

SYSTEM DELTA 30 LABORATORY EQUIPMENT | GENERAL CATALOGUE



Fume cupboard systems	24-51	01
Service systems	58-89	02
Table systems	94-117	03
Cupboard systems	122-135	04
Furnishing samples	136-153	05



"Since the establishment of our company, it is our mission to translate our customer's wishes in user-oriented, tailor-made furnishing concepts."

Preface General Catalogue

Founded in 1963, Wesemann is one of the leading producers of high-quality laboratory furnishings in Europe and is steadily expanding. Innovative, user-oriented and flexible laboratory furnishings are the answer to the many demands and, rapid changes in science and research. Our goal is to precisely understand the ideas of our customers in order to best assist them in their work with our design concept. We achieve this with the Wesemann Group, an association of medium-sized companies, specialising, in the design and manufacture of sophisticated furniture systems.

With over 200 employees, we produce high-quality laboratory furnishing systems, and specialised science classroom furniture, as well as office furnishings and heavy duty workstation systems, protecting the operator and the product.

In all our fields of activity, we are one of the leading manufacturers on the market. The group-wide exchange of know-how creates innovative designs, always guided by the special requirements of the market. As interior designers, we make individual and practical laboratories to the highest standard, and provide our customers with optimal research conditions. The experience gained, from well over 35,000 completed projects, consistent use of the latest technology, as well as regular staff training, and our quality management provide us with solid know-how to implement the most varied of projects.





Introduction Laboratory working environment



The specialization of the workplace in a laboratory requires a functional environment in which all the necessary work equipment is also located at hand. In addition to large work surfaces, direct access to electronic media and equipment is a must. At the same time, the laboratory workplace should be flexible, ready to be reorganized at all times so new ways of working can be accommodated. The solution: DELTA 30 System.

The DELTA 30 System

Our equipment system has a very fine-grained module structure of standard elements, that can be combined in almost any variation. This structure makes it possible to satisfy with the standard elements very individual requirements. The different Service supply systems, and different cupboard variations, can be easily combined with our extensive fume cupboard programme. For your individual needs, we offer our customers a team of qualified staff from our company, to advise you in planning your laboratory furniture.

Quality and Safety Outstanding products

Customer demands for quality and safety are growing steadily. As a modern company, we have made these challenges our own goal. All products have been checked on the basis of the latest laws, regulations, technical rules, and standards, and come with the TÜV GS mark ("Tested Safety"), issued by the independent auditors of the TÜV product service. All safety-relevant components of our products, have a mark, be it the VDE certificate for electrical components, or the DVGW test label for plumbing components. Above and beyond technical safety, our company is certified according to DIN EN ISO 9001:2008. This ensures that all processes are documented and traceable (Health and Safety Management BS OHSAS 18001:2007).



Introduction System design



Our furnishing systems for laboratories are divided essentially into the following four system components: fume cupboard systems, service systems, table systems and storage systems. In each system, there are various easily combinable designs. Thus, it is possible to design a laboratory, perfectly tailored to meet your requirements.

Fume cupboard systems

Systems for the safe handling of hazardous materials in the laboratory

Service systems

Systems for supplying electrical and service. These systems can be free standing, wall or ceiling mounted

Cupboard systems

Systems for safekeeping, as well as storage of laboratory materials, and storage of hazardous materials.

Table systems

Systems for the design of workstations, in many different types, and sizes, as well as bench tops

Product benefits Overview system

"This pioneering idea of our duct system design has found many imitators. This confirms that we created with the DELTA 30 system, an original that sets the new standard."



Functional grooves for accessories and 3D tripod hole

Reagents tray

0

with glass overlay

Ouct cover

for electrical service outlets/sockets

The DELTA 30 system duct is a high-quality, splashproof, solid aluminium duct offering high durability, integrated in the system, as a small electrical distributor. The front cover, also made of solid aluminium is tilted at 30 degrees, and is an essential system component, lending its name to product: "DELTA" due to the outer shape of the duct and, "30" due to the 30 ° tilting of the duct. The duct is fitted with a special profile, to keep the lid from falling when opened.



Full-length spine stand

with accessory groove

6 Reagents tray

for the best possible use of space

Integrated functional grooves

for individual organization of the work environment (also optional sealed)

30° slanted duct
 optimal accessibility of the controls

Optimized storage and utility space for efficient organization of work equipment

Details

System design standing unit service spine







Level for functional area

Integration of storage space/hanging cupboards possible

Area for accessories

Two three-dimensional tripod rod holders per Frame size Use of accessories is also possible when the media level is populated.

• Level for electrical service outlets

Dense population is possible

Level for mechanical service outlets

Arrangement of fittings possible in each slot at every 75 mm distance points. Large, almost joint-free splash protection made of antibacterial solid laminate (HDL High Density Laminate)

Storage levels

Integration of base cupboards available for various designs/devices

Representation of the functional levels



Introduction System design fume cupboard units

Representation of the functional levels



- Level for functional space Stand tripod holder
- Level for electronical service outlets (option) Internal sockets, switches outside
- Level for mechanical service outlets

Arrangement of fittings possible in each slot at every 75 mm distance points

- Level for electrical sockets and front control valves
- Level of storage space
 Integration of under bench cupboards/devices/waste disposal possible



Fume cupboard systems Experiment in safety.

1.1 DELIAguard bench-mounted fume cupboard	24-25
1.2 DELTAguard low ceiling bench-mounted fume cupboard	26-27
1.3 DELTAguard low level fume cupboard	28-29
1.4 DELTAguard walk-in fume cupboard	30-31
1.5 DELTAguard filter fume cupboard	32
1.6 DELTAguard radio nuclide fume cupboard	33
1.7 Special purpose (acids) high performance fume cupboard	34-35
1.8 DELTAcare fume cupboard	36-37
1.9 DELTAguard EX-fume cupboard	38-39
1.10 Special applications	40
1.11 Demonstration fume cupboards	41
1.12 DELTAbigbox	42-43
1.13 Air Barrier Efficiency	44
1.14 Engineered Enclosures	46
1.15 Weighing containment	47
1.16 Chemicals disposal /	
Disposal substructure	48-49
1.17 Extraction systemes I Articulated arm flexible extractor	50-51



Introduction Fume cupboard systems

One of the most important pieces of safety equipment in laboratories is the fume cupboard. Therefore, the requirements defined for this device are based on DIN EN 14175.

To comply with the safety function, and thus the preservation of safety, the exhaust airflow is an important criteria. The retention of pollutants (airborne contaminants) inside the fume cupboard, and the resistance to external air flow, that could interfere with the fume cupboard, depends by enlarge on the extraction volume. The further the sash is opened, the stronger the retention of the fume cupboard is impaired. Based on these considerations, in addition to the static, the dynamic behaviour in a resistance test is required, as proof according to DIN EN 14175. Here, a parasitic airflow is created near the fume cupboard to evaluate the stability of the inflow and the retention potential of the fume cupboard.

DELTA 30 fume cupboards, with its comprehensive variety of models fulfil the requirements of DIN EN 14175 in its full topics with the best values. The exhaust system has optimized extraction zones in the rear panel, which are very easy to disassemble for cleaning purposes, ensuring ideal air flow and ventilation. The hood interior offers a large useable area. The overall construction optimises air Flow without disturbing it. Optimal usability, and maximum safety at work: the decisive factors for our fume cupboards.

Our range:

- Bench-mounted fume cupboard
- Low ceiling bench-mounted fume cupboard
- Low level fume cupboard
- Walk-in fume cupboard
- Filter fume cupboard
- Radio-isotope fume cupboard
- Special purposes fume cupboard
- DELTAcare fume cupboard
- EX-fume cupboard





Product benefits Fume cupboard systems

- Fume cupboard tested, and certified according to DIN EN 14175
- Optimized airborne contaminants retention capacity, offering low exhaust flows at the same time
- Maximum usable work space, due to extra-narrow fume cupboard sides
- Maximum visibility through the use of standard skylight glazing
- Bench-tops and interior surfaces, as required
- Bench-top with moulded, flow-optimizing front rim
- Exhaust system, with optimized air intake zones for a full-surface extraction of the work surface
- Ergonomically designed sash handle bar for easy one-handed operation twist-lock release mechanism
- Maintenance friendly thanks to large inspection panel, easy-to-disassemble internals and the table top simple to replace
- Modules with splash protection
- Electric panels on either side of the interior
- Dense population, no overlap of the service outlet and tripod level
- Standard battery-backed air-monitoring unit with IR interface
- Integrated function control panel at eye level in the pilaster, optionally with a graphical OLED display functional monitoring of the main operating and status information of the fume hood are displayed (e.g. volume flow, inflow, error and operating messages)
- Support tripod holder on the rear panel
- Optional: Standard Base / Acid cabinet or safety storage cabinet
- Wide range of accessories, and options such as an automatic motorized sash drive, fume cupboard control (with integrated web server and ECO-efficiency indicator, by averaging, in comparison with other linked laboratory fume cupboards the energy consumption of the individual device)



- The PROTECT-model completes the DELTA 30 system of laboratory fume cupboards, providing maximum energy efficiency and user safe system
- The innovative, active supportive flow technology, induces and stabilizes the inflowing air
- Fume cupboards of the conventional type require an air extraction 50% greater than the PROTECT- model
- The reduced energy consumption, means correspondingly low operating costs at the same high level of safety
- Active monitoring of the air-injection system
- Worktop with adapted air flow profile over the entire work surface width
- Both side pilasters with added air injection

DELTAguard PROTECT



Higher energy efficiency – lower operating cost. Sustainability that pays off.

Equipped with the advanced technology PROTECT fume cupboards use 33% less air than conventional fume cupboards for safe operation, and thus enable cost-effective laboratory operation. Thus, the investment is recovered with the PROTECT system, just by the savings in energy costs (supply air flow rate) and the investment costs for a smaller scale building ventilation system within a short time. With the supportive air injection, we rely on innovative DC motor technology. DC fans consume significantly less energy, operate very quietly, and at the same time generate less heat than traditional AC motors. The PROTECT fume cupboard system, with active flow technology support increases the protection level, making it one of the world's safest, and at the same time most economical laboratory fume cupboards.

These fume cupboards are available as PROTECT models with active flow technology support:

- Bench-mounted fume cupboard
- Low ceiling bench-mounted fume cupboard
- Low level fume cupboard
- DELTAcare fume cupboard





- ¹ Taking a simultaneity of 10% into account, i.e. in the case of 10% of the fume cupboards the sashes are open and in 90% of fume cupboards the shashes are closed.
- ² Taking a simultaneity of 40% into account, i.e. in the case of 40% of the fume cupboards the sashes are open and in 60% of fume cupboards the shashes are closed.



COMPARISON OF ENERGY SAVING OPTIONS

- Controlled air volume, corresponding to the free inflow in vertical, horizontal or combined sash opening
- Maintenance-free and self-cleansing measuring system with little loss of pressure, optional Venturi measuring system
- Energy saving, and improving work safety, without restricting usability
- Complete system solution from one source; all exhaust air, supply air, drive and control components are coordinated to achieve an optimized and energy-efficient room air balance
- Graphical functional monitoring display with optional OLED display and ECO energy efficiency indicator
- Fast and reliable microprocessor controls, with simple integration into a buildings management system, via BACnet, LON or Modbus technology or conventionally via analogue signals

- Visualisation of system data via PC with a web browser or tablet computer possible
- Fail-safe, proven path and incoming air flow sensor for stable and quick set point
- Emergency button V-max, to increase exhaust air volume flow in the event of an accident, regardless of the sash opening
- Automatically closing sash to increase the protection and energy optimization, with motion detector, to monitor the work area and initiate the closing process (UP/DOWN button integrated in control panel)
- Light barrier for obstacle detection when closing the sash
- Optional footswitch

Quick and easy set-up



Fume cupboard systems | 1.1 DELTAguard bench-mounted fume cupboard

- Multipurpose fume cupboard according to EN 14175
- Variant: Fume cupboard for high thermal loads according to EN 14175-7
- For high heat and acidic load and the handling of unsealed radioactive substances, other fume cupboard types are available

Fume cupboard systems | 1.1 DELTAguard bench-mounted fume cupboard



Fume cupboard systems | 1.2 DELTAguard low ceiling bench-mounted fume cupboard



- Multipurpose fume cupboard according to EN 14175
- Optimized use of space due to an overall height of only 2405 mm
- Synchronously running telescopic sash for ease of use
- For high heat and acidic load and the handling of unsealed radioactive substances separate fume cupboard types are available

Fume cupboard systems | 1.2 DELTAguard low ceiling bench-mounted fume cupboard



01 Option: Sash with 3/4 cross slides07 Option: Under bench cabinet or
safety store cabinet02 Fume cupboard functional monitoring display08 Option: Fume cupboard controller (damper and
high-speed actuator) 2495 mm Connection
height03 2 rows tripod rod holder09 Option: Internal sockets, switched outside04 Option: Internal sockets, switched outside09 Option: Drip cup05 Service fitting points09 Option: Drip cup06 Aluminium duct with electrical service outlets
and front control valves10 Lighting



Fume cupboard systems | 1.3 DELTAguard low level fume cupboard

- Multipurpose fume cupboard according to EN 14175
- For high heat and acidic loadand the handling of unsealed radioactive substances other fume cupboard types are available.

Fume cupboard systems | 1.3 DELTAguard low level fume cupboard



10 Option: Drip cup

11 Lighting

- 05 Option: Internal sockets, switched outside
- **06** Service fitting points

29

ï 9

Fume cupboard systems | 1.4 DELTAguard walk-in fume cupboard

- Multipurpose fume cupboard according to EN 14175
- For high heat and acidic load and the handling of unsealed radioactive substances other fume cupboard types are available

Fume cupboard systems | 1.4 DELTAguard walk-in fume cupboard



- Upper part glazed fixed screen or optional 2 cross slides
- 02 Option: sash with 3/4 cross slides
- **03** Fume cupboard functional monitoring display
- 04 6 rows tripod rod holder
- 05 Option: Internal sockets, switched outside
- **06** Service fitting points

- 07 Service panel left or right available
- Option: Fume hood controller (damper and high-speed actuator) 2820 mm Connection height
- 09 Option: Drip cup
- 10 Lighting





10 Lighting

Available as one or two phase filter

06 Service fitting points

2 phase filter from frame size 1500 (asymmetrical sequence)





- Option: Interior in stainless steel or polypropylene
- Sash made of Makrolon / acrylic one-piece, option: access apertures
- **04** Service fitting points
- **05** Aluminium duct with electrical service outlets and front control valves

- 08 Option: With base cupboard or safety cabinet
- Option: Fume hood controller (damper and highspeed actuator) 3075 mm Connection height
- Fume cupboard for the handling of unsealed radioactive materials in accordance with DIN 25466:2012-08



Fume cupboard systems | 1.7 Special application (acids) high performance fume cupboard

- Fume cupboards for high heat and acidic load according to EN 14175-7:2012-08
- Perchloric acid fume cupboard for working with perchlorics
- Hydrofluoric acid fume cupboard for working with fluorides

Fume cupboard systems | 1.7 Special application (acids) high performance fume cupboard





- Option: waste air scrubber on the top of the fume cupboard or next to the fume cupboard in a separate cabinet
- 02 Option: Sprinkling the exhaust air duct
- Option: Inner lining in stoneware or polypropylene
- **04** Service fitting points
- Aluminium duct with electrical service outlets and front control valves
- **06** Option: neutralization system in conjunction with waste air scrubber
- Option: pH-metering device for neutralization of the wash water



- Integral bench-mounted fume cupboard with electrical drive stepless adjustable height
- Work surface heights of 750 to 950 mm adjustable
- Anti-pinch safety

- Wheelchair users can easily work on this fume cupboard
- Transparent control panels in the sides
- Moving heavy equipment and loads at the touch of a button
Fume cupboard systems | 1.8 DELTAcare fume cupboard



- Upper part glazed fixed screen or optional 2 cross slides
- 02 Option: sash with 3/4 cross slides
- 03 Exhaust functional monitoring display Connection height
- 04 3 series tripod rod holders
- 05 Option: Internal sockets, switched outside
- **06** Service fitting points

- 07 Service panel left and right
- Option: Fume hood controller (damper and high-speed actuator) from 2470 to 2870 mm Connection height
- 09 Space
- 10 Option: Drip cup
- 11 Lighting



- Certified in accordance with Directive 94/9/EC
- Consistently running conformity assessment procedures
- Suitable for hazardous areas (within an EX-Zone 1)
- Ignition sources are safely avoided by the design of the fume cupboard, so that sparks can not be created and explosive atmospheres can't ignite
- All surfaces are electrically conductive and grounded

Fume cupboard systems | 1.9 DELTAguard Ex-fume cupboard



Fume cupboard system | 1.10 Special designs



Fume cupboard with integrated physical protection extinguishing system (night fume cupboard)



Washing fume cupboard

Spray cabin

Fume cupboard systems |1.11 Demonstration fume cupboards



- Pass-through fume cupboard, both sides with sash
- For installation between preparatory and demonstration room
- With blackout sliders



Universal demonstration fume cupboard (with excellent visibility through panoramic window)

Fume cupboard systems | 1.12 DELTAbigbox

- System solution for systems and equipment with moderately loaded emissions
- Optimum modular design adapting the dimensions of the equipment requirements with high efficiency
- Access via horizontal sash, wing, hinged, folding or sliding doors, closed or with glazing
- Exhaust performance and air distribution according to process requirements
- Variable service and power supply
- Installation upon request such as tripod structures or warning systems



Fume cupboard systems | 1.12 DELTAbigbox

01 Dimensions upon request

02 Example: Access via folding doors

02



- A symbiosis of a DELTAguard fume cupboard with an air barrier air management system
- For safe operator protection, compliant with EN 14175-3 or product exposure (OEL) <10 g / m³ and product protection, within a clean room zone up to class 5 according to EN ISO 14644-1
- Also with a free front opening of 900 mm height
- Option: Comprehensive horizontal slide for spray and splinter protection
- Option: Horizontal sliding screen with two glove ports and gloves as protection against cross contamination
- Variation: System completely in stainless steel

Air Barrier & Containment Systems

Product solutions for special requirements



The vertical AirBarrier (air barrier) on the front opening of the containment, i.e. between operator and product, is the base component for the safe and robust retention capacity of this technology. It can be used safely from the free front opening, over the entire width of the containment without protective screens, curtains, or other mechanical barriers restricting ergonomic work.

Lab Safety

- Safety work tables
- Chemical filling areas
- AirTable boxes
- Disposal substructure
- "Lab butler" disposal
- "Lab butler" supply
- Weighing containment
- AirBarrier "efficiency"
- Laminar flow systems

Weighing and refilling containment

- Free working place
- Clean room containment
- Laminar flow systems
- Material and personnel airlocks
- Air Barrier
- Horizontal Air Barrier
- Air Barrier special workstations

Equipment

- Lifting devices
- Lifting and turning stations
- Container handling
- Conveyor technology
- Balance tables
- Continuous liner system



Extraction systems | 1.14 Engineered Enclosures



Enclosures with flexible, modular design - precisely adapted to your needs for:

- Apparatus/appliances
 (splinter shield/splash guard)
- Automated robotic workstations/processes
- Pipetting/liquid handling workstations
- High-throughput screening
- HPLC instruments

- Handling and transfer of hazardous substances (solvents)
- Weighing
- Working with powders
- Other laboratory automation processes
- Measurement stations (Faraday cage)
- Pass-through



Safe weighing containment for weighing potent, fine powders in the laboratory:

- Maximum protection of personnel
- Minimal product exposure
- Secure, stable and reproducible weighing results

- Robust pollutant retention capacity according to DIN EN 14175-3
- Width: 900 mm, 1200 mm and 1500 mm
- Also available with air filters

12

Disposal unit substructure with collection containers

Extraction systems | 1.16 Chemical disposal / Disposal unit substructure

Disposal unit Type AEU-4 ATEX

- Collection container, HDPE el 30 litres
- Collection tray 30 litres Material HDPE el
- Non-contact 3-point level measurement, pressure sensor and buzzer.
 3 Light indicator installed in the media panel of the fume cupboard, or alternatively in the safety cabinet.
- Safety cabinet type 90 according to EN 14470-1. Dim: 590 x 570 x 600 mm
- Collector pipe, ca. 8 HPLC hose connections possible or
- Safety funnel with cover and table mounting for the laboratory fume cupboard

Disposal unit Type AEU-7 ATEX

- 2 Collection container 10 litres each, HDPE el
- Drip pan 12 litre HDPE el
- Non-contact level measurement pressure sensor and buzzer. 3-point illuminated indicator installed in the media panel of the fume cupboard, or alternatively in the safety cabinet.
- Safety cabinet type 90 according to EN 14470-1. Dim: 590 x 570 x 600mm
- Collector pipe, ca. 8 HPLC hose connections possible or
- Safety funnel, with cover and table mounting for the laboratory fume cupboard

Disposal unit Type AEU-8 ATEX

- 2 Collection containers 10 litres each, HDPE el
- 12 Litre drip tray HDPE el
- Float switch, one point limit switch and buzzer. One indicator light, fitted either in the fume cupboard media panel, or the safety cabinet.
- Safety cabinet type 90 according to EN 14470-1. Dim: 590 x 570 x 600mm
- Pipe collector, ca. 8 HPLC hose connections possible or
- Safety funnel with cover and table mounting for the laboratory fume cupboard

LABbutler Chemical disposal

The compact and manoeuvrable LABbutler conveyors for the collection of waste chemicals, acids and, leach resistant HDPE with 100 litre holding tank, 110 litre safety tank and integrated pump system.







AFU-8

AEU-4







Extraction systems | 1.17 Articulated arm flexible extractor

- Single-point extractor for work places requiring high flexibility
- Easily adjustable with its ball bearing friction joints
- Easy to clean in and outside, smooth aluminium tubing, and easy-to-remove plastic
- Air tight valve
- Upon request, available with polypropylene tubing

Extraction systems | 1.17 Articulated arm flexible extractor





Service systems Tailor-made solutions for your workplace

2.1 System duct	58-59
2.2 Container	60-61
2.3 Reverse-side container	62-63
2.4 Standing unit for wall bench	64-65
2.5 Standing unit for double (island) workbench	66-67
2.6 Standing bridge	68-69
2.7 Shelf level	70-71
2.8 Media-energy duct	72-73
2.9 Media rail	74-75
2.10 Media column	76-77
2.11 Sink	78-79
2.12 Washing-up centre	80-81
2.13 Disposal system	82-83
2.14 Decentralized services and supply	84-85
2.15 System accessories	86-89



Introduction Service systems



The basis for the high flexibility of our service systems is a frame size spacing of 300 mm, which applies consistently across all service systems, but also the media ducts, base cabinets and cabinet systems. It forms the basis of individual planning for the design of laboratory layouts, which are characterized by a motivating work environment, and harmonious work processes - with the aim of creating optimal conditions for research. In effect, as a result of the very fine-grained modular structure of our standard elements, creating countless solutions for different requirements and tasks in the laboratory, producing an individual atmosphere, and overview joining functionality, quality and design.

Service supply Electrics



Power grid or data network? The system duct makes cabling easy.

- Wide range of electrical devices mounted with sockets in many variations, e.g. contrasting colours for special and emergency networks, or country-specific types
- Buttons and switches from our standard range and special elements under customer requirements
- Optional multi compartment versions available
- Splash protection
- Installation of data networks (equipment mounting boxes)
- Option: fuses, residual current circuit breakers for securing freely definable circuits
- Cover guide groove, preventing the lid from falling when opened

Service supply Plumbing



The service panels allow a virtually unlimited individual arrangement of all fittings and elements.

- Variable arrangement, of fittings over the entire systems length at the point of use
- Pipe work according to the requirements
- Fittings for water, natural gas, LPG, compressed air, technical gases up to purity 4.5, (high) purity gases up to purity 6.0 and vacuum out of different materials (brass, stainless steel, polypropylene, etc.)
- Fittings including additional equipment, such as pressure regulators, fine adjustment valve, etc. can be supplied in a variety of attachments depending on the system
- Supply leads from the ceiling or from the ground
- Pre-installation with all safety checks and pressure tests
- Hidden pipe work

Service systems | 2.1 System duct



- DELTA 30 system aluminium duct system in Frame size elements, with corner connection or by measurement
- Can be fitted on tabletops, and walls
- Expandable by convection grid
- Wide range of accessories for a significantly increased value in use

Service systems | 2.1 System duct



- 2 Heat convection grid of aluminium profiles, depth as required
- System duct as wall duct (system groove in front and below)
- **06** System duct inside corner (300 x 300 mm)
- **07** System duct outside corner (300 x 300 mm)
- **08** Rectangular wall duct

Service systems | 2.2 Container



- Centralized service supply
- System duct upgradeable as a multi-chamber duct
- Lower table depth possible through lateral arrangement
- Linkage module connecting standing and sitting work surface level
- Stand-alone module for flexible use of space
- No superstructures that interfere with the supply of appliances
- Support function for fixating worktops

Functional grooves for extensive accessory range

- Ideal for double work benches for head-side linking, from one or two writing areas
- Optionally available CPU holder



Container Depth 720 mm for table depth 750 mm
 Container depth 795 mm for table depth 835 mm
 Container depth 870 mm for table depth 900 mm

02 System duct for electrical service outlets

Service systems | 2.3 Reverse-side container



- Centralized service supply
- System duct upgradeable as a multi-chamber duct
- Working flush service supply at the rear of the table
- No superstructures that interfere with the supply of appliances
- Functional grooves for extensive accessory range
- With appropriate sequence installation path (service corridor) for the supply of apparatus (e.g. gas chromatograph)



- 01 System duct for electrical and gas outlets
- 02 Combination with all series and types possible
- 03 Combination possible with all work tops

Service systems | 2.4 Standing unit for wall work bench



- Work place in accordance with DIN EN 13150
- Excellent properties for wet work environments
- Splash protection to the wall
- Aluminium spine system
- Dense population possible
- Functional grooves for extensive accessory range
- Integration of the first storage level in the

system duct

- More storage levels steplessly adjustable in height
- Few joints
- Three-dimensional tripod rod holder
- The system uprights are extendable by adding profiles
- Wide range of accessories for a significantly increased value in use





- 02 Option: Additional storage levels
- 03 System duct for electrical outlets

 Service panel (arrangement of fittings possible in each slot at every 75 mm distance points)

05 Combination with all table systems possible



Service systems | 2.5 Standing unit for double work bench

- Work place in accordance with DIN EN 13150
- Excellent properties for wet work environments
- Splash protection to the opposite workplace
- Aluminium spine system
- Dense population possible
- Functional grooves for extensive accessory range
- Integration of the first storage level in the system duct

- More storage levels steplessly adjustable in height
- Few joints
- Three-dimensional tripod rod holder
- The system uprights are extendable by adding profiles
- Integration of end sink is possible
- Wide range of accessories for a significantly increased value in use





- 02 Option: Additional storage levels
- 03 System duct for electrical outlets
- A Service panel (arrangement of fittings possible in each slot at every 75 mm distance points)
- **05** Option: splash guard made of safety glass
- 06 Combination with all table systems possible

Service systems | 2.6 Standing bridge



- Workplace based on DIN EN 13150
- Best features for the device work space
- Aluminium spine system
- Dense population possible
- Fittings can be used from both sides
- Functional grooves for extensive accessory range
- Integration of the first storage level in the system duct
- More storage levels steplessly adjustable in height
- Three-dimensional tripod rod holder
- The system uprights are extendable by adding profiles
- Integration of end sink is possible
- Wide range of accessories for a significantly increased value in use



- 01 Option: System uprights extension
- 02 Option: Additional storage levels
- 03 System duct for electrical outlets
- Arrangement of fittings possible in each slot at every 75 mm distance points
- **05** Free through reach
- **06** Combination possible with all table systems and series

Service systems | 2.7 Storage shelves



- Suitable for standing unit and standing bridge
- Attachable to the system uprights profile, height adjustable
- Includes two tripod rod holders and a glass shelve
- Suitable for wall mounting

Service systems | 2.7 Storage shelves



Storage shelf type 4

Storage shelf

Storage shelf Type 1: Storage of 5 mm raw glass attachment with 2 tripod rod holders Option: shelf 5 mm solid core

Storage level Type 3: Shelf of 19 mm particleboard core panel, melamine faced without tripod rod holders Storage level Type 4: Shelf of 19 mm particleboard core panel, melamine faced with 2 tripod rod holders Option: shelf 5 mm solid core Option: shelf 5 mm raw glass Option: integrated workplace lighting (LED lighting)



- Workplace according to DIN EN 13150
- Free use of space beneath the system
- Can both be used as a stand-alone, or services system for the entire room
- Ideally suited to work with apparatus
- Dense population possible
- Centralized media supply
- Flexible services
- Mechanical service outlets either downwards or forwards
- Mounting height as required
- Media installation duct with ample space for the horizontal installation feeds, insulation

and fixating of the cabling and piping; completely encased easy to maintain and clean

- Wall or ceiling mounted installation
- Can be used in combination with double work benches
- Easily expandable and upgradeable, also as a retrofit
- Combination with all series and types possible
Service systems | 2.8 Service energy duct



Floor

Ceiling



01 Installation space

02 Aluminium panels for electrical outlets

Services: Arrangement of fittings possible in each slot at every 75 mm distance points
 Option: corner or remote control

Service systems | 2.9 Media rail



- Free table arrangement with the overhead service system
- Flexible arrangement of the service outlets gas, electrics, data, multimedia
- Integrated lighting for optimal illumination of workstation, and special lighting with innovative LED technology
- Elegant, slim design, limited suspension points for easy integration into architectural concepts

Service systems | 2.9 Media rail



01 Mounting height as required

02 Electric service outlets according as required

O3 Arrangement of fittings possible in each slot at every 75 mm distance points

04 Option: with lighting

Service systems | 2.10 Service column



- Installation concept for open space laboratories
- Transparent, open and technically high-quality appearance
- The customer only needs to provide a single connection
- In addition to the columns the installation Frame size also accommodates suspended

cupboards, shelving, and point extraction system as well as partition elements to form smaller laboratory units

- Simple, cost-effective conversion or retrofitting
- Option: supply and distribution of the media via the functional ceiling, giving flexibility and mobility to the laboratory environment

Service systems | 2.10 Service column



01 Aluminium panels for fitting electrical outlets and front control valves

02 Mounting height upon demand

03 Ceiling connector if required

Service systems | 2.11 Sink



- Sink for installation into wall benches or in the laboratory rows
- Flush sink
- Option: under mount basin sink module with waste water protection
- Optional drain grooves

- Various materials and dimensions
- Optional stand for columns or wall fittings
- Optional splash guard





- 02 Space for eye-wash station optional
- 03 Stoneware sink

04 Option: Waste collector with full height drawer

05 Option: Waste bin

Service systems | 2.12 Washing-up centre



- Spine sink placed against the double work bench
- Flush sink
- Option: under mount sink
- Basin module sink with waste water protection
- Optional drain grooves or drain groove module
- Various materials and dimensions
- Front side panel mounted service fitting
- Optional splash guard













02 Eye-wash optional

Service systems | 2.13 Waste disposal system



- Waste disposal boxes of different materials with the corresponding durability
- Optional extraction in the base cabinets
- Drip trays as a safety element
- Optional drawer-opening foot pedal





Service systems | 2.14 Decentralised services



Having services directly at the work space, avoids the use of long leads and hoses. The services are integrated underneath the surface of the table.

- Ideal for media such as vacuum, compressed air, pure gases, pure and ultrapure water
- Integration underneath the tabletop in specially designed substructures facilitating maintenance and the supply of services
- Separate integration of devices, indicators and control units above the worktop ensuring easy handling and optimum use of work space
- Short service lines to point-of-use make for superb process quality



01 Option: Pull out with container



System accessories Add more value to your laboratory



Our components from the DELTA 30 range of system accessories make your system more efficient in many ways: you extend the functionality, simplify organization and improve workflows.









Grab tray

Tissue box holder

Service systems | 2.15 System accessories



Service systems | 2.15 System accessories

System compatibility								
	Container	Reverse side container	Table duct	Standing bridge	Standing unit (Wall bench)	Standing unit (Island bench)	System stand	
Grab tray				•	•	•		
Cable clamp	•	•	٠	•	•	٠	٠	
Tripod rod holder	•	٠	٠	•	•	•	٠	
Pipette holder			•	•	•	•		
Paper roll holder				•	•	•	٠	
Tissue box holder				•	•	•		
Flat screen bracket				•	•	•	•	
Storage board	•	٠	٠					
Swivel organizer	•	٠	٠					
Workplace lamp	•	•	•					
Telephone swivel	•	٠	٠					
Flat screen swivel arm	•	•	٠					
Groove profile	•	•	•	•	•	•	•	







Workplace lamp

Notebook holder

Swivel organizer



Table systems The basis for your workplace

3.1 Series E	94-95
3.2 Series 4FU	96-97
3.3 Series CFU	98-99
3.4 Auxiliary frame	100-101
3.5 Single table	102-103
3.6 Mobile auxiliary table	104-105
3.7 LABterminal	106-109
3.8 Balance table	110-111
3.9 Rack	112-113
3.10 Clean room furniture	114
3.11 Sensory analysis labs	115
3.12 Writing table work space	116-117

Series

Furnishing systems for workplaces with different types of frames, model series as well as bench tops

- Series E Economy
- Series 4FU 4-legged frame
- Series CFU C-frame
- Series 4FU with inserted sub-base and plinth 4-legged frame with inserted sub-base and plinth
- Series 4FU with inserted under bench cabinet and plinth 4-legged frame with inserted under bench cabinet and plinth
- Auxiliary frame with mobile table



Worktops Materials



Stainless steel work surface



High-pressure compact laminate work surface (standard or laboratory grade)



Composite stoneware work surface





Polypropylene work surface



Melamine work surface, PP edge

Stoneware work surface

- Epoxy resin work surface
- Stainless steel work surface
- Glass work surface, epoxy marine edge
- Melamine work surface, PP edge
- Melamine work surface, epoxy marine edge
- Polypropylene work surface
- Stoneware work surface

- Composite stoneware work surface, epoxy marine edge
- High-pressure compact laminate work surface (standard or laboratory grade)
- High-pressure compact laminate work surface (standard or laboratory grade), epoxy marine edge





The Series E (E = economy) is the most economical design. No need for table base, as the base cabinet is the supporting element of the work top. The wood frame cabinet stands on adjustable feet and is fitted with a base. The Series E can be used as a stand-alone or combined as well with all media and table systems.

- Standard widths: 450 / 600 / 900 / 1200 mm
- Standard heights: 750 / 900 mm (seated / standing working heights)
- Standard depths: 600 / 750 mm

ï LD Suma. And Address of the Owner, owne ē Con -

Table systems | 3.2 Series 4FU



Series 4FU

In the Series 4FU a metal 4-legged frame is the supporting element of the worktop. This table can be used with a suspended under bench cabinet, and with an inserted under bench cabinet with 100 mm plinth, both as stand-alone, as well as with mobile substructures with open base (100 mm). The series can be combined with all media/table systems.

- Standard widths:
 600 / 900 / 1200 / 1500 / 1800 mm
- Standard heights: 750 / 900 mm (seated / standing working heights)
- Standard depths: 600 / 750 mm





In the Series CFU a metal C- frame is the supporting element of the worktop. This bench can be used both stand-alone as well as with mobile substructures. The series CFU can be combined with all media/table systems. Especially when working seated the CFU provides benefits on account of the legroom.

- Standard widths: 600 / 900 / 1200 / 1500 / 1800 mm
- Standard heights: 750 / 900 mm (seated / standing working heights)
- Standard depths: 600 / 750 mm

Table systems | 3.4 Auxiliary frame





Auxiliary frame

With the auxiliary frame, a metal frame is the supporting element of the worktop. It is covered and has a 100 mm base. The auxiliary frame can be used as a stand-alone unit (wall bench and island bench), in combination with a standing bridge and with all table systems.

- Standard widths: 600 / 900 / 1200 / 1500 / 1800 mm
- Standard heights: 750 / 900 mm
- Standard depths: 160 mm

Option: drip cupOption: Mechanical services

Table systems | 3.5 Single table





Single table

01 Option: frame with storage level

The freestanding table can be positioned easily and individually. The sturdy welded table frame is well suited to support heavy apparatus. This table is not compatible with the media system. Not interlaceable with additional tables.

- Standard widths: 600 / 900 / 1200 / 1500 / 1800 mm
- Standard heights: 750 / 900 mm
- Standard depths: 600 / 750 / 900 mm



Table systems | 3.6 Mobile auxiliary table



Mobile auxiliary table

In the mobile auxiliary table a metal frame on castors is the supporting element of the worktop. This bench can be used with an open base (100 mm) inserted substructure as well as with additional storage shelf, stand-alone as well as with other mobile substructures. The mobile auxiliary table can be combined with all media and table systems.

- Standard widths: 600 / 900 / 1200 / 1500 mm
- Standard heights: 750 / 900 mm
- Standard depths: 600 / 750 mm

Table systems | 3.7 LABterminal



- Flexibility due to mobility
- Extremely stable multi-chamber aluminium profile
- Robust and durable frame and base
- Integrated high-volume media duct (electricity, gas, and data)
- Flexible positioning of the media (sockets, network connections and gas fittings)
- Variable by simple adaptation to changing operational environments and new apparatus
- Modules can be daisy-chained to form larger units

- Space-efficient thanks to the vertical arrangement of different working levels
- Built-in computer bracket
- Standard available in three widths and two depths, for different device sizes.





reddot design award winner 2013

Table systems | 3.7 LABterminal





The LABterminal system offers a wide range of design and configuration options, depending on the application and apparatus size. On request we will be happy to quote you a customised solution.

- Standard widths: 900 / 1200 / 1500
- Standard depths: 800 / 1050 mm




- 01 Mechanical service box with fittings
- 02 Tool-less handling of the E-boxes
- 03 Easy variation of the modular shelves

- 04 Electrical services, including cable storage
- **05** Flexible design, castors
- 06 Stationary version, supporting feet





Balance table



Table systems | 3.9 Rack



- Rack with several shelves to store apparatus
- Fitted with castors



01 Number of trays and drawers as required

02 Option: electric duct

Table systems | 3.10 Clean room furniture



Quality standards of our clean room furniture

- Scratch-resistant, smooth and matt surfaces: either chipboard with fine particle surface according to EN 312 (all horizontal surfaces [friction intensive] with HPL coating) or highpressure laminate (HPL)
- All visible and non-visible panel edges are protected with edge bandings

Our clean solutions for clean room and air lock systems

- Sit-over benches with or without shoe compartments (one or both) cabinets for changing shoes
- Work clothing wardrobe
- Hampers
- Supply and storage cabinets (with dispenser for small items/tilt boxes etc.)
- Various cabinet systems for valuables, detergents, hampers, etc.



Sensory labs

- Preparation room (kitchen) with sideboard and mobile tables
- Partition with hatch (electronic, both central as well as individual locked) between the test and preparation room
- Neutral, separated cabins (noise protection) with sufficient space to move
- Test room temperature of 20 +/- 3 ° C with odourless air and relative humidity up to 70% (there is constant over-pressure in the test room compared to the kitchen)
- Steady laboratory lighting, allowing for different illumination possibilities (dimmers, red and green coloured light sources, monochromatic light sources)

Table systems | 3.12 Office work space



- Optional system duct at the side or at the back of table or as a variation with integrated convection grid
- Base is a flexible solution with mobile elements
- Various table depths and widths available
- Optional with side wood flat cover panel

- Design based on wall working table
- Optically harmoniously matched to the DELTA 30 system laboratory work places





Office work space



Office work space Ergo





Cupboard systems Everything organized to perfection.

4.1 Under bench cabinets	122-125
4.2 Cupboards /top-mounted cabinets	126-127
4.3 Under bench safety cabinets for hazardous materials storage	128-129
4.4 Hazardous materials storage cabinets	130-131
4.5 Special cabinets	132-133
4.6 Wall /overbench cabinets	134-135

Innovation in detail

The added value of our cabinet systems.



Designed for every purpose



fixed: with sturdy foot and base

■ flexible: with easy rolling castors (Ø 75 mm)





Storage systems | 4.1 Under bench cabinets



Our cabinets come in various designs with a vast selection of drawers and doors.

All cabinets are available in the following versions:

- for working height 750 mm
- for working height 900 mm
- depth 500 mm
- depth 600 mm







Cabinet inserted in Series 4FU frame



Cabinet inserted in Series 4FU frame with plinth



Mobile cabinet on castors



Cabinet models

The various versions of the under bench cabinets are available in four different forms:

- Cabinet inserted in Series 4FU frame with plinth
- Mobile on castors, combinable with Series 4FU and CFU, mobile side table available separately.
- Base cabinet on plinth as a substructure unit Series E
- Cabinet inserted in Series 4FU frame

Storage systems | 4.1 Under bench cabinets



Under bench cabinets for seated working height of 750 mm

0	= open
FL	= single door, left hinged
FR	= single door, right hinged
SFL	= single drawer, single door, left hinged
SFR	= single drawer, single door, right hinged
S2	= 2 drawers
S3	= 3 drawers
S4	= 4 drawers
SMH	= single drawer, pencil tray, suspended filing system
FLI	= single door, left hinged, installation
FRI	= single door, right hinged, installation

F2	= doube doors	
S2F2	= 2 drawers, double doors	
F2I	= double doors, installation	
 Seated working height 750 mm 		
Base depth 500/600 mm		
• Plinth height 100 mm		

- Option: label for pull
- Option: Lock

Storage systems | 4.1 Under bench cabinets



Under bench cabinets for standing working height of 900 mm

0	= open
FL	= single door, left hinged
FR	= single door, right hinged
FLI	= single door, left hinged, installation
FRI	= single door, right hinged, installation
SFL	= single drawer, single door, left hinged
SFR	= single drawer, single door, right hinged
F2	= double doors
F2I	= double doors, installation
SF2	= single drawer, double doors
S2F2	= 2 drawers, double doors

Z2	=	2 pull-outs
S3	=	3 drawers
S4	=	4 drawers
S5	=	5 drawers

- Standing working height 900 mm
- Base depth 500/600 mm
- Plinth height 100 mm
- Option: label for pull
- Option: Lock



Storage systems | 4.2 Tall cabinets / Top-mounted cabinets

Our tall storage cabinets come with various accessories, including a guide rail, to make optimal use of space.

- Stand-alone cabinets, wall units or room divider blocks
- Winged doors closed, glass-insert doors (partially or fully glazed)
- Top-mounted cabinets always with integrated aluminium guide rail saving space.
- Optional ladder with parking rail

Wide range of accessories, variations and options available, such as extra shelves, pull drawers, internal drawers, suspended filing system, staggered drawers, etc.

Storage systems | 4.2 Tall cabinets / Top-mounted cabinets





Storage systems | 4.3 Under bench safety cabinets for hazardous materials storage

- Under bench safety cabinets for integration with bench fume cupboards
- Complete range of FWF 90 safety storage cabinets, in various sizes for storage of hazardous materials, in work rooms, in accordance with DIN EN 14470-1 (Type 90), and flammable liquids 20 (Annex L)
- Alkalis and acids cupboard with air extraction
- Wide range of accessories, variations and options available
- Design as required



Storage systems | 4.3 Under bench safety cabinets for hazardous materials storage







Storage systems 4.4 Safety cabinets for hazardous materials storage

We supply various hazardous materials storage cabinets for your individual requirements.

- Safety cabinets integrated in wall unit
- Complete range of FWF90 safety storage cabinets in various sizes for storage of hazardous materials, in work rooms, in accordance with DIN EN 14470-1 (Type 90) and flammable liquids 20 (Annex L)
- Alkalis and acids cabinet with individual compartment air extractor
- G90 fire-resistant gas cylinder cabinets in various sizes, with and without pipework installation as well as gas shortage indicator and / or gas detection system
- Wide range of accessories, variations and options available
- Design as required

Storage systems 4.4 Safety cabinets for hazardous material storage



Safety cabinets for hazardous materials storage

CHGSFR	chemicals and poison storage cabinet,
	single door, right hinged
CHGSFL	chemicals and poison storage cabinet,
	single door, left hinged
CHSFR	chemical storage cabinet, single door, right hinged
CHSFL	chemical storage cabinet, single door, left hinged
CHSF2	chemical storage cabinet, double doors

SLSFR acid and alkali storage cabinet, single door, right hinged SLSFL acid and alkali storage cabinet, single door, left hinged

131



For all special uses

- Pull-out cabinet in two depths
- Pull-out cabinet accessible from both sides
- Option: with air extractor
- Emergency cabinet including safety equipment
- Equipment cabinet ventilated
- Electrical and mechanical services possible
- For devices such as rotary evaporators, ovens, analysis equipment, etc.

Storage systems | 4.5 Special cabinets



SHSFR	emergency cabinet, single door, right hinged
SHSFL	emergency cabinet, single door, left hinged
ZS2	2 Pull-out cabinet, 2 full-height drawers

Special cabinets

Option: safety equipment, 1 first aid box 400 x 350 x 110, 1 fire extinguisher 12 kg, 2 fire blankets, 2 sand buckets, 1 sand shovel, 1 instructions for first aid

02 Option: Extractor connection Ø 110 mm

03 Option: Lock, available for all tall cabinets

Storage systems | 4.6 Wall / overbench cabinets



We supply wall units either open or with various door models.

- Various types of doors, depending on requirements
- Can be combined with the following service systems: wall working table, double working table, standing bridge
- Option: Integrated ladder rail
- Standard: 2 file heights
- Option: Heights as required

Storage systems | 4.6 Wall / overbench cabinets









MEDIZINISCHES FORSCHUNGSZENTRUM, ESSEN, GERMANY



BIOTECHNICUM, FACHHOCHSCHULE LÜBECK, GERMANY



BIOTECHNICUM, FACHHOCHSCHULE LÜBECK, GERMANY



MÜNSTER ELECTROCHEMICAL ENERGY TECHNOLOGY, MÜNSTER, GERMANY





WISSENSCHAFTSZENTRUM, STRAUBING, GERMANY


CLEMENS-WINKLER-BAU, FREIBERG, GERMANY



CLEMENS-WINKLER-BAU, FREIBERG, GERMANY





INSTITUT FÜR PHARMAZIE UND LEBENSMITTELCHEMIE, UNIVERSITÄT WÜRZBURG, GERMANY



FORSCHUNGSZENTRUM CECAD AN DER UNIVERSITÄT ZU KÖLN UND UNIKLINIK KÖLN, GERMANY





INSTITUT FÜR PHARMAZIE UND LEBENSMITTELCHEMIE, UNIVERSITÄT WÜRZBURG, GERMANY





PHILIPPS-UNIVERSITÄT MARBUG, GERMANY

Main facilities Syke





Wesemann GmbH – Headquarters

Max-Planck-Strasse 15–25 28857 Syke Germany

 Fon:
 +49 42 42 594-480

 Fax:
 +49 42 42 594-333

 E-Mail:
 info@wesemann.com



Photos on pages 6, 138-139 l © diephotodesigner l www.diephotodesigner.de Photos on pages 16, 110, 122, 150-151 l © Johannes Marburg l www.johannesmarburg.com Photos on Pages 50, 134 l © Christina Kratzenberg l www.christina-kratzenberg.de

www.wesemann.com

Wesemann GmbH – Headquarters

Max-Planck-Strasse 15–25 28857 Syke Germany

Fon:	+49 42 42 594-480
Fax:	+49 42 42 594-333
E-Mail:	info@wesemann.com

