

Individual.
Functional.
Efficient.



Simtro
KARL original.



Individual. **Functional.** Efficient.

The SINTRO table range,
designed as a **modular system**,
meets all requirements for
a modern workplace design
in production and assembly.

Optimal gripping distances,
stepless height adjustment,
Provision of materials according to the FIFO principle,
Energy and media supply,
glare-free illumination -
SINTRO is lively, innovative and changeable.

SINTRO supports changing working postures,
offers **high working comfort**, well-thought-out functionality
and sophisticated ergonomics.



The extensive range of accessories offers a maximum of **individual combination options**, which can be redesigned, changed and expanded at any time.



For every production strategy SINTRO offers an **extensive program** for low-waste design of assembly processes, material flow and order picking.

SINTRO can stand almost anything and presents itself even after a long time and intensive use like the first day, because at KARL we place the biggest emphasis on material-appropriate construction and high quality processing.



ESD-requirements.

Powder coated.

Conductive.

Sintro

KARL original.

Detailed **perfection.**

Flexible modular system for the design of modern assembly workplaces.



SINTRO docking function



SINTRO assembly table

Tailored for the requirements lean production.

Table superstructure and table extension elements are height-adjustable with the work surface, set gripping spaces remain intact.

Well thought-out and consistent cable management ensures order and safety at the workplace.

The functional table system also sets visual accents with colored decor elements.



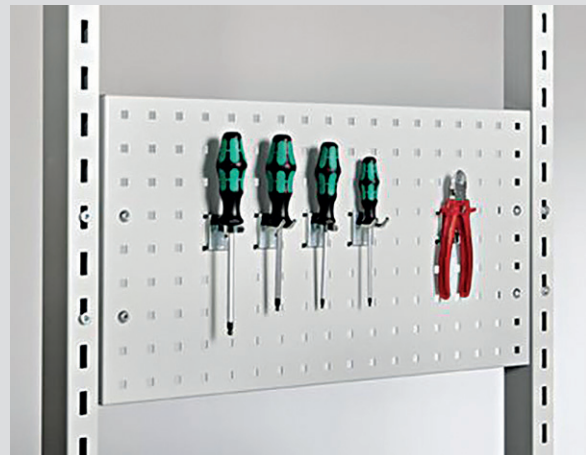
SINTRO ball table with cable pull



SINTRO turntable



SINTRO rotary table



SINTRO toolholder wall

High **working comfort** and sophisticated **ergonomics.**

Stepless height adjustment of the working surface from 740 to 1140 mm.

Sintro
KARL original.



Content	Page
Base frame	8
Base frame standard	8
Base frame for increased loads	8
ESD-Steering Rollers	9
Height-adjustable base frame with crank-handle	9
Height-adjustable base frame with electric drive	9
Trap protection	10
Decorative elements	10
Worktops	11
Table construction and add-on elements	13
Cross connection for table construction	13
Vertical strut	13
Bracket	13
Vertical cable duct	14
Infinitely inclinable storage board	14
Cable tray below the storage board	15
Hook-in storage board	15
Hook-in storage board for parts containers	15
Runner rail	15
Compressed air connection / distributor	16
Toolholder wall	16
Carrier rail with holder for TFT monitor	16
Carrier rail for power strips	17
Holder for power strip	17
ESD-provisions holder	17
Keyboard tray	17
PC tower rack	18
Privacy	18
Cable tray	18
Footrests bracket	18
Freestanding footrest holder	19
ESD-footrest	19
Bottle holder	19
Multifunction arm VARIO	20
Swiveling storage board	20
Flat screen bracket	21
Carrier rail for parts containers	21
Storage board for parts containers	21
Clam shell containers	21
Universal frame	22
Clip-in shelf	22
Hook-in storage board for gripping trays	22
Toolholder wall	22

Content	Page
Drawer units	23
Single Drawer	23
Drawer block F4	23
Drawer block F1	24
Drawer block F0	24
Mobile drawer block F0	24
ESD insert tray for small parts	25
Variable cross and longitudinal divisions	25
Power connection rails	26
Standardized power connection rail	26
Electrical connection strips for individual fitting with insert plates	27
Insert plates for electrical connection strips	27
Connection cable for electrical connection strips and lighting	29
Lighting	30
Linear Luminaire	30
LED-articulated arm light	30
LED-magnifying lamp	30
Chairs	32
SINTRO-CAR	33
Base frame with swivel castors	33
Base frame with floor glides	34
Infinitely inclinable storage board	35
Hook-in storage board	35
Toolholder wall	36
Carrier rail for power strips	36
Hanging shelf for SMD rolls	36
Handle	36
Drawer blocks for SINTRO-CAR	37
Docking function	38
Height-adjustable table frame with electric motor	38
SINTRO-CAR with docking function	38
FIFO-CAR with 2 vertical struts	39
Equipment	41

Work Bench



- stable tubular steel construction
- continuously adjustable height from 740 to 1140 mm
- foot sections with additional height adjustment elements
- working area can be loaded with a uniform load of 200 kg

Base frame

- stepless height adjustment with clamping screws

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.003.70	25.005.70	25.025.70	25.045.70
ESD	26.003.70	26.005.70	26.025.70	26.045.70

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.002.70	25.006.70	25.026.70	25.046.70
ESD	26.002.70	26.006.70	26.026.70	26.046.70



Base frame for increased loads

- working surface can be loaded with a uniform load of 250 kg
- stepless height adjustment with clamping screws

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.013.70	25.015.70	25.035.70	25.055.70
ESD	26.013.70	26.015.70	26.035.70	26.055.70



ESD-Steering Rollers

- 4 Steering Rollers (Ø 100 mm), 2 of them lockable
- Installation at the foot sections

for table depth 750 mm	25.560.98
for table depth 900 mm	25.562.98



Height adjustable base frame with crank-handle

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.103.70	25.105.70	25.125.70	25.145.70
ESD	26.103.70	26.105.70	26.125.70	26.145.70

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.102.70	25.106.70	25.126.70	25.146.70
ESD	26.102.70	26.106.70	26.126.70	26.146.70

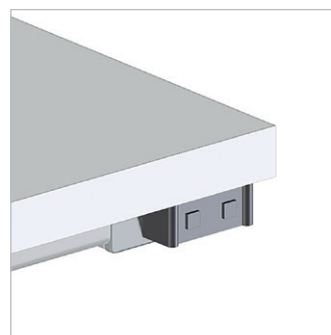


Height adjustable base frame with electric drive

- Control via desk panel
- Mains connection cable 5 m with Schuko plug

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.203.70	25.205.70	25.225.70	25.245.70
ESD	26.203.70	26.205.70	26.225.70	26.245.70

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.202.70	25.206.70	25.226.70	25.246.70
ESD	26.202.70	26.206.70	26.226.70	26.246.70



optional:

- Height adjustment with 4 individually adjustable memory buttons
- In addition, the lowest and the highest position can be programmed and be approached directly

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.303.70	25.305.70	25.325.70	25.345.70
ESD	26.303.70	26.305.70	26.325.70	26.345.70

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.302.70	25.306.70	25.326.70	25.346.70
ESD	26.302.70	26.306.70	26.326.70	26.346.70



Optionally the electrical height adjustment of two or more tables can be synchronized

Trap protection

- for lateral attachment to electrically height-adjustable SINTRO tables
- suitable for table depth 750 mm / 900 mm
- 2 pieces (1x left, 1x right)
- light grey (RAL 7035)

500 x 750 mm (HxD)	39.532.70
500 x 900 mm (HxD)	39.534.70









SINTRO decorative elements

- sheet steel with square perforations
- H = 470 mm
- 2 pieces (1x left, 1x right)

W = 210 mm, for table depth 750 mm, standard	25.800. __
W = 320 mm, for table depth 750 mm, height adjustable	25.820. __
W = 460 mm, for table depth 900 mm	25.840. __



Please add the color key:

	light grey	(RAL 7035)	__ . __ . __ . 70
	water blue	(RAL 5021)	__ . __ . __ . 02
	cobalt blue	(RAL 5013)	__ . __ . __ . 03
	raspberry red	(RAL 3027)	__ . __ . __ . 04
	zinc yellow	(RAL 1018)	__ . __ . __ . 06
	pigeon blue	(RAL 5014)	__ . __ . __ . 08



Other colors for realizing your corporate identity on request.

Height-adjustable table frame with electric motor for docking a SINTRO-CARS

More information on page 38



Worktops



Optional:

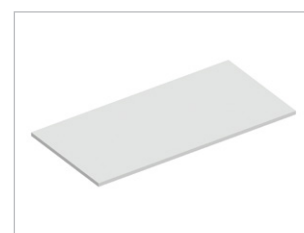
- two cutouts with lockable plastic cover for cable entry (Ø 80 mm)

Hard laminate (EN 438)

- light grey worktop (RAL 7035), 27 mm thickness
- all around with a resistant edge band
- very hard and abrasion-resistant HPL laminate
- surface slightly structured and glare-free, highly scratch-resistant
- heat-resistant for a short time up to 180 °C
- resistant to organic solvents, weak acids and bases, petrol and oil

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.903.88	25.900.88	25.904.88	25.906.88
with cutouts	25.913.88	25.910.88	25.914.88	25.916.88

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.922.88	25.920.88	25.924.88	25.926.88
with cutouts	25.932.88	25.930.88	25.934.88	25.936.88



Direct coated ESD plate

- light grey worktop (RAL 7035), 27 mm thickness
- all around with a resistant edge band
- Melamine resin direct coating, limited abrasion and scratch resistance
- slightly structured surface and glare-free
- volume-conductive carrier plate
- Bleeder R_A 1×10^4 to 1×10^9 ohms (dry measurement according to IEC 61340-5-1, 100 V)
- resistant to organic solvents, weak acids and bases, petrol and oil

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.903.87	25.900.87	25.904.87	25.906.87
with cutouts	25.913.87	25.910.87	25.914.87	25.916.87

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.922.87	25.920.87	25.924.87	25.926.87
with cutouts	25.932.87	25.930.87	25.934.87	25.936.87

Conductive ESD Hard Laminate (EN 438)

- light grey worktop (RAL 7035), 27 mm thickness
- all around with a resistant edge band
- very hard and abrasion-resistant HPL laminate
- surface slightly structured and glare-free, highly scratch-resistant
- volume-conductive carrier plate
- Bleeder R_A 1×10^4 to 1×10^9 ohm
(dry measurement according to IEC 61340-5-1, 100 V)
- heat-resistant for a short time up to 180 °C
- resistant to organic solvents, weak acids and bases, petrol and oil

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.903.89	25.900.89	25.904.89	25.906.89
with cutouts	25.913.89	25.910.89	25.914.89	25.916.89

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.922.89	25.920.89	25.924.89	25.926.89
with cutouts	25.932.89	25.930.89	25.934.89	25.936.89

Multiplex board natural beech

- multi-layer glued beech board, 40 mm thickness
- with broken edges on all sides, without edge protection
- surface painted with clear varnish

W x D in mm	930 x 750	1230 x 750	1530 x 750	1830 x 750
Standard	25.903.85	25.900.85	25.904.85	25.906.85
with cutouts	25.913.85	25.910.85	25.914.85	25.916.85

W x D in mm	930 x 900	1230 x 900	1530 x 900	1830 x 900
Standard	25.922.85	25.920.85	25.924.85	25.926.85
with cutouts	25.932.85	25.930.85	25.934.85	25.936.85

Corner table top trapezoid

- including mounting kit
- external dimensions at table depth 750 mm: 850 x 850 mm
- external dimensions at table depth 900 mm: 1000 x 1000 mm

D in mm	750 mm	900 mm
Hard Laminate	35.908.88	35.928.88
directly coated ESD plate	35.908.87	35.928.87
ESD Hard Laminate	35.908.89	35.928.89
Multiplex board natural beech	35.908.85	35.928.85

Corner table top square

- including mounting kit
- external dimensions at table depth 750 mm: 850 x 850 mm
- external dimensions at table depth 900 mm: 1000 x 1000 mm

D in mm	750 mm	900 mm
Hard Laminate	35.910.88	35.930.88
directly coated ESD plate	35.910.87	35.930.87
ESD Hard Laminate	35.910.89	35.930.89
Multiplex board natural beech	35.910.85	35.930.85

Other table top variants and table top dimensions on request.

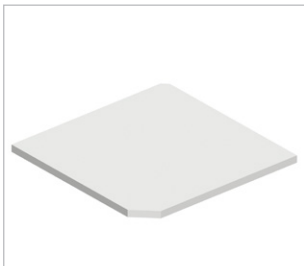
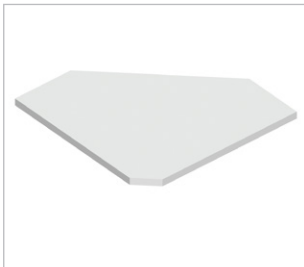
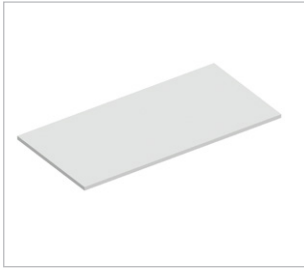


Table construction and add-on elements



Cross connection for table construction

- Cross connection on the table frame for mounting vertical struts
- D = 38 mm, H = 160 mm

for table width 930 mm	29.129.70
for table width 1230 mm	29.130.70
for table width 1530 mm	29.132.70
for table width 1830 mm	29.134.70



Vertical strut

- stable rectangular steel tube with grid perforation for variable height adaptation of table construction elements and multi-function arm VARIO
- installation on the cross connection
- W = 40 mm, D = 60 mm

H 1990 mm, usable height above table top: 1425 mm	29.120.70
H 1340 mm, usable height above table top: 775 mm	29.122.70



Bracket

- to accommodate running tracks, linear luminaires etc.
- Installation on the vertical struts
- L = 650 mm
- optionally with colored decorative element

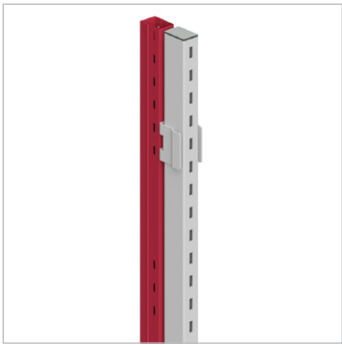
standard design	29.105.70
with colored decorative element	25.505. _ _









Vertical cable duct

- simple and orderly vertical cable routing
- installation either beside or behind the vertical struts
- two-part, easy-to-open cover made of metal, cross-section: 45 x 60 mm, L = 1990 mm
- the integrated brush elements allow cables and wires flexible laying

	39.128._ _
--	------------



Please add the color key:

	light grey	(RAL 7035)	_ _ _ _ .70
	water blue	(RAL 5021)	_ _ _ _ .02
	cobalt blue	(RAL 5013)	_ _ _ _ .03
	raspberry red	(RAL 3027)	_ _ _ _ .04
	zinc yellow	(RAL 1018)	_ _ _ _ .06
	pigeon blue	(RAL 5014)	_ _ _ _ .08

Weitere Farben zur Realisierung Ihrer Corporate Identity auf Anfrage

Infinitely inclinable storage board

- infinitely adjustable inclination from 0° to 30°
- +/- 75 mm in depth
- D = 450 mm, max. distributed load: 50 kg
- 20 mm high stopstrip, mountable either front or rear

W = 680 mm, for all table widths	39.005.70
W = 1115 mm, for table width 1230 mm	39.007.70
W = 1415 mm, for table width 1530 mm and 1830 mm	39.009.70



Alternative: Console for continously inclinable storage board

- the shelf is infinitely adjustable from 0 ° to 30 °
- storage board offset 200 mm to the front

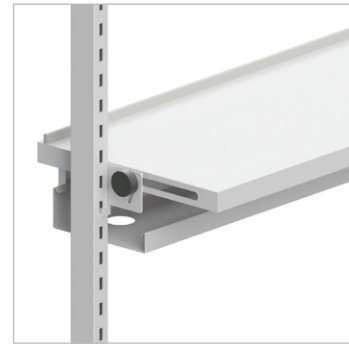
	39.000.70
--	-----------



Cable tray below the storage board

- Installation below a storage board with D = 450 mm, suitable for table width 1230, 1530 and 1830 mm
- adjustable in width, D = 230 mm, H = 80 mm
- for horizontal cable routing and to accommodate socket strips, power supplies for test devices, etc.

	39.028.70
--	------------------



Hook-in storage board

- suspendable horizontally or with a 15 ° inclination
- max. surface load: 25 kg
- D = 320 mm
- 20 mm high stopstrip, mountable either front or rear

W = 740 mm, for all table widths	39.025.70
W = 1170 mm, for table width 1230 mm	39.027.70
W = 1470 mm, for table width 1530 mm and 1830 mm	39.029.70



Hook-in storage board for parts containers

- suspendable horizontally or with a 15 ° inclination
- suitable for gripping trays (Schäfer system, size 5)
- D = 150 mm, max. surface load: 25 kg
- stopstrip, mountable either front or rear

W = 740 mm, for all table widths	39.303.70
W = 1170 mm, for table width 1230 mm	39.305.70
W = 1470 mm, for table width 1530 mm and 1830 mm	39.307.70



Runner rail

- mounting on the brackets
- Carriage with eyelet for hanging tools, balancers etc.
- load capacity: 22 kg

for table width 930 mm	39.113.70
for table width 1230 mm	39.115.70
for table width 1530 mm and 1830 mm	39.117.70
Carriage for running track	0340512



Compressed air connection / distributor

- for fastening to the vertical strut
- 1 x coupling plug, 3 x coupling box

Size 3	39.545.70
Size 4	39.547.70



- for fixing at the table frame
- 1 x coupling box
- for connecting hoses with outside diameter of 8 mm
- 1 x compressed air gun holder

Size 3	39.555.70
Size 4	39.557.70



Toolholder wall

- sheet steel with square perforations
- H = 340 mm

W = 680 mm; for all table widths	39.705.70
W = 1115 mm; for table width 1230 mm	39.707.70
W = 1415 mm; for table width 1530 mm and 1830 mm	39.709.70

Equipment:

tool holder set (20 hooks and 4 containers in different sizes)	39.710.96
---	------------------



Carrier rail with holder for TFT monitor

- VESA-standard (75 x 75 mm and 100 x 100 mm)
- horizontally flexible positionable

for table width 930 mm	39.624.70
for table width 1230 mm	39.626.70
for table width 1530 mm and 1830 mm	39.628.70

additional bracket for TFT monitor	39.680.70
------------------------------------	------------------



Carrier rail for power strips

- for fixing socket strips
- H = 85 mm, D = 45 mm

for table width 930 mm	54.104.70
for table width 1230 mm	54.106.70
for table width 1530 mm and 1830 mm	54.107.70



Holder for power strip

- for fixing socket strips at the vertical strut

	39.682.70
--	------------------

Equipment:

5-way socket outlet with switch, power cord and safety plug	95.005.98
5-way power strip, Swiss version with switch, power cord and plug	95.004.98



ESD-provisions holder

- includes adapter for height-variable attachment to a vertical strut
- suitable for DIN A4
- incl. 10 swiveling, ESD-compatible insert sleeves
- W = 280 mm, H = 370 mm

	39.619.98
--	------------------



Keyboard tray

- W = 495 mm, D = 250 mm
- clear height adjustable from 35 to 70 mm
- 210 mm extendable
- extendable mouse rest (W = 180 mm), mountable on both sides

	39.465.70
--	------------------



PC tower rack

- can be hooked into the cross connection
- infinitely adjustable in width from 125 to 200 mm (clear internal dimension)
- for towers up to max. height 560 mm

	14.510.70
--	------------------



Privacy

- sheet steel with square perforations
- H = 260 mm

for table width 930 mm	25.524.70
for table width 1230 mm	25.526.70
for table width 1530 mm	25.528.70
for table width 1830 mm	25.530.70



Cable tray

- for horizontal cable routing under the table top
- as a shelf for power strips

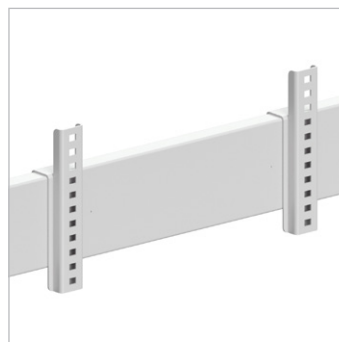
for table width 930 mm	39.524.70
for table width 1230 mm	39.526.70
for table width 1530 mm	39.528.70
for table width 1830 mm	39.530.70



Footrests bracket

- can be hooked into the cross connection
- raster for height-adjustable hanging of the footrest

	52.320.70
--	------------------



Freestanding footrest holder

- frame made of sturdy square steel tube
- raster for height-adjustable hanging of the footrest
- H = 450 mm

52.315.70



ESD-footrest

- for hanging in the footrest holder
- version according to DIN 33 406
- infinitely adjustable inclination via foot switch
- inserted, conductive ESD covering for the footrest
- W = 500 mm, D = 340 mm

ESD-footrest

52.350.70

ESD-ground wire

52.355.98



Bottle holder

- basket for bottles up to d = 95 mm

bottle holder

52.074.70

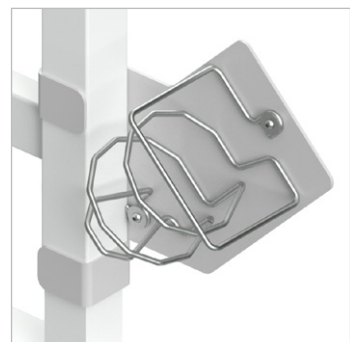


Optional:

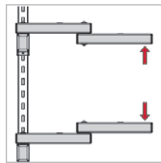
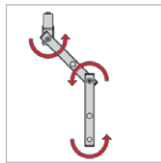
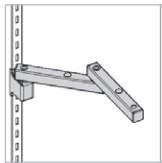
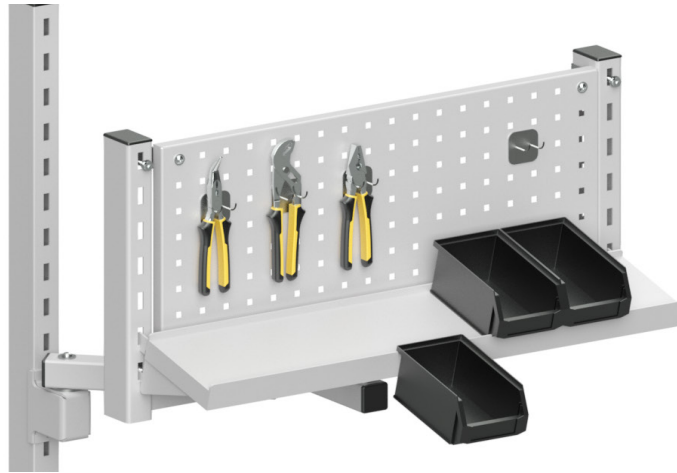
- with bracket for inclined fastening of the bottle holder to the table frame

bottle holder with inclined bracket

52.073.70



Multifunction arm VARIO



Ergonomically optimal arrangement:

- 3 self-locking joints
- variable length adjustment of the two swivel arms
- max. swing radius: 500 mm
- height-variable mounting on a vertical strut
- either standing or hanging adaptation

Swiveling storage board

- continuously adjustable from 0 ° to 25 °
- board bar front and back
- suitable for the storage of Euronorm containers
- loadable up to 30 kg
- including multifunction arm

415 x 315 mm (W x D), for Euro standard containers 400 x 300 mm **39.635.70**

615 x 415 mm (W x D), for Euro standard containers 600 x 400 mm **39.637.70**



Optional:

- swivel arm with joint
- stepless incline adjustment of the storage board from 0° to 50°

39.639.70



Flat screen bracket

- VESA standard (75 x 75 mm and 100 x 100 mm)
- bracket can be swiveled +/- 90° and tilted +/- 15°
- including multifunction arm
- optionally with keyboard and mouse tray

flat screen bracket	39.610.70
keyboard tray	39.670.70
mouse tray (attachment to keyboard shelf)	39.672.70



Carrier rail for parts containers

- curved support rail for 7 parts containers (System Schäfer, size 5)
- expandable up or down with additional support rails
- loadable up to 30 kg
- including multifunction arm

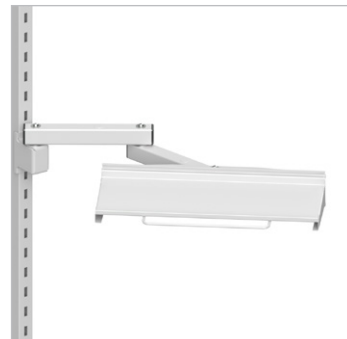
carrier rail (basic element)	39.601.70
carrier rail for expansion	14.602.70



Storage board for parts containers

- to accommodate 5 parts containers (Schäfer system, size 5) or clam shell container
- W = 530 mm, H = 147 mm
- loadable up to 30 kg
- including multifunction arm

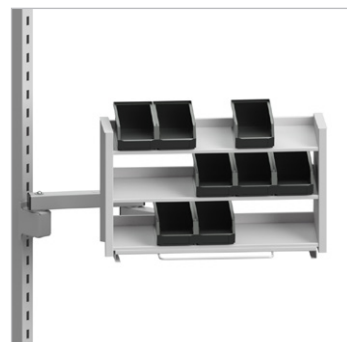
	39.606.70
--	------------------



Clam shell containers

- for placing on the tray for gripping trays
- 3 shelves for 5 gripping trays each (Schäfer system, Size 5)
- 585 x 165 x 335 mm (W x D x H)

	14.611.70
--	------------------



Universal frame

- to accommodate attachable storage boards and / or toolholder wall
- clear width: 690 mm
- usable height: 350 mm
- including multifunction arm

39.660.70



Clip-in shelf

- can be attached to the universal frame at different heights
- can be hung horizontally or with a 15 ° inclination
- W = 740 mm, D = 320 mm
- 20 mm high board bar, optionally at the front or rear
- loadable up to 25 kg

39.025.70



Hook-in storage board for gripping trays

- can be attached to the universal frame at different heights
- can be hung horizontally or with a 15 ° inclination
- suitable for parts containers (Schäfer system, size 5)
- W = 740 mm, D = 150 mm
- 20 mm high board bar, optionally at the front or rear
- loadable up to 25 kg

39.303.70



Toolholder wall

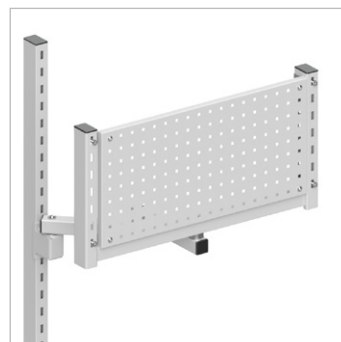
- attachment to the universal frame
- perforated sheet with square perforations
- W = 680 mm, H = 340 mm

39.705.70

Equipment:

tool holder set
(20 hooks and 4 containers in different sizes)

39.710.96



Drawer units



- robust sheet steel case with central locking
- 4 cabinet heights, 2 widths
- variable drawer divisions (1 HU = 54 mm)
- clear internal dimensions: W = 330 mm respectively 520 mm, D = 450 mm
- 4/5-extensible, drawer runners with steel ball bearings
- load capacity / drawer: 30 kg
- ESD-compliant due to conductive powder coating and conductive guides, connection of all parts with contact washers
- pull-out protection: only one drawer can be opened at a time

Optional:

- full extension drawers, drawer runners with telescopic rails
- load capacity / drawer: 45 kg

Single Drawer

- with single locking
- several individual drawers can be installed one below the other
- H = 110 mm, D = 540 mm



Drawer division	1 x 2 HU
W = 418 mm	32.405.70

Drawer block F4

- H = 313 mm
- D = 540 mm



Drawer division	4 x 1 HU	2 x 1 HU 1 x 2 HU	2 x 2 HU
W = 418 mm	27.005.70	27.010.70	27.015.70
W = 606 mm	28.005.70	28.010.70	28.015.70

Drawer block F1

- H = 475 mm
- D = 540 mm



Drawer division	7 x 1 HU	2 x 1 HU 1 x 2 HU 1 x 3 HU	1 x 1 HU 3 x 2 HU	1 x 1 HU 2 x 3 HU	1 x 1 HU 1 x 6 HU
W = 418 mm	27.105.70	27.110.70	27.115.70	27.120.70	27.125.70
W = 606 mm	28.105.70	28.110.70	28.115.70	28.120.70	28.125.70

Drawer block F0

- H = 583 mm
- D = 540 mm



Drawer division	9 x 1 HU	2 x 1 HU 2 x 2 HU 1 x 3 HU	1 x 1 HU 4 x 2 HU	1 x 1 HU 1 x 2 HU 1 x 6 HU	3 x 3 HU
W = 418 mm	27.205.70	27.210.70	27.215.70	27.220.70	27.225.70
W = 606 mm	28.205.70	28.210.70	28.215.70	28.220.70	28.225.70

Mobile drawer block F0

- 4 conductive castors (Ø 52 mm)
- 2 of them lockable
- H = 670 mm
- D = 540 mm



Drawer division	9 x 1 HU	2 x 1 HU 2 x 2 HU 1 x 3 HU	1 x 1 HU 4 x 2 HU	1 x 1 HU 1 x 2 HU 1 x 6 HU	3 x 3 HU
Hard laminate cover					
W = 418 mm	32.305.63	32.310.63	32.315.63	32.320.63	32.325.63
W = 606 mm	33.305.63	33.310.63	33.315.63	33.320.63	33.325.63
Cover directly coated, ESD					
W = 418 mm	32.305.34	32.310.34	32.315.34	32.320.34	32.325.34
W = 606 mm	33.305.34	33.310.34	33.315.34	33.320.34	33.325.34
Cover ESD hard laminate					
W = 418 mm	32.305.66	32.310.66	32.315.66	32.320.66	32.325.66
W = 606 mm	33.305.66	33.310.66	33.315.66	33.320.66	33.325.66

ESD insert tray for small parts

- made of conductive plastic
- 2 trays can be used per drawer
- H = 31 mm

insert tray with 7 compartments for W = 418 mm	96.205.98
insert tray with 11 compartments for W = 606 mm	96.206.98



Variable cross and longitudinal divisions

- adjustable in grid
- made of powder-coated sheet steel
- H = 73 mm

Cross dividers, W = 330 mm	96.225.70
Cross dividers, W = 520 mm	96.226.70



Longitudinal divisions, 303 mm / A4 landscape	96.227.70
Longitudinal divisions, 213 mm / A5 landscape	96.229.70
Longitudinal divisions, 113 mm / A6 landscape	96.231.70



Power connection rails



- stable sheet metal housing in the form of a parapet duct, H = 140 mm, D = 76 mm
- height-variable mounting on the vertical struts
- the individual modules can be exchanged and expanded at any time
- WINSTA connector system for mains connection and further wiring

Standardized power connection rail



- EMERGENCY STOP, circuit breaker, 5 safety sockets (D) or Swiss sockets (CH)

for table width 1230 mm	(D)	39.470.70
	(CH)	39.471.70
for table width 1530 und 1830 mm	(D)	39.473.70
	(CH)	39.474.70



- EMERGENCY STOP, circuit breaker, FI 25 A / 30 mA 2-pole, 10 Schuko sockets (D) or Swiss sockets (CH)

for table width 1230 mm	(D)	39.480.70
	(CH)	39.481.70
for table width 1530 und 1830 mm	(D)	39.483.70
	(CH)	39.484.70

Electrical connection strips for individual fitting with insert plates



for table width 1230 mm (usable width for insert plates: 1100 mm)	39.450.70
for table width 1530 und 1830 mm (usable width for insert plates: 1400 mm)	39.453.70

Insert plates for power connection rails

Security modules

	Circuit breaker 10-16 A, Undervoltage release, EMERGENCY STOP, 1 indicator light, 1-phase	400 mm	(D) (CH)	95.365.70 95.367.70
	Circuit breaker 10-16 A, Undervoltage release, EMERGENCY STOP, 3 indicator lights, 3-phase	400 mm	(D) (CH)	95.370.70 95.372.70
	FI 25 A / 30 mA 2-pole, circuit breaker 10-16 A, Undervoltage release, EMERGENCY STOP, 1 indicator light, 1-phase	400 mm	(D) (CH)	95.355.70 95.357.70
	FI 25 A / 30 mA 4-pole, circuit breaker 10-16 A, Undervoltage release, EMERGENCY STOP, 3 indicator lights, 3-phase	400 mm	(D) (CH)	95.360.70 95.362.70
	EMERGENCY STOP in a separate housing, 3 m connection cable, circuit breaker 10-16 A Undervoltage release, 1 indicator light, 1-phase	400 mm	(D) (CH)	95.307.70 95.309.70
	EMERGENCY STOP in a separate housing, 3 m connection cable, circuit breaker 10-16 A Undervoltage release, 3 indicator lights, 3-phase	400 mm	(D) (CH)	95.312.70 95.314.70
	EMERGENCY STOP, guided on plug connector	100 mm		95.315.70

Switch

	ON / OFF 16 A 2-pole, Rocker switch with indicator light	100 mm		95.405.70
--	---	--------	--	------------------

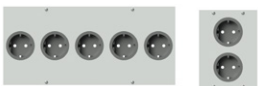




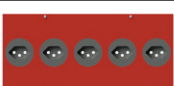



Empty plates

	Empty plate	100 mm		95.205.70
	Empty plate	300 mm		95.210.70
	Empty plate with punching and pre-assembled flush-mounted box	100 mm		95.206.70
	Empty plate with main connection without switching module			
	1-phase	100 mm		95.620.70
	3-phase	300 mm		95.630.70




Compressed air connection

	2 x Coupling box, size 3	100 mm	95.545.70
	2 x Coupling box, size 4	100 mm	95.547.70


Sockets

	5 x Schuko socket	300 mm	95.410.70
	2 x Schuko socket	100 mm	95.412.70
	5 x Universal socket I, D, USA	300 mm	95.420.70
	5 x Swiss socket	300 mm	95.415.70
	5 x Schuko socket	red panel	95.440.70
	2 x Schuko socket	red panel	95.442.70
	5 x Universal socket I, D, USA	red panel	95.444.70
	5 x Swiss socket	red panel	95.445.70
	1 x floating socket, isolating transformer 230 V / 1 A, breaker	300 mm	95.430.70
	1 x CEE 16 A 5-pin	100 mm	95.435.70
	5 Safety sockets, connected to L1, L2, L3, N, PE	100 mm	95.450.70

Data and communication interfaces

	Universal connection RJ45, CAT 6, 2 terminals	100 mm	95.527.70
	2 Passage connector RJ45, CAT 6	100 mm	95.530.70
	9-pin SUB-D connector, insulation displacement connection	100 mm	95.505.70
	SUB-D socket 9-pin, insulation displacement connection	100 mm	95.515.70
	2 x Passage connector USB 2.0 Typ A / B reversible	100 mm	95.528.70

Adjustable DC voltage

	0 – 30 V / 0 – 1 A, 2 analog displays	500 mm	95.705.70
	0 – 30 V / 0 – 1 A, 2 digital displays	500 mm	95.707.70

Connection cable for electrical connection strips and lighting

Power supply

3 m power cable (3 x 1,5 mm ²) with Schuko plug (16 A), <i>WINSTA</i> 3-pole socket	95.625.98
3 m power cable (3 x 1,5 mm ²) with Swiss plug (10 A), <i>WINSTA</i> 3-pole socket	95.627.98
3 m power cable (5 x 2,5 mm ²) with CEE plug (16 A, 5-polig), <i>WINSTA</i> 5-pole socket	95.635.98
7 m power cable (3 x 1,5 mm ²) with Schuko plug (16 A), <i>WINSTA</i> 3-pole socket	95.675.98
7 m power cable (3 x 1,5 mm ²) with Swiss plug (10 A), <i>WINSTA</i> 3-pole socket	95.674.98
<i>WINSTA</i> 3-pole socket for on-site cable connection	95.605.98
<i>WINSTA</i> 5-pole socket for on-site cable connection	95.607.98
M-Fitting sets (1 x M 16, 1 x M 20, 1 x M 25) for on-site cable connection	95.615.98

Extension and connection cables

2 m power cable (3 x 1,5 mm ²), <i>WINSTA</i> -3-pole connector, <i>WINSTA</i> -3-pole socket	95.685.98
3 m power cable (3 x 1,5 mm ²), <i>WINSTA</i> -3-pole connector, <i>WINSTA</i> -3-pole socket	95.687.98
4 m power cable (3 x 1,5 mm ²), <i>WINSTA</i> -3-pole connector, <i>WINSTA</i> -3-pole socket	95.689.98
2 m power cable (5 x 2,5 mm ²), <i>WINSTA</i> -5-pole connector, <i>WINSTA</i> -5-pole socket	95.695.98
3 m power cable (5 x 2,5 mm ²), <i>WINSTA</i> -5-pole connector, <i>WINSTA</i> -5-pole socket	95.697.98
4 m power cable (5 x 2,5 mm ²), <i>WINSTA</i> -5-pole connector, <i>WINSTA</i> -5-pole socket	95.699.98
5 m patch cable RJ45; Plug 1 x angled, 1 x straight	80.926.98

For connecting further electrical workstation components

WINSTA-3-pole snap-in socket including internal wiring to the main switch module	95.645.98
WINSTA-5-pin snap-in socket including internal wiring to the main switch module	95.655.98
WINSTA-3-pole snap-in socket including internal wiring in front of the main switch module	95.647.98
WINSTA-5-pole snap-in socket including internal wiring in front of the main switch module	95.657.98
AC distribution - 1 x 3-pin WINSTA plug to 3 x 3-pin WINSTA socket	95.600.98
AC distribution - 1 x 3-pin WINSTA plug to 5 x 3-pin WINSTA socket	95.602.98
AC distribution - 1 x 5-pin WINSTA plug to 3 x 5-pin WINSTA socket	95.604.98
WINSTA-3-pole snap-in connector, including internal wiring for separate IT network	95.650.98

EMERGENCY STOP

Room EMERGENCY STOP set (additional break contact for on-site room EMERGENCY STOP loop)	95.300.98
Coupling of 2 EMERGENCY STOP (2 additional NC contacts including wiring)	95.301.98

Technical specifications

- maximum connected load without internal protection: 16 A / 230 V bzw. 16 A / 400 V
- maximum connected load with internal protection: 25 A / 230 V bzw. 25 A / 400 V
- operating current of the circuit breaker: 16 A (AC-3)
- maximum supply cross-section with internal protection: 4 mm²
- cable cross sections without internal protection: 3 x 1,5 mm² with alternating current
5 x 2,5 mm² at three-phase current

Lighting

Linear Luminaire

- optionally with T5 fluorescent tube lamps or LED technology
- fixed or suspended connection
- color temperature neutral white 4.000 K
- glare-free through conical prismatic aperture
- LED version continuously dimmable
- robust housing made of anodized aluminum
- incl. 3 m power cable and Schuko plug

luminaire length	T5	LED
900 mm	1 x 39 W	26 W
1200 mm	1 x 54 W	33 W
1500 mm	1 x 49 W	40 W



		T5	T5	LED	LED
for table width	luminaire length	permanently installed	extendible	permanently installed	extendible
930 mm	900 mm	39.972.98	39.973.98	39.982.98	39.983.98
1230 mm	1200 mm	39.974.98	39.975.98	39.984.98	39.985.98
1530 / 1830 mm	1500 mm	39.976.98	39.977.98	39.986.98	39.987.98

	T5	LED
L = 900 mm, assembly under shelves	14.952.98	14.953.98

LED-articulated arm light

- color temperature neutral white 4.000 K
- input 24 W
- robust housing made of anodized aluminum, W = 400 mm
- stepless dimming down to 10%, with memory function
- maximum mobility in all directions due to 3D head joint
- articulated arm length: 384 + 400 mm plus multifunction arm VARIO

	39.917.98
--	------------------



LED-magnifying lamp

- double magnification by 3.5 diopters
- scratch-resistant glass magnifier with Ø 153 mm for distortion-free vision
- continuously dimmable up to 10%
- optionally with visualizer function:
 - separately switchable light sections for structure-emphasizing effects
- maximum mobility in all directions due to 3D head joint
- articulated arm length: 384 + 400 mm plus multifunction arm VARIO

LED-magnifying lamp	39.930.98
with visualizer function	39.932.98
ESD version with visualizer function	39.936.98



Office chairs

Basic ESD chair

- height adjustable from 470 to 610 mm
- according to IEC 61340-5-1
- height-adjustable permanent contact backrest
- base with conductive, load-dependent braked double castors
- durable, conductive fabric cover
- steel and plastic parts light grey

Basic ESD work chair, blue upholstery	96.137.98
Basic ESD work chair, grey upholstery	96.139.98
Armrests, light grey	96.185.98



ESD chair Sintec

- height adjustable from 430 to 580 mm
- according to IEC 61340-5-1
- height-adjustable permanent contact backrest
- base with conductive, load-dependent braked double castors
- backrest and seat made of volume conductive plastic
- steel and plastic parts black, upholstery optional

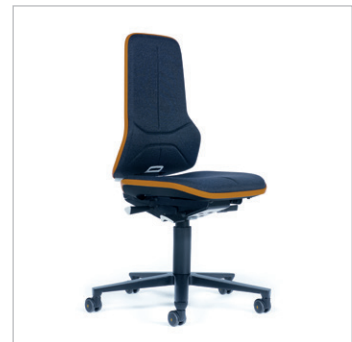
ESD work chair Sintec	96.130.98
ESD textil upholstery	96.134.98
ESD integral foam pad	96.135.98



ESD chair Neon

- height adjustable from 450 to 620 mm
- according to IEC 61340-5-1
- height-adjustable backrest
- seat depth and seat tilt adjustment
- base with conductive, load-dependent braked double castors
- optional: permanent contact backrest or synchronous technology
- chair element and black base, grey flexible band
- upholstery elements configurable and quickly exchangeable

ESD work chair Neon with permanent contact backrest	96.140.98
ESD work chair Neon with synchronous technology	96.142.98
ESD textile upholstery, black	96.144.98
ESD integral foam pad, black	96.146.98



Additional chairs on request

SINTRO-CAR



- optionally with 4 swivel castors (Ø 100 mm, 2 of them lockable) or with 4 floor gliders
- metal parts light grey, conductive powder-coated
- ESD-compatible as standard due to the exclusive use of conductive materials
- D = 650 mm
- load capacity: 175 kg
- standard without decorative part

Base frame with swivel castors

H = 1100 mm

W = 790 mm (clear measure: 690 mm)	68.026.70
W = 970 mm (clear measure: 870 mm), for Euro standard containers	68.046.70
W = 1370 mm (clear measure: 1270 mm), for Euro standard containers	68.066.70

H = 1600 mm

W = 790 mm clear measure: 690 mm)	68.031.70
W = 970 mm (clear measure: 870 mm), for Euro standard containers	68.051.70
W = 1370 mm (clear measure: 1270 mm), for Euro standard containers	68.071.70



Base frame with floor glides

H = 1000 mm	
W = 790 mm (clear measure: 690 mm)	68.126.70
W = 970 mm (clear measure: 870 mm), for Euro standard containers	68.146.70
W = 1370 mm (clear measure: 1270 mm), for Euro standard containers	68.166.70

H = 1500 mm	
W = 790 mm (clear measure: 690 mm)	68.131.70
W = 970 mm (clear measure: 870 mm), for Euro standard containers	68.151.70
W = 1370 mm (clear measure: 1270 mm), for Euro standard containers	68.171.70









Decorative elements for SINTRO-CAR

■ sheet steel 6 mm

190 x 190 mm (HxD)	25.860._ _
--------------------	-------------------

Please add the color key:

	light grey	(RAL 7035)	_ _ _ _ .70
	water blue	(RAL 5021)	_ _ _ _ .02
	cobalt blue	(RAL 5013)	_ _ _ _ .03
	raspberry red	(RAL 3027)	_ _ _ _ .04
	zinc yellow	(RAL 1018)	_ _ _ _ .06
	pigeon blue	(RAL 5014)	_ _ _ _ .08



Other colors to realize your corporate identity on request.

Infinitely inclinable storage board for Euro standard containers

- continuously adjustable up to 30 °
- +/- 50 mm variable in depth
- H = 55 mm
- board bar front and back
- max. distributed load: 50 kg

W = 680 mm, D = 400 mm, suitable for CAR-width 790 mm	69.505.70
W = 860 mm, D = 600 mm, suitable for CAR-width 970 mm	69.506.70
W = 1260 mm, D = 600 mm, suitable for CAR-width 1370 mm	69.507.70



Infinitely inclinable storage board

- continuously adjustable up to 30 °
- +/- 75 mm depth variable
- D = 450 mm, H = 55 mm
- 20 mm high board bar, optionally at the front or rear
- max. distributed load: 50 kg

W = 680 mm, suitable for CAR-width 790 mm	39.005.70
---	------------------



Clip-in shelf

- can be hung horizontally or with a 15 ° inclination
- D = 320 mm, H = 45 mm
- 20 mm high board bar, optionally at the front or rear
- max. distributed load: 25 kg

W = 740 mm, suitable for CAR-width 790 mm	39.025.70
---	------------------



Hook-in storage board for part containers

- can be hung horizontally or with a 15 ° inclination
- for parts containers (Schäfer system, size 5)
- D = 150 mm
- board bar front and back
- max. distributed load: 25 kg

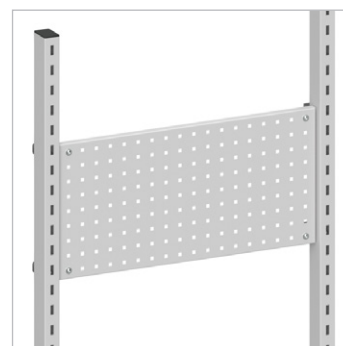
W = 740 mm, suitable for CAR-width 790 mm	39.303.70
---	------------------



Toolholder wall

- sheet steel with square perforations
- H = 340 mm

W = 680 mm, suitable for CAR-width 790 mm	39.705.70
---	------------------



Carrier rail for power strips

- for receiving socket strips
- D = 45 mm, H = 85 mm

W = 770 mm, suitable for CAR-width 790 mm	54.104.70
---	------------------



Hanging shelf for SMD rolls

- for SMD rolls with d = 320 mm or d = 180 mm
- can be equipped with 35 dividers

W = 860 mm, suitable for CAR-width 970 mm	69.104.70
partition clamps	69.059.98



Handle

- for side mounting on the vertical struts
- color: black
- 30 x 50 x 173 mm (W x D x H)

	69.950.70
--	------------------






Drawer blocks for SINTRO-CAR

- suitable for CAR width 790 mm, mounting on the vertical struts
- robust sheet steel case with central locking
- lid front and rear with 25 mm high board bar
- 4/5 extensible, drawer runners with steel ball bearings
- load capacity / drawer: 30 kg
- ESD-compliant due to conductive powder coating and conductive guides
- connection of all parts with contact washers

- Optional:
- drawers with full extension
 - drawer runners with telescopic rails
 - load capacity / drawer: 45 kg






Drawer block F4

- H = 313 mm
- D = 540 mm

			
Drawer division	4 x 1 HU	2 x 1 HU 1 x 2 HU	2 x 2 HU
W = 606 mm	69.005.70	69.010.70	69.015.70






Drawer block F1

- H = 503 mm
- D = 540 mm

					
Drawer division	7 x 1 HU	2 x 1 HU 1 x 2 HU 1 x 3 HU	1 x 1 HU 3 x 2 HU	1 x 1 HU 2 x 3 HU	1 x 1 HU 1 x 6 HU
W = 606 mm	69.105.70	69.110.70	69.115.70	69.120.70	69.125.70

Drawer block F0

- H = 611 mm
- D = 540 mm

					
Drawer division	9 x 1 HU	2 x 1 HU 2 x 2 HU 1 x 3 HU	1 x 1 HU 4 x 2 HU	1 x 1 HU 1 x 2 HU 1 x 6 HU	3 x 3 HU
W = 606 mm	69.205.70	69.210.70	69.215.70	69.220.70	69.225.70

Equipment:	
ESD rubber covering for drawer block lids, 666 x 540 x 2 mm (W x D x S)	69.805.98

Docking function



- work table and material supply trolley fit together as a complete system
- different body sizes and working postures

Height-adjustable table frame with electric motor for docking a SINTRO-CARS

- table frame with 2 additional linear guides
- maximum total weight (table and CAR including payload): 300 kg

Please use the article numbers from page 9
with the ending __.50



SINTRO-CAR with docking function

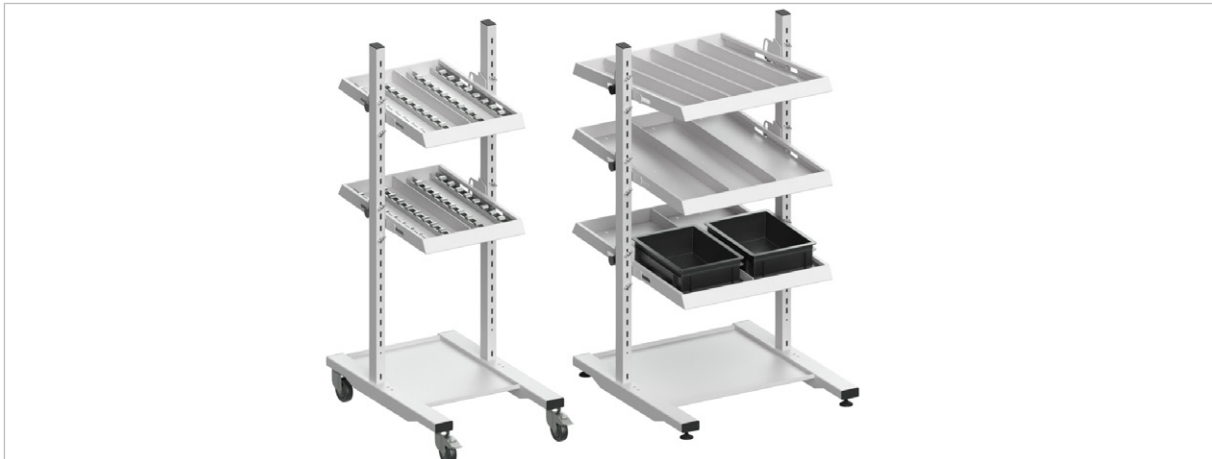
- easy handling: docking device as positive connection to the table frame
- max. payload: 100 kg

attachment docking car

39.200.70



FIFO-CAR with 2 vertical struts



- for material supply according to the FIFO principle
- all metal parts conductive powder coated, light grey (RAL 7035)
- ESD-compatible as standard due to exclusive use
- conductive materials

Base frame

- stable tubular steel construction
- optionally with 4 swivel castors (Ø 100 mm, 2 of them lockable) or with 4 floor gliders
- vertical struts with grid perforation
- D = 870 mm, H = 1600 mm
- incl. floor pan for holding Euro standard containers
- load capacity: 200 kg

Base frame with swivel castors

W = 570 mm	68.228.70
W = 790 mm	68.230.70

Base frame with floor glides

W = 570 mm	68.328.70
W = 790 mm	68.330.70



FIFO storage

- the shelf can be mounted variable in height, depth and inclination on the vertical struts of the base frame
- based on a grid system, the storage can be optionally equipped with roller strips and / or dividers
- the dimensions are primarily for the use of gripping shells and Euronorm containers designed
- load capacity / storage: 50 kg

W = 460 mm (clear measure: 423 mm)

suitable for base frame W = 570 mm

D = 700 mm (clear measure: 630 mm)	69.521.70
D = 900 mm (clear measure: 830 mm)	69.523.70

W = 680 mm (clear measure: 645 mm)

suitable for base frame W = 790 mm

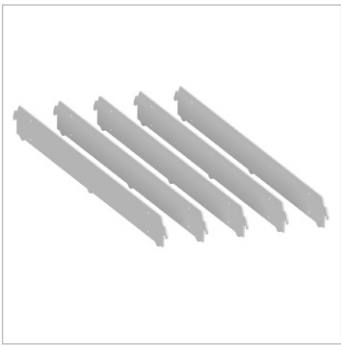
D = 700 mm (clear measure: 630 mm)	69.525.70
D = 900 mm (clear measure: 830 mm)	69.527.70



Dividers

H = 55 mm

set of dividers (5 pieces) for D = 700 mm	69.960.70
set of dividers (5 pieces) for D = 900 mm	69.962.70



ESD roller tracks

- ESD roller tracks

set of ESD roller tracks (4 pieces) for D = 700 mm	69.970.70
set of ESD roller tracks (4 pieces) for D = 900 mm	69.972.70

- stainless steel bracket (2 pieces) for fastening the roller tracks

W = 460 mm	69.956.70
W = 680 mm	69.958.70



- The FIFO tray 69.525.70 (D = 700 mm) can also be used as an option can be adapted directly at the SINTRO table

vertical strut	29.122.70
foot extension of the table frame	39.970.70



Equipment

Parts Containers

- Schäfer system, size 5
- 95 x 160 x 75 mm (W x D x H)

ESD black	red	blue	green
96.505.98	96.507.98	96.509.98	96.511.98



Euro standard container

- either made of non-conductive polyethylene (red) or ESD-compliant made of conductive polypropylene (black)

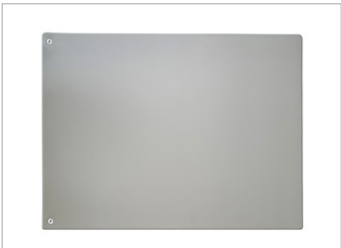
Width x Depth	Height	Standard	ESD
300 x 400 mm	120 mm	96.540.98	96.550.98
300 x 400 mm	170 mm	96.542.98	96.552.98
300 x 400 mm	220 mm	96.544.98	96.554.98
600 x 400 mm	120 mm	96.560.98	96.570.98
600 x 400 mm	170 mm	96.562.98	96.572.98
600 x 400 mm	220 mm	96.564.98	96.574.98
600 x 400 mm	320 mm	96.566.98	96.576.98



ESD mat

- solder-resistant synthetic rubber, 2 mm thickness, platinum grey
- volume-conductive, two-layer composite covering
- 2 push button connections (10 mm)
- 900 x 600 mm

95.805.98



ESD spiral cable

- push buttons on both sides (10 mm)
- safety resistance 1 MOhm on both sides
- black, extended 2400 mm long

95.825.98



ESD wrist strap

- adjustable, elastic
- 10 mm snap connector

95.815.98



The **KARL-product range.**

Optimal solutions require a precise analysis of the work processes.
KARL defines itself as a system supplier for modern, ergonomic workplace design.

The intensive cooperation and the qualified dialogue with our customers is the basis
for a tailor-made solution for your task.

We also take production-specific requirements and spatial conditions
like the individual needs of each employee into account.

We visualize functionality, ergonomics, handling and implementation of the spatial specifications
in a three-dimensional layout.



QUADRO.

The workplace system for the highest demands.



QUADRO twin.

The classic table system with all options.



SINTRO.

The variable assembly workstation.

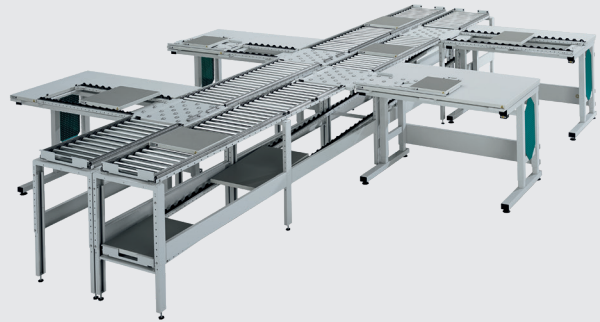


SINTRO pack.

The solution for packing stations.



BASIC. The economic workplace system.



Transfer systems.



FIFO shelves. The flexible material feed.



Deployment shelves.



Cupboard and shelf systems.



Measuring and testing technology.

Ergonomics.
Functionality.
 Custom design.



Andreas KARL GmbH & Co. KG | Hauptstraße 26 | 85777 Fahrenzhausen | Germany
Phone: +49 8133 17-0 | Fax: +49 8133 17-11 | E-Mail: info@karl.eu | www.karl.eu