WELCOME

23. APRIL 2013

Köttermann
Systemlabor

we care
about your safety

Survey

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> Together as one

> Project management

> Integrated Quality

> EXPLORIS®

> Laboratory furniture

> Service systems

> Chemical storage cabinets

> Fume cupboards

Köttermann

> More than 60 years of experience with laboratories

> Internationally active group of companies

  - 11 countries with subsidiaries
  - Numerous authorised contractual partners
  - Export share: > 50%

> Production headquarters - Germany

> About 260 employees globally

> Turnover of ca. 50 Mil Euro
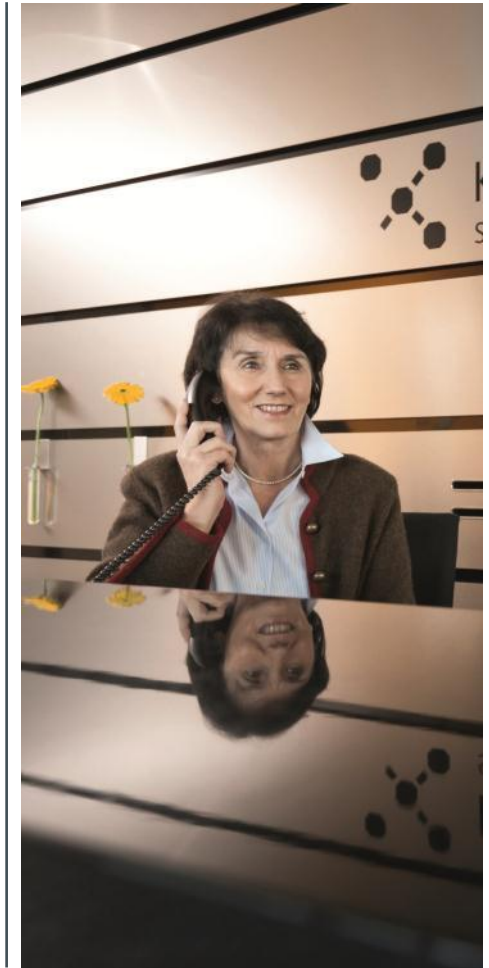
From workshop to an international company

> 1946 Foundation

> 1948 Specialised in furniture and equipment for pharmacies and laboratories

> 1960 Production of climate simulators

> 1973 First manufacturer in Germany to produce steel laboratory furniture

> 1975 The company grows – new buildings for production and storage as well as new Headquarters

> 1991 Revolution in laboratory fittings

From workshop to an international company

> 1998 Commissioning of the company's own test laboratory in Hänigsen

> 2001 TÜV-Certification according to DIN EN ISO 9001

> 2008 Installation of the photovoltaic system

> 2011 Production expansion – construction of the new logistics centre

> 2012 The Systemlabor EXPLORIS® was presented at ACHEMA 2012

LOCATIONS

> Subsidiaries

- Belgium - Köttermann bvba
- France - Köttermann Systemlabor S.A.S.
- United Kingdom- Köttermann Ltd.
- Netherlands - Köttermann B.V.
- Austria - Köttermann GmbH Austria
- Poland - Köttermann Sp. Z o.o.
- Switzerland - Köttermann AG
- Spain - Köttermann Systemlabor S.A.

LOCATIONS

> International sales / Partners

- Algeria
- Kenya
- Nigeria
- Mexico
- India
- Kuwait
- Malaysia/Singapore
- Sri Lanka
- United Arab Emirates
- Bosnia/Herzegovina
- Italy
- Croatia
- Malta

- Macedonia
- Norway
- Russia
- Serbia
- Slovenia
- Turkey
- Ukraine

National references

> Vattenfall Europe GmbH, Hamburg

> Universitätsklinikum, Essen

> Fachhochschule, Darmstadt

> Bayer CropScience, Frankfurt

> Volkswagen AG, Wolfsburg

> GPC AG, München

Vattenfall Europe GmbH, Hamburg

> Type: Energy production and power
  supply

> Analytical chemical laboratory

Universitätsklinikum, Essen

> Type: Hospital
> Conversion of the former casino into a central laboratory
> Basic examinations

Fachhochschule, Darmstadt

> Type: School, High School, University

> Centre for Research and Development

Bayer CropScience, Frankfurt

> Type: Biology

> Chemical laboratory

Volkswagen AG, Wolfsburg

> Type: Automotive industry
> Laboratory E43/44

GPC AG, München

> Type: Pharmacy
> Facilities of genetic workspace
> Security level S1

International references

> Britvic Soft Drinks Ltd, UK

> Budweiser Budvar, CZ

> Hochschule Wädenswil, CH

> Universidad Rey Juan Carlos, ES

> South Tyneside Hospital, UK

> GlaxoWellcome, AR

Britvic Soft Drinks Ltd, UK

> Type: Drinks

> Manufacturer and Sales of soft drinks

> Analytical lab

Budweiser Budvar, CZ

> Type: Brewery

> Established: April 1895

> Control laboratory

Hochschule Wädenswil, CH

> Type: School, High School, University

> Applied research and development into three centres

- Biotechnology
- Food and Nutritional Sciences
- Environmental and plant

> Chemical lab

> Biological lab

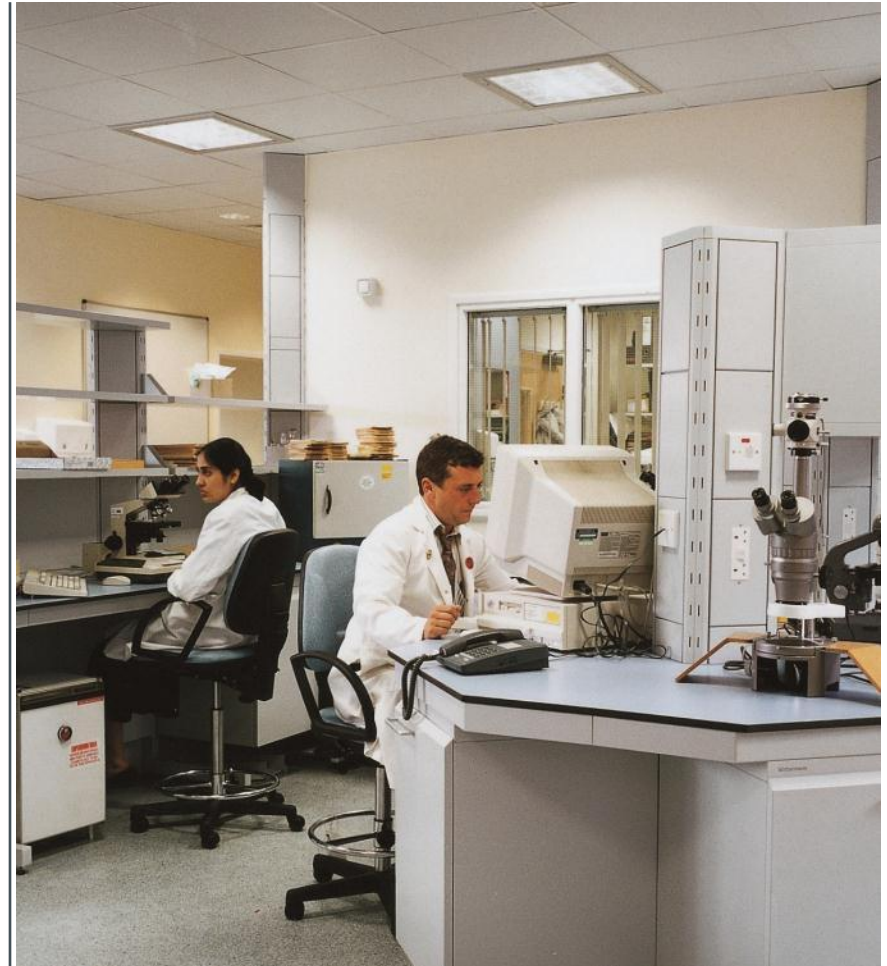# Universidad Rey Juan Carlos, ES

> Type: School, High School, University

> University of science and research institute Chemical lab

> Physical lab

South Tyneside Hospital, UK

> Type: Hospital
> Set up research and pathology lab

GlaxoWellcome, AR

> Type: Pharmacy

> Manufacture and monitoring of prescription drugs

> Physical and chemical quality control

Together as one

> Collaboration with trusted suppliers, partners and customers

> Together with our customers we develop intelligent solutions for safe laboratories

> We are grateful to our customers for providing their crucial input

> Your safety is important to us

- During consultation
- When we develop our products
- When the manufacturer commissions the fume cupboards
- And especially during the annual maintenance on site

Project management

Professional project management A-Z:

> Individual solutions for maximum customer satisfaction

> Professional and competent order processing

> Production of the Systemlabor EXPLORIS®

> Transport to the customer

> Provision and installation of laboratories taking into account national and international regulations

> Exhaust air management

> Handover of laboratory to the customer

Company

> Tradition

> Values

> Responsibility
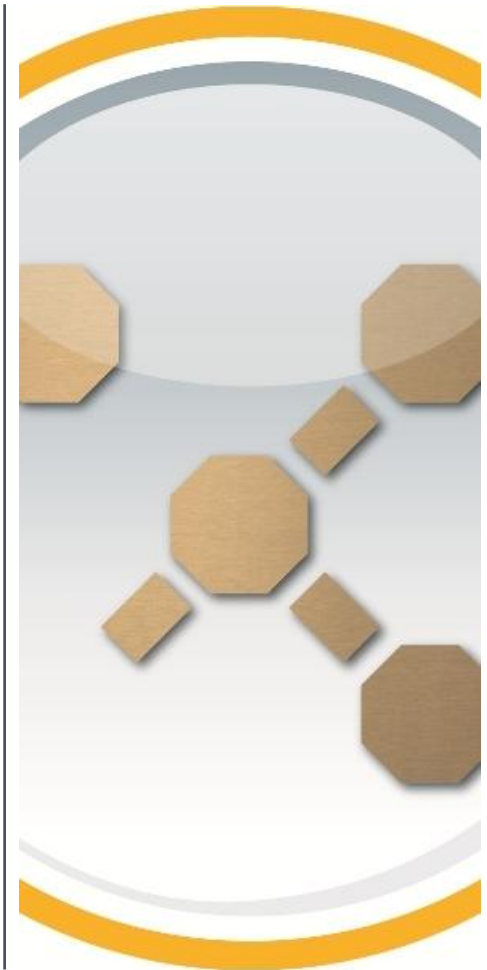
Customers

> Dialogue

> Advice

> Understanding

Employees

> Code of conduct

> Creativity

> Further qualification

Suppliers and distributors

> Continuity

> Trust

> Partnership
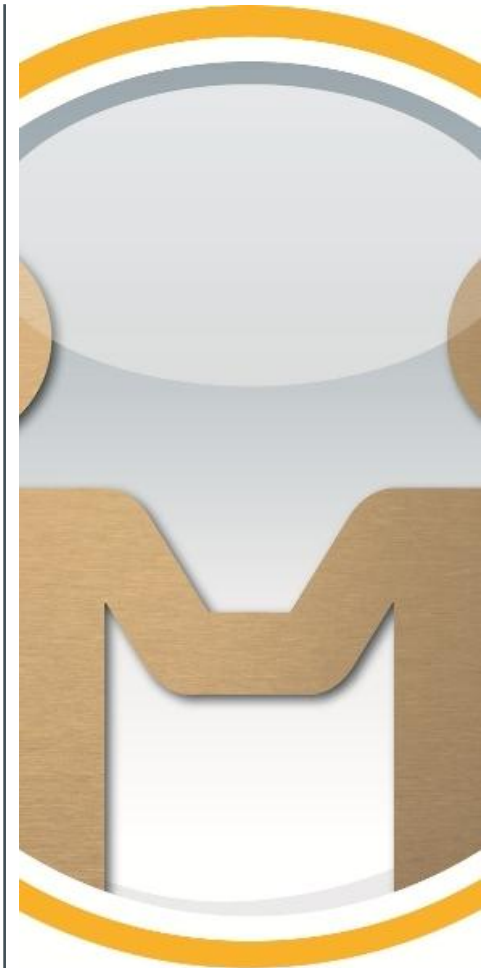
Premium products

> Technical standards and guidelines

> Made of steel

> Manufacturer´s warranty of up to 20 years

Project management and support

> Systematic support

> Handing over of the operational laboratories

> Certified installers

Development and manufacturing

> Made in Germany

> Highest standards

> Complete range

Sustainability

> Environmental protection

> Protection of resources

> DIN EN ISO 14001

Systemlabor EXPLORIS®

> The safe laboratory

> Modular system for flexibility in the laboratory

> All elements are
  - Coordinated
  - Interchangeable
  - Retrofitted easily at any point

> Köttermann Systemlabor EXPLORIS® is synonymous with
  - High quality
  - Innovative products
  - Safety

EXPLORIS®

> Modular system „Made in Germany"

> Made of solid, sturdy steel

- Extremely durable
- Reduces the risk of fire in the laboratory
- 100 % recyclable
- Hygienic
- UV resistant (by coating)

> Infinitely flexible

> Extensive programme

- Laboratory furniture
- Chemical storage cabinets
- Service supply
- Fume cupboards

Top Features

> Quality
- All components are designed and tested for a long working life (20 years)
- Internal and external testing
- TÜV certified - conformity with EN standards

> Design
- Perfectly coordinated colours
- A successful combination of design and function

Top Features

> Flexibility

- Modular design
- Universal frame can be continuously adjusted to your required working height
- Flexible exchangeable cassettes

> Safety

- Specially designed equipment to minimize the risks in the laboratory
- Additional safety for storage of flammable hazardous substances
- Intelligent features make working in the laboratory even safer
- Safety as standard with EXPLORIS TouchTronic®

Top Features

> Ergonomics

- Bringing work and anatomy together
- The Universal frame can be adjusted to your required working height
- Height-adjustable fume cupboard worktop for working while sitting, standing or for tall test set-ups

> Innovation

- Sensors and intelligent electronics for full control
- EXPLORIS® TouchTronic – intelligent fume cupboard electronics with an easy-to-use touchscreen for control and monitoring

Laboratory furniture

> Space for all your needs

> We meet your requirements

> An integrated furniture concept

> Laboratory furniture from Köttermann offer

- Excellent use of space
- Best possible support of working processes
- Easy retrofitting or re-modelling

Furniture product range

> Underbench cabinets
- On plinth
- As mobile containers
- Suspended cabinets

> Top mounted cabinets
- For tall cabinets
- For service walls

> Tall cabinets

> Wall mounted cabinets

> Frames

> Tables

> Worktops

> Basins and sink units

> Accessories

Furniture product range / Fronts

> Fronts
- With folding doors
- With glass sliding doors
- As display cabinet
- As cabinet with pull-out doors
- With drawers only
- With drawers and doors
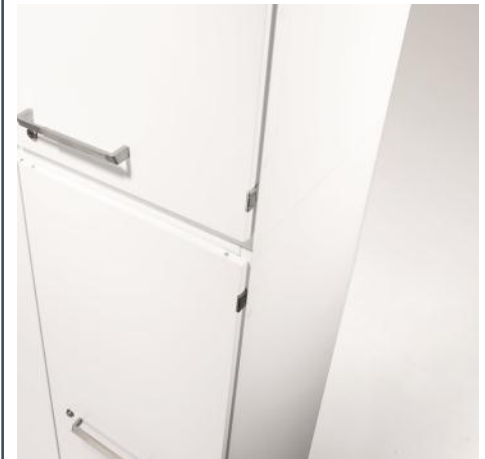
Furniture product range / Accessories

> Accessories
- With shelves
- With drawers
- With equipment drawers
- With waste bins
- With pull out file racks

- With or without closure depending on type

Underbench cabinets

> Storage space directly under the worktop

> Drawers with air cushioned full extension and automatic soft close mechanism

> Container as standard with 40 kg loading capacity (castor container 25 kg)

> A wide range of different models to suit a wide range of uses

	Dimension (in mm)							Frame depth	
	Width					Height			
Base	450		600	900	1200	720	870	350	500
Mobile container	423	573	600	846	1146	580	730		500
Suspended cabinet	423	573	600	846	1146	480	630		500

Tall cabinets

> Plenty of space for storing equipment and materials

> As open shelves or with different door variants

> Accommodates up to 5 rows of hanging files

	Dimension (in mm)					
	Width			Height	Depth	
Without doors (shelf)		600	900	1200	1920	350	500
With double doors		600	900	1200	1920	350	500
With glass sliding doors			900	1200	1920	350	500
Display cabinet			900	1200	1920	350	500
With wardrobe		600			1920		500
With pull-out doors	300	600	900	1200	1920		500

Wall mounted cabinets

> Maximum storage space

> 3 door variants

> Mounting on the wall or on the service cell

> Depth 350mm (suitable for files)

	Dimension (in mm)									
	Width					**Height**			**Frame depth**	
Without doors		600	900	1200	1500	480		780	350	500
With double doors	450	600	900	1200	1500	480	630	780	350	
With glass sliding doors			900	1200	1500	480	630	780	350	

Frames

> Rectangular and octagonal shape

> Base frame adjustable as C or A shaped base

> Base frame height adjustable

	Dimension (in mm)								
	Grid width					Frame depth			Height
Rectangular	627	750	900	1200	1500	600	750	900	variable 690-930
Octagonal 90°		750	900	1200	1500		750	900	variable 690-930
Octagonal 180°	1350	1500	1650	1800	1950		750	900	variable 690-930
Octagonal 360°				1500	1800		750	900	variable 690-930

Tables

> 3 styles:
- single table (static or mobile)
- heavy-duty table (only mobile)
- balance bench

	Dimensions (mm)						
	Width				**Height**	**Depth**	
Individual static table	900	1200	1500		variable 720-960	600	750
Individual mobile table	900	1200	1500	1800	variable 720-960	600	750
Heavy-duty mobile table	900	1200	1500		750, 900	600	750
Balance bench, free standing	900				750, 900	600	
Balance bench, build in	ca. 900				750, 900		

Worktops

> 10 materials for every kind of use

> 5 materials available with marine edge for trapping spilt fluids

	Dimensions (mm)	
	Width	**Depth**
Rectangular	600-2400	400*, 600, 750, 900
Octagonal 90°	750	750
	900	900
Octagonal 180°	1500	750
	1650	750
	1800	900
	1950	900
Octagonal 360°	1500	1500
	1800	1800

Only available without marine edging
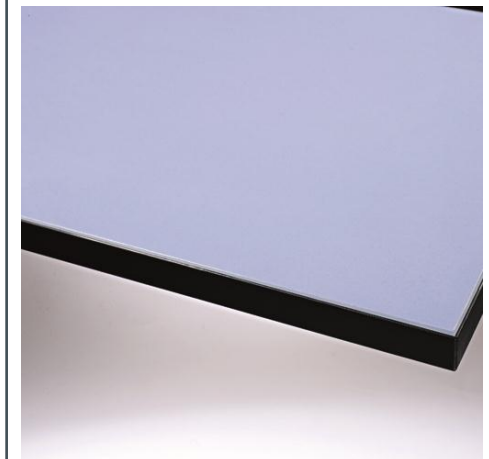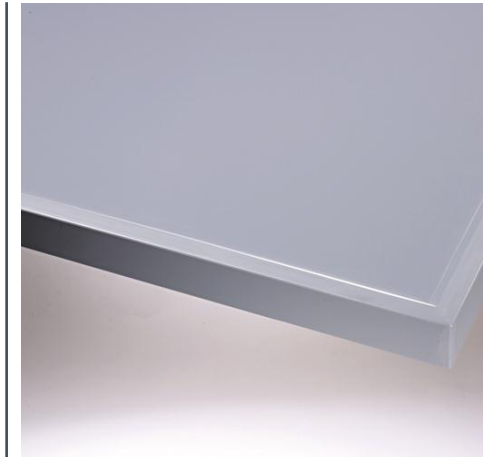
Basins and sink units

> 4 materials for sinks

> Various installation options

- Flush-fitting
- Drop-on (lipped)
- Seamless (as part of sink unit)

> Many possible combinations of sink units, basins and worktop materials

Service systems

> Service supply systems from Köttermann bring power, water, gases, vacuum…
- Of top quality
- With appropriate pressure, voltage/current
- With the required volume

flexible at every work station.

Service systems product range

> Service cells

> Service blocks

> Service booms

> Accessories
- Fittings
- Electrical components
- Installation

Service cells

> Range of Application
  - Island and wall bench configurations
  - With and without table
  - Especially flexible with exchangeable cassettes

> Maximisation of total table top work area

> Transparent shelves
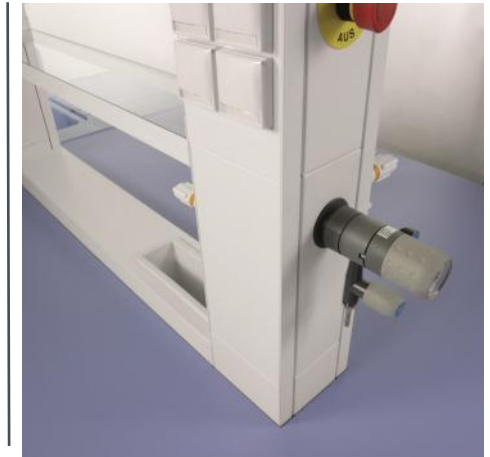
	Dimensions (mm)								
	Width				**Height**				**Depth**
Service cells		900	1200	1500	1600	1900	2200	2500	150
Service blocks	600				1600	1900	2200	2500	150
Service booms		900	1200	1500	400				200

Service blocks

> Especially flexible use

> High density of services is possible

	Dimensions (mm)								
	Width			Height				Depth
Service cells		900	1200	1500	1600	1900	2200	2500	150
Service blocks	600				1600	1900	2200	2500	150
Service booms		900	1200	1500	400				200

Service booms

> Suspended from the ceiling

> Wall installation

> Fittings controlled, uncontrolled or for high purity gases

> Horizontal arrangement of supply points

> Free space for larger equipment under service booms

	Dimensions (mm)								
	Width				**Height**				**Depth**
Service cells		900	1200	1500	1600	1900	2200	2500	150
Service blocks	600				1600	1900	2200	2500	150
Service booms		900	1200	1500	400				200

Service systems

> Wide selection of
  - Electrical components
  - Fittings
> Electrical sockets are available in a number of variations and country-specific types
> Uniform appearance
  - With accessories that can be combined with any of Köttermann's service supply systems

Chemical storage cabinets

> Risks in connection with the storage of hazardous substances

- Escape of volatile hazardous substances into the air in the laboratory
- Combustion of flammable hazardous substances
- Restricted access by unauthorised persons
- Leakage from stored bottles

Product range chemical storage cabinets

> Safety cabinets for flammable liquids
  - Tall safety cabinets
  - Underbench safety cabinets
> Acid and base cabinets
> Chemicals cabinets
> Accessories for safety cabinets

Safety cabinets for flammable liquids

> Three different types of door which all close automatically in the event of fire:

- Hinged doors can remain open in any position
- Hinged doors with ergonomic single-handed operation of two-door cabinets – made extra secure with time-delayed automatic closure
- Space-saving folding doors

> Two types of internal fittings available:

- Removable shelves with drip tray
- Drawers
- Optional re-circulation filter attachment
- Optional plug-in external fan

Tall safety cabinets

> Three different types, all close automatically in the event of fire:

- Hinged doors can remain open in any position
- Hinged doors with ergonomic single-handed operation of two-door cabinets – made extra secure with time-delayed automatic closure
- Space-saving folding doors

> Two types of internal fittings available:

- removable shelves with drip tray
- drawers

	Door closure	Dimensions (mm)	
1 hinged door, left or right	Manual operation	600 x 1955 x615	-
2 hinged doors	Manual operation	900 x 199 x 615	1200 x 1955 x 615
1 hinged door, left or right	Automatic time-delayed closure	600 x 1955 x 615	-
2 hinged doors, single hand operation	Automatic time-delayed closure	900 x 1955 x 615	1200 x 1955 x 615
2 folding doors	Manual operation		1200 x 1955 x

Underbench safety cabinets

> Three different types, all close automatically in the event of fire:
  - With doors, removable shelves and drip trays
  - With drawers
  - With doors and drawers

> XXL-cabinets with extra high interior to accommodate two levels of 1-litre bottles*

	Dimensions (mm)	
1 drawer	592 x 710 x 570	890 x 710 x 570
2 drawers	1100 x 710 x 570	1400 x 710 x 570
2 hinged doors	1100 x 710 x 570	_
2 hinged doors, 1 drawer	-	1400 x 710 x 570

Standard 1-litre bottles with a maximum height of 225 mm

Acid and base cabinets

> Safe, separated storage of acids and bases

> Optional integrated fan

> Materials with the highest resistance against acids

> Liquid-tight pull-out trays, max. load up to 30 kg

> Lockable

	Dimensions (mm)				Drawers
Tall cabinets, door L/R	600 x 1920 x 515	-	-	-	4
Underbench cabinets, door L/R	600 x 720 x 515	-	-	-	2
Underbench cabinets, 2 doors	900 x 720 x 515	1100 x 720 x 515	1200 x 720 x 515	1400 x 720 x 515	3/4*
Underbench cabinets for waste containers, door L/R	600 x 720 x 515	-	-	-	1
Underbench cabinets for waste containers, 2 doors	900 x 720 x 515	1100 x 720 x 515	1200 x 720 x 515	1400 x 720 x 515	3

* 3 drawers in versions with integrated fan

Chemicals cabinets

> Safe storage of non-combustible hazardous materials in accordance with relevant regulations

> Robust steel manufacture

> Double skinned, soft-closing doors

> Optional easy-to-use drawers

> Optional integrated, lockable poisons compartment to prevent unauthorised access

	Dimensions (mm)	
Underbench cabinet, 2 doors	900 x 720 x 515	1200 x 720 x 515
Tall cabinet door L/R	600 x 1920 x 515	-
Tall cabinet, 2 doors	900 x 1920 x 515	1200 x 1920 x 515

Fume cupboards

> Hazardous substances extracted safely

> For you, we exceed the standards

> Comprehensive safety features and high economic efficiency

> Extraction of volatile hazardous substances Gases, Aerosols, Dust

> Protection from exploding experiments

Product range fume cupboards

> EXPLORIS VarioTop® fume cupboard

> Distillation fume cupboard

> Walk-in fume cupboard

> Bench-type fume cupboard

> High-performance fume cupboard

> Radionuclide fume cupboard

EXPLORIS TouchTronic®

> Easy-to-use touchscreen
> EXPLORIS AirMonitor® safely monitors the extraction function
> Slider on the EXPLORIS AutoProtect® for intuitive sash operation
> EXPLORIS CloseGuard® monitors the sash opening
> Operation of electrical sockets in the fume cupboard
> EXPLORIS LevelControl® visual display

EXPLORIS VarioTop® fume cupboards

> Flexible working height – extremely variable

- Work ergonomically at seated and standing working heights
- Worktop height individually adjustable for users or according to experiment requirements
- Programmable positions for regularly used working heights

> Sash glazed with laminated safety glass

	Dimensions (mm)		
Width	1200	1500	1800
Height	2550	2550	2550
Depth	900	900	900
Useable space height	min. 1128-1528	min. 1128-1528	min. 1128-1528
Working height	750 to 950	750 to 950	750 to 950

Distillation fume cupboards / Walk-in fume cupboards

> Provide ample working height
> For large, heavy apparatuses, the option to move directly into interior space

	Dimensions (mm)				
Width	1200	1500	1800	2000	2100
Height	2550	2550	2550	2550	2550
Depth	900	900	900	900	900
Useable space height of distillation fume cupboard	min. 1528	min. 1528	min. 1528	min. 1528	min. 1528
Useable space height of walk-in fume cupboard	min. 2028	min. 2028	min. 2028	min. 2028	min. 2028
Distillation fume cupboard working height	500	500	500	500	500

Bench-type fume cupboards

> Bench-type fume cupboards are designed for general use in the laboratory

> Optional lining with chemical-resistant SGL for occasional work with aggressive, concentrated acids

	Dimensions (mm)				
Width	1200	1500	1800	2000	2100
Height	2550	2550	2550	2550	2550
Depth	900	900	900	900	900
Useable space height	min. 1128/1428	min. 1128/1428	min. 1128/1428	min. 1128/1428	min. 1128/1428
Working height	900	900	900	900	900

High-performance fume cupboards

> Acid-resistant ceramics for universal use (excluding use with hydrofluoric acid)

> Hydrofluoric acid-resistant: Polypropylene lining

	Dimensions (mm)		
Width	1200	1500	1800
Height	2550	2550	2550
Depth	900	900	900
Useable space height	min. 1128	min. 1128	min. 1128
Working height	900	900	900

Radionuclide fume cupboards

> Specially designed for work with radioactive materials

> Radiation protection with 30 mm thick lead plate below the worktop

> Contactless handling of radioactive substances using glove openings in the sash panels

	Dimensions (mm)	
Width	1200	1500
Height	2550	2550
Depth	900	900
Useable space height	min. 1128	min. 1128
Working height	900	900

THANK YOU
FOR YOUR ATTENTION

Köttermann GmbH & Co KG

Industriestraße 2-10

31311 Uetze/Hänigsen

Phone +49 5147 976-0

Fax +49 5147 976-844

systemlabor@koettermann.com

www.koettermann.com