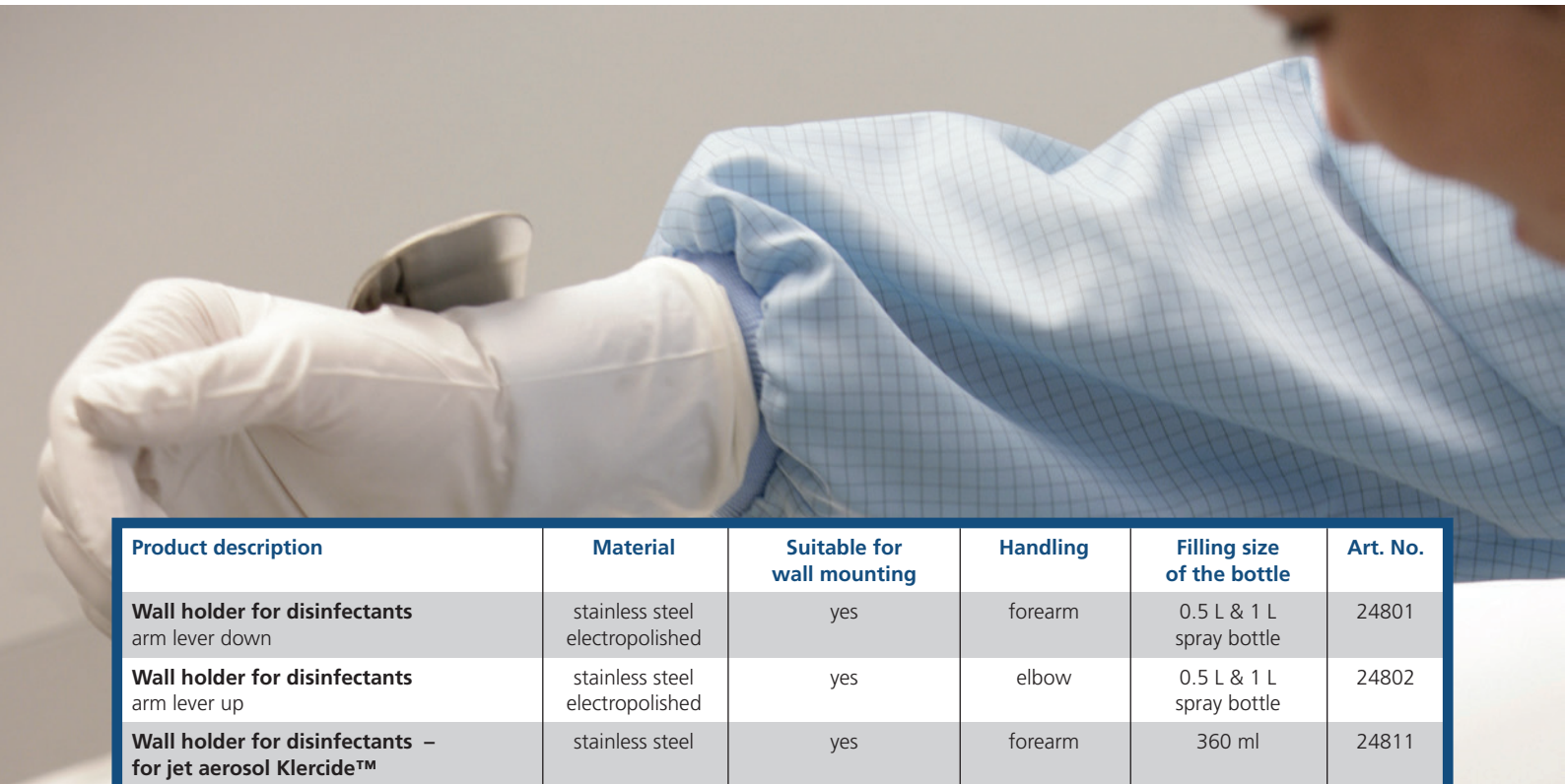
Product description	Dimensions in mm (W x H x D)	Lid	Base removable	Wall mounting	Art. No.
with viewing slot, e.g. for disposable overshoes	300 x 250 x 250	yes	no	yes	28113
with viewing slot, e.g. for face masks	250 x 120 x 250	yes	no	yes	28117-1
3 panels, e.g. for box packed gloves	240 x 403 x 99	no	no	yes	28119
e.g. for sterile gloves	320 x 260 x 160	no	no	yes	28121
4 panels, e.g. for gloves	650 x 325 x 205	yes	no	yes	28127
2 panels with viewing slots, e.g. for disposable overshoes	400 x 200 x 600	yes	no	yes	281400
3 panels with viewing slots, e.g. for disposable overshoes	600 x 200 x 600	yes	no	yes	281401
2 panels, e.g. for non-woven fabric caps	400 x 210/150** x 250	yes*	no	yes	281503
3 panels, e.g. for non-woven fabric caps	600 x 210/150** x 250	yes*	no	yes	281505
with viewing slit, e.g. for disposable coats	300 x 350 x 300	no	no	yes	281507

* lid made of polycarbonat ** height rear part/front part of the oblique lid

This is only a small extract of our models. Available on request:

- ▶ other dimensions
- ▶ further materials
- ▶ several partitions (2, 3 or 4 compartments)
- ▶ special solutions





Product description	Material	Suitable for wall mounting	Handling	Filling size of the bottle	Art. No.
Wall holder for disinfectants arm lever down	stainless steel electropolished	yes	forearm	0.5 L & 1 L spray bottle	24801
Wall holder for disinfectants arm lever up	stainless steel electropolished	yes	elbow	0.5 L & 1 L spray bottle	24802
Wall holder for disinfectants – for jet aerosol Klercide™	stainless steel	yes	forearm	360 ml	24811
Hartmann/BODE Eurospender 1 plus Touchless	aluminium	yes	touchless	500 ml bottle	248513
Hartmann/BODE Eurospender 1 plus long arm lever, dimensions: 215 mm deep/295 mm high	aluminium	yes	elbow	350 ml & 500 ml bottle	248515
Hartmann/BODE Eurospender 1 plus long arm lever, dimensions: 225 mm deep/340 mm high	aluminium	yes	elbow	1,000 ml bottle	248517
Hartmann/BODE Eurospender 1 plus ▶ also available with short arm lever ▶ available in the signal colours red, orange and yellow					



Hand hygiene products are listed in chapter 7.12!

In the range of dispenser systems, disinfection dispensers are another important product group used for continuous, daily hand disinfection. They allow easy, safe and economical operation. Furthermore, they reduce the risk of cross-contamination due to easy handling by touching with the forearm or elbow, if necessary even contact-free by means of a sensor.

Good cleanability and easy refilling or exchanging of the disinfectant bottle (or canister) are also product features.

The table shows a product choice from our delivery programme. Other articles are available on request.

Dispenser automats for disposable overshoes



HYGOSTAR®
HYGOMAT COMFORT

Dispenser automats for disposable overshoes are not used for storage, but are primarily intended to simplify the donning procedure in the cleanroom area.

Other details:

- ▶ can be easily placed anywhere
- ▶ do not consume electricity nor do need batterie
- ▶ with handlehold for easy, safe and faster donning
- ▶ with viewing window, so that the filling level can be easily seen at any time
- ▶ easy refill
- ▶ large capacity

Description	Dimensions	Capacity	Material	PU	Handhold	Art. No.
HYGOSTAR® HYGOMAT CLASSIC	70 x 32 x 28 cm	max. 100 – 110 overshoes	plastic	1 piece	no	26670
HYGOSTAR® HYGOMAT COMFORT	74 x 30 x 73 cm	max. 200 – 220 overshoes	plastic	1 piece	yes	26671
HYGOSTAR® HYGOMAT CLEANROOM*	74 x 30 x 73 cm	max. 200 – 220 overshoes	plastic & stainless steel (backside/sides)	1 piece	yes	26672

* for cleanrooms, with 2 rear castors for quick and easy transport

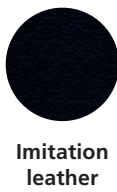
Single-use overshoes for dispenser automats

Description	Size	Colour	PU	Art. No.
Overshoe CPE**	approx. 47 cm	●	1,100 pieces 10 packs at 110 pieces each	26675
Overshoe made of PP non-woven fabric with strong, waterproof CPE sole	approx. 44 cm	◐	700 piece 10 packs at 70 pieces each	26676
Overshoe made of PP non-woven fabric with CPE coating	approx. 44 cm	○	800 piece 10 packs at 80 pieces each	26677
Overshoe made of PP non-woven fabric with anti-slip coating	approx. 46 cm	●	1,000 piece 10 packs at 100 pieces each	26678
Overshoe made of PP non-woven fabric with ESD tape	approx. 48 cm	●	1,000 piece 10 packs at 100 pieces each	26679

** CPE = chlorinated polyethylene PP = polypropylene

The qualities of these special disposable overshoes for dispensers are not identical to the products in chapter 2.5 (disposable foot articles).

Practice-oriented ergonomic diversity of variants



20751-19851



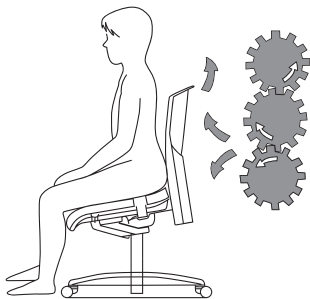
20751-20940



Art. No. 20106

Please note that the models listed here are only a selection of the most common variants. We can offer you further configuration possibilities!

We will be happy to advise you on further configuration options!



Equipping workplaces ergonomically is becoming more and more important. Chairs have a special impact, as malposition due to bad seating posture leads to severe health damage and increased sickness-related absenteeism.

ESD-compliant*	Colour	Material	Seat height	Seat surface	Feature	Art. No.
Cleanroom stool TEC basic , complies with class 3 according to EN ISO 14644-1, height-adjustable, seat tiltable to -12°						
yes	●	PU	45 – 62 cm	40 x 33 cm	castors	20751-19851
Cleanroom stool TEC basic , complies with class 4 according to EN ISO 14644-1, height-adjustable						
yes	●	imitation leather	45 – 62 cm	Ø 38 cm	castors	20751-20940

ESD-compliant	Colour	Material	Seat height	Seat surface	Feature	Art. No.
Stainless steel cleanroom stool AM551 , satin finish Scotch Brite version AISI 304, autoclavable						
yes	-	stainless steel	48 – 59 cm	Ø 33 cm	castors	20106
no	-				glides	

* DIN EN 61340-5-1:2017-07
Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements
Resistance < 1 x 10⁶ Ω



Art. No. 20116



Art. No. 20741-20981



Art. No. 20740-20112



Art. No. 20740-20990



Art. No. 20741-20980

ESD-compliant*	Colour	Material	Seat height	Seat surface	Feature	Art. No.
Stainless steel cleanroom chair AM501 , satin finish Scotch Brite version AISI 304, autoclavable						
yes no	-	stainless steel	48 – 59 cm	38.5 x 37 cm	castors glides	20116

ESD-compliant	Colour	Material	Seat height	Backrest	Feature	Art. No.
Cleanroom chair TEC profile complies with class 3 according to EN ISO 14644-1, synchronous technology with 4° seat inclination						
yes	●	PU	44 – 60 cm	55 – 62 cm	castors	20740-20112
Cleanroom chair TEC profile, with foot ring complies with class 3 according to EN ISO 14644-1, synchronous technology with 4° seat inclination						
yes	●	PU	44 – 60 cm	55 – 62 cm	glides	20740-20113
Cleanroom chair TEC classic complies with class 4 according to EN ISO 14644-1, synchronous technology with 4° seat inclination						
yes	●	imitation leather	43 – 59 cm	51 – 57 cm	castors	20741-20980
Cleanroom chair TEC classic, with foot ring complies with class 4 according to EN ISO 14644-1, synchronous technology with 4° seat inclination						
yes	●	imitation leather	43 – 59 cm	51 – 57 cm	glides	20741-20981
Cleanroom chair TEC classic, high backrest complies with class 4 according to EN ISO 14644-1, synchronous technology with 4° seat inclination						
yes	●	imitation leather	43 – 59 cm	62 – 68 cm	castors	20740-20990

Other versions on request:

AB = Synchronous technology with automatic seat tilt adjustment (up to -12°)

AS = Automatic weight adjustment



Designed for cleanliness and stability



Dimensions (mm)

Width: 1219, 1524, 1825, 2439

Depth: 760

Height: 864



Laboratory worktable with shelf (accessories: castors)

- ▶ seamless worktop and support structure made of 14-gauge stainless steel type 304
- ▶ closed or perforated surface
- ▶ flexibly adaptable thanks to a comprehensive range of castors and accessories such as monitor holders, grid shelves, keyboard pull-outs and drawers
- ▶ delivery in disassembled condition (tool-free assembly in a few minutes)
- ▶ increased stability, optional closed shelves, three-sided or H-frames
- ▶ stationary or mobile. The mobile units are equipped with 4 castors (Ø 127 mm), each unit with 2 swivel castors and 2 swivel locking castors



Stainless steel table with lower wire shelf



Worktable with H-frame



Worktable with three-sided frame

Optional: grid shelf, keyboard drawer, slide-in rails for box, monitor arm

Space-saving tables with 610 mm depth



Dimensions (mm)

Width: 914, 1219, 1524

Depth: 610

Height: 860

- ▶ proven stability: 1" Ø posts and the patented Super Erecta® Shelf design ensure a stable and robust table construction
- ▶ made of heavy duty 14 gauge stainless steel type 304
- ▶ stationary or mobile (with loadable 127 mm polymer castors)
- ▶ load capacity of the tables: up to 362 kg (stationary) or 272 kg (mobile)



Space saver worktable
with solid shelf



Space saver worktable
with 3-sided frame



Super Erecta® and Super Adjustable™ Super Erecta®

Reclaim wasted space.



The original wire shelving system – reliability and flexibility without compromises

All METRO® stainless steel, chrome or Metroseal 3 with Microban® wire shelving systems and the MetroMax® Polymer shelving systems are adjustable in steps of 25 mm (1") to make the best use of available space.

The unique Super Adjustable™ Super Erecta® quick-adjustable shelving has shelf components that can be easily repositioned without tools to quickly adapt to changing storage needs.

Depending on the model, load capacities of up to 907 kg are possible for stationary racks with four posts and up to 453 kg for mobile units.

The posts are available in the following heights, fixed or mobile:

191, 370, 699, 875, 1385, 1590, 1895, 2200
and 2454 mm.

The shelves are optionally available in the following widths:

457, 610, 760, 914, 1066, 1219, 1524 and
1829 mm.

METRO® also offers suitable solutions for
sterile and ESD areas.



All dimensions can
be freely combined
with each other!

Select individually the respective width, height and depth!

Plug shelving systems
Stainless steel or chrome

Dimensions (mm)

Width: 610, 762, 914, 1067, 1219, 1524, 1829

Depth: 355, 457, 530, 610, 760, 910

Height: 370, 875, 1385, 1590, 1895, 2200, 2450



Shelves
Stainless steel, chrome, Metroseal 3 with Microban®

Dimensions (mm)

Width: 610 – 1829* **Depth:** 355

457 – 1829* 457

610 – 1829* 530, 610

914 – 1829* 760, 910

* Standard width dimensions (mm):
457, 610, 760, 914, 1066, 1219, 1524, 1829

Special shelving solutions

Corner shelves

- ▶ space-saving
- ▶ flexibly extendable
- ▶ pre-configured sets with four or five shelves
- ▶ available in chrome and Metroseal 3 with Microban®

Dimensions (mm)

Width: 610, 760, 914, 1066, 1219, 1524, 1829

Depth: 457, 530, 610

Height: 1600, 1880



Microban® product protection – exclusive to Metro.
Integrated into all shelves and touch points. The surface protection inhibits the growth of mould, fungi and bacteria. This prevents stains, product damage and odours are prevented.

Microban® and the Microban® symbol are registered trademarks of the Microban Products Company, Huntersville, NC.

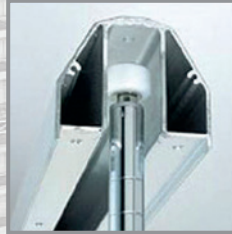


DISPENSER SYSTEMS & FURNITURE

Top-Track® High-Density Storage – increased storage capacity by up to 50%

The Top-Track® compact rack storage system increases the storage capacity by up to 50% without additional construction costs and enables better organisation of the stored goods and thus an improved inventory control.

Several mobile units can be used between two stationary end racks. The overhead guide tracks do not have to be screwed and they compensate for uneven floor surfaces.



Stainless steel, chrome, Metroseal 3 mit Microban®

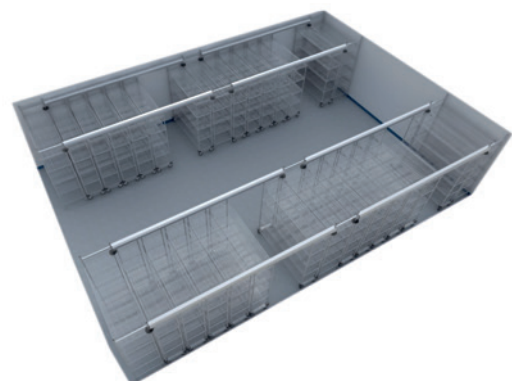
Dimensions (mm)	
Width shelves:	610 – 1524
Depth shelves:	457, 530, 610
Total height:	2185
Length guide tracks:	762 – 6405



Through innovative planning of storage solutions as a system, storage spaces can be optimised and adapted to changing requirements.

For individual advice and conception our specialists will be happy to assist you!

Spatial representations



Precisely fitting solutions are a matter of course



Configurable mobile gown rack with 15 baskets

Changing bench

- ▶ stable and comfortable gown changing bench with closed seat surface made of 1.6 mm stainless steel type 304
- ▶ optional adjustable stainless steel foot plates for screwing to the floor or free-standing version available



Dimensions (mm)

Width: 914, 1219, 1524, 1825

Depth: 406

Height: 457



Configurable shoe rack

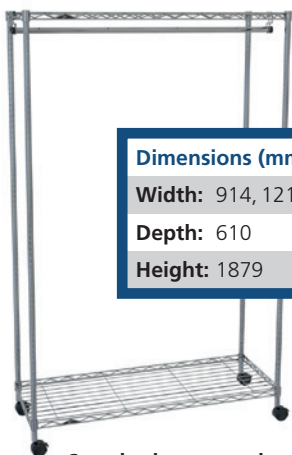
Configurable gown racks and shoe rack

Metro® Super Erecta® racks can be adapted for many specific storage and handling tasks.

For cleanroom shoe storage, the standard components can be combined with a storage rack.

Versatile sorting shelves and garment racks can also be planned in different sizes, each mobile or stationary.

Available in chrome or stainless steel, as well as an ESD version.



Standard gown rack, free-standing

Dimensions (mm)

Width: 914, 1219, 1524, 1825

Depth: 610

Height: 1879

Standard gown racks

- ▶ made of stainless steel type 304 in proven Super Erecta® construction
- ▶ available in floor-standing and wall-mounted versions
- ▶ open wire construction promotes laminar airflow
- ▶ including clothes hangers (electropolished, stainless steel type 304) spacing of the suspensions: 76 mm (3")



Standard gown rack, wall fastening

Dimensions (mm)

Width: 914, 1219, 1524, 1825

Depth: 610

Height: 190



Reliable transport solutions



MW400 Series
MW100 Series



Dimensions (mm)

Width: 610, 760, 914

Depth: 457, 530, 610

Height: 965, 990

MMW Series utility carts

- ▶ reliable, durable and easy to manoeuvre
- ▶ two or three wire or solid shelves, adjustable in steps of 25 mm
- ▶ robust castors (in different diameters)
- ▶ chrome or stainless steel type 304
- ▶ individual configurations possible

Dimensions (mm)

Width: 610, 914, 1524

Depth: 457, 610

Height: 991, 1753

Autoclavable laboratory carts and cage racks

Type 304 stainless steel laboratory carts / trolleys and cage racks with smooth surfaces for corrosion resistant performance and long life. Carts are delivered standard with swedged posts and aluminum split sleeves. Separate high temperature phenolic and nylon castors are available, suitable for autoclaves.

For all autoclavable carts and cage racks we offer matching autoclavable covers made of cleanroom fabric.



Efficient transport solutions



Dimensions (mm)

Width: 838, 1143, 1448

Depth: 729

Height: 1005, 1446

Stainless steel case carts

- ▶ efficient transport solutions, protect contents from unclean environment
- ▶ made of stainless steel type 304
- ▶ extra reinforced doors and housings
- ▶ lockable, removable doors
- ▶ lockable, high modulus rubber wheels with stainless steel mounting
- ▶ stainless steel shelf inserts adjustable in steps of 2" (50.8 mm) each
- ▶ total load capacity up to 181 kg



Safe transport solutions



Super Adjustable™ Super Erecta® mobile security cart

Stationary trolleys/carts

Dimensions (mm)
Width: 980, 1295, 1587
Depth: 546, 692, 851
Height: 1695

Mobile trolleys/carts

Dimensions (mm)
Width: 1035, 1340, 1651
Depth: 546, 692, 851
Height: 1575, 1740

Security trolleys/carts

They protect valuable materials and sensitive objects from loss or theft through a unique fixing mechanism and the special design of the hangers. The open wire construction also facilitates inventory control.

Doors rotate 270° and can be secured to the sides of the trolley. The patented ergonomic 1/4 turn door handle ensures easy opening and closing of the unit.

The security trolley is available in a stationary or mobile version as well as in a heavy-duty version.



Sorting trolleys/carts

- ▶ efficient handling of containers, tray systems and bins
- ▶ efficient tracking and identification of products using ESD-safe SmartTray system through the use of colour-coded accessories or barcode technology
- ▶ versatile: single, double, triple and ESD configurations

For further information please call us!

Individual models



The number and width of step treads can be determined individually for steps and ladders.

Possible versions

- ▶ smooth plate
- ▶ corrugated plate
- ▶ grating
- ▶ removable



The steps can be equipped with a handrail and the stairs-head with a banister.

Product recommendations referring to cleanroom classes

Cleanrooms and associated controlled environments – Part 1
Classification of air cleanliness by particle concentration
EN ISO 14644-1

Hygiene zones
(microbiological controlled areas) according to GMP

Article	3	4	5	6	7	8	9	low dust	A	B	C	D	E
---------	---	---	---	---	---	---	---	----------	---	---	---	---	---

All articles of the product classifications:

Dispensers made of acrylic and stainless steel for disposable articles

Dispensers for disinfectants

Dispenser automats for disposable overshoes

Chairs & stools

Worktables and desks

Plug shelving systems and storage solutions

Gowning room racks and benches

Storage carts and multi-purpose carts

Ladders and steps made of stainless steel

▶ EXPLANATION

Cleanroom compatible dispenser systems and furniture for cleanrooms can in principle be recommended for all cleanroom classes from ISO 5 up to 9 (or low dust rooms). Therefore we have refrained from listing a corresponding table here – as in the other chapters.

The same applies for hygiene zones A and D, if the articles have been sterilised beforehand for A/B-zones accordingly.

