



LABORATORY CATALOGUE
EQUIPMENT AND REQUIREMENTS

22/23

EVERYTHING ABOUT TECHNICAL CLEANLINESS



Our portfolio not only covers all aspects of laboratory equipment,

we also have a large warehouse and can deliver on short term. Just send us a delivery date for the delivery of initial equipment and small parts – and you will receive the order on schedule for your training or commissioning. Apropos training: GLÄSER customers receive detailed instructions from our professional lab team and are welcome to contact us at any time with their questions. Because GLÄSER is known for providing customers with the most extensive support possible. Whether for training or consulting, analysis or concrete applications – we provide you with professional support in your own laboratory.

But now it's time for an informative and practical peek into the world of GLÄSER products, which may soon even make your daily work routine more efficient, simple, safer and healthier.

Your GLÄSER-Team

We are constantly working to improve our products. Texts, illustrations and figures in this flyer are therefore exemplary and non-binding. October 2019

Dear Laboratory Customers,

Certified know-how for reliable test results: The GLÄSER test laboratory for technical component cleanliness was the first German laboratory of its kind to receive accreditation. A pioneering achievement, typical for GLÄSER GmbH.

As a future-oriented, highly efficient company, we provide our customers with a comprehensive, sophisticated concept for technical cleanliness: This covers targeted consulting to competent plant engineering and includes our professional training programmes.

In this catalogue, we will provide you with a detailed presentation of our premium, extensive service and product portfolio. There are years of experience and well-founded GLÄSER expertise in all of our products and services.

Each product is subjected to rigorous controls and is tested in compliance with TecSa.

RELIABILITY AND COMPETENCE IN TECHNICAL CLEANLINESS

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PLANT CONSTRUCTION & OVERVIEW

Individual plant construction

ACCESSORIES FOR ANALYSIS

CONSUMABLE

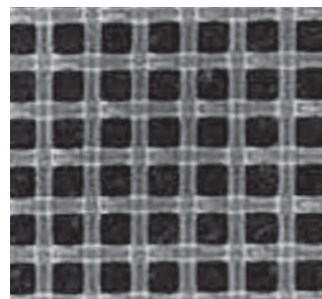


 Please note our Tips.
These products are our
recommendations for
you.

Membranes / nonwoven / net

ø 47 mm

Other sizes as per request.



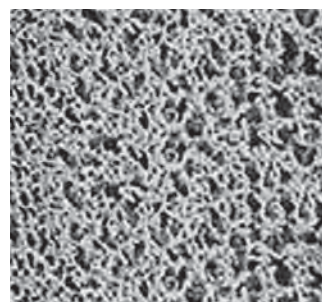
Product example
Figure enlarged viewing.

µm		Material	VE	Art. No.
5 µm	ø 47 mm	PET / cold stamped	100	1.7600.30.79
10 µm	ø 47 mm	PET / cold stamped	100	1.7600.30.80
15 µm	ø 47 mm	PET / cold stamped	100	1.7600.30.81
20 µm	ø 47 mm	PET / cold stamped	100	1.7600.40.30
51 µm	ø 47 mm	PET / cold stamped	100	1.7600.30.84
100 µm	ø 47 mm	PET / cold stamped	100	1.7600.30.82
150 µm	ø 47 mm	PET / cold stamped	100	1.7600.30.83
5 µm	ø 47 mm	PET / laser cut	100	1.7600.30.75
10 µm	ø 47 mm	PET / laser cut	100	1.7600.30.73
15 µm	ø 47 mm	PET / laser cut	100	1.7600.30.71
20 µm	ø 47 mm	PET / laser cut	100	1.7600.40.31
51 µm	ø 47 mm	PET / laser cut	100	1.7600.30.74
100 µm	ø 47 mm	PET / laser cut	100	1.7600.30.78
150 µm	ø 47 mm	PET / laser cut	100	1.7600.30.77
5 µm	ø 47 mm	Polyamide / cold stamped	100	7.9840.00.37
7 µm	ø 47 mm	Polyamide / cold stamped	100	7.9840.00.33
10 µm	ø 47 mm	Polyamide / cold stamped	100	7.9840.00.39
15 µm	ø 47 mm	Polyamide / cold stamped	100	7.9840.00.41
20 µm	ø 47 mm	Polyamide / cold stamped	100	7.9840.00.26
50 µm	ø 47 mm	Polyamide / cold stamped	100	1.7600.30.63
100 µm	ø 47 mm	Polyamide / cold stamped	100	7.9840.00.45
150 µm	ø 47 mm	Polyamide / cold stamped	100	1.7600.30.65
400 µm	ø 47 mm	Polyamide	200	1.7600.40.12
15 µm	ø 47 mm	Polyamide / laser cut	100	7.9840.00.42
20 µm	ø 47 mm	Polyamide / laser cut	100	7.9840.00.43

Membranes / foam

ø 47 mm

Other sizes as per request.



Product example.
Figure enlarged viewing.
*For the detection of light coloured/ colourless particles.

µm		Material	VE	Art. No.
0,8 µm	ø 47 mm	Cellulose mixed ester / black*	100	1.7600.30.89
1,2 µm	ø 47 mm	Cellulose nitrate / w/o net print	100	1.7600.30.16
1,2 µm	ø 47 mm	Cellulose nitrate / w/o net print	100	1.7600.30.17
5 µm	ø 47 mm	Cellulose nitrate	100	1.7600.30.62
5 µm	ø 47 mm	Cellulose mixed ester	100	1.7600.30.61
8 µm	ø 47 mm	Cellulose mixed ester	100	1.7600.30.43
30 µm	ø 47 mm	Polyamide	100	1.7600.40.02



Mesh opening and correlation to particle size classes

Classification according VDA 19.1 and ISO / DIS 16232

Particle size class according VDA 19.1 (2015) Chapter 7.2.2 & Annex A 7.3 & ISO / DIS 16232: 2017 Chapter 8.2.2.1			Corresponding filter pore size selection
Size class	Particle size (µm)	Factor for filter pore size selection	Mesh opening (µm)
B	5 ≤ x < 15	1/5	1
C	15 ≤ x < 20		
D	25 ≤ x < 50	1/5	5
E	50 ≤ x < 100	1/10	
F	100 ≤ x < 150	1/10	10
G	150 ≤ x < 200	1/10	15
H	200 ≤ x < 400	1/10	20
I	400 ≤ x < 600	1/10	40
Most common filter used for class I and J			50
J	600 ≤ x < 1.000	1/10	50
K	1.000 ≤ x < 1.500	1/10	100
L	1.500 ≤ x < 2.000	1/10	150
M	2.000 ≤ x < 3.000		
M	3.000 ≤ x	1/10	300



Laser cutted membranes have coalesced edges. Due to this they can not fray. In this way particles or strings can't reach the measurement area. Therefore, laser cutted membranes are particularly suitable for analyses.

The table above helps you to find the right filter size according to your requirements.

Membrane dispenser



Membrane dispenser „CleanDisc Solution“ – developed in cooperation between Gläser and Sefar, according to the VDA 19.1 recommendations.

- Direct issue of clean membranes: Simple handling due to the issue of single filters
- Storage of membranes in a closed container
- No cross-contamination from environment
- Protective sheet guarantees a defined level of cleanliness and consistence
- Simple tape change: Suitable for use of several tapes
- Current standard of laboratory equipment

Set

Art. No.: 7.9840.01.17

Dispenser with tape.



Tape

Art. No.: 7.9840.01.18

Tape can be ordered separately.



Role

Art. No.: 7.9840.01.19

Art. No.: 7.9840.01.20

Art. No.: 7.9840.01.21

Art. No.: 7.9840.01.22



- Role for membrane dispenser with 5 µm membranes. 200 membranes per role.
- Role for membrane dispenser with 5 µm membranes. 600 membranes per role.
- Role for membrane dispenser with 20 µm membranes. 200 membranes per role.
- Role for membrane dispenser with 20 µm membranes. 600 membranes per role.



While handling a filter membrane a clean precision tweezer should be used. Please grab the border of a filter.



Precision tweezers

Art. No.: 1.7600.20.26



- Chrome- / nickel steel
- ESD coated
- Anti-glare black with a surface resistance of about 10⁵ ohms
- Anti-glare brushed tips
- Gripping areas matted for maximum hold
- Straight form
- Round tips (about 2 mm wide)
- Gripping areas smooth
- Stainless
- Electrically dissipating
- Anti-magnetic (18 / 10)
- Not temperable

Filter tweezers

Art. No.: 7.9840.00.32




- Extremely light
 - Without sharp edges
 - Ergonomic gripping angle
 - Smooth grip inside surfaces to protect the membrane, approx. 2 mm jaw width
- Product details:**
Material: Matt polished, stainless, acid proof, anti-magnetic
Grip angle: 45°
Length: 115 mm
Weight: 15g

Haku 1025-921 Solvent

Art. No.: 2.9840.13.13
 Export: 7.9840.00.10



- Detergent for cleaning and degreasing, neutral (without smell) brand mixture of hydrocarbon. Pre-cleaned by Gläser.
- Product details:**
 30-liter.
 Please note the material safety data sheet.

 *We recommend to change the medium Haku in regular temporal distances, at least twice a year. Indications for changing can be for example the yellow colouring of the medium or the difficult reaching of blank values.*

Glass slides

Art. No.: 7.9840.00.00

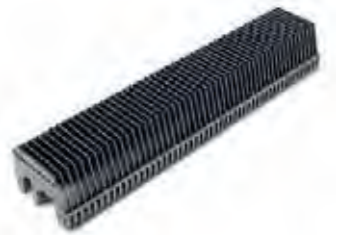


- Protects from dirt and dust. Keeps particles on the membrane.
- Product details:**
 60 mm x 60 mm
 20 pieces / pack

For storage and archiving of slide frames. **Product details:**
 30 dias / cassette

Archive cassette

Art. No.: 1.7600.10.19



Suitable for the correct archiving of membranes. In one transparent sheet nine membranes can be stored. With 4 punched holes for the keeping in a folder. **Product details:**
 10 pieces / box

Transparent sheet for glass slides

Art. No.: 7.9840.00.91



Soda-lime glass with cover. **Product details:**
 Ø 80 mm
 15 mm high / 10 pieces / pack
 Ø 120 mm
 20 mm high / 10 pieces / pack

Petri dishes

Ø 80 mm Art. No.: 1.7600.30.25
 Ø 120 mm Art. No.: 1.7600.30.26



7,5 cm x 5 cm with label and kerb for easy opening. **Product details:**
 Ø 47 mm
 petri slide of polystyrene / 100 pieces / pack
 Ø 48 mm
 petri slide of plastic / 100 pieces / pack

Petrislide

Ø 47 mm Art. No.: 1.7600.30.27
 Ø 48 mm Art. No.: 1.7600.30.54



Plugs

Art. No.: 7.9840.00.89



Plugs for filling out or closing part openings, to analyse exclusively the interior of components. Available in set.

Product details:

Colour: Grey

Material: Natural rubber

Plugs

Art. No.: 7.9840.00.90



Plugs with holes for filling out or closing part openings, to analyse exclusively the interior of components. Available in set.

Product details:

Colour: Red

Material: Natural rubber

Single-use cap

Art. No. Size M: 1.7600.30.53

Art. No. Size L: 5.9840.02.59



100 pieces / box

Product details:

Colour: White

Material: Fleece 40500

Single - use overshoes

Art. No.: 1.7600.30.11



Blue plastic foil, with elastic band for all standard shoe sizes.

100 pieces / box

Product details:

Colour: Blue

Material: Plastic

One size fits all.

Compact wall dispenser with chamfered top for cleanliness-fair storage of single use caps and overshoes.

Easy to fill. Contents can be removed easily. Perfect for installation on the wall in the lock for personnel.

Product details:

Material: Stainless steel

Size: 400 x 600 x 205 mm

Wall dispenser / single use caps & overshoes

Art. No.: 7.9840.00.70



- Clear glass
- Strain-free and fatigue-free view
- Tight-fitting for nonrestrictive long gestation period
- Straight, black bows, no pressure behind the ears

Product details:

Weight: 34g

EN 166

Protective glasses

Art. No.: 1.7600.30.12



Indispensable to all accident-prone workplaces, in each laboratory, in workshops and wherever it may lead to eye injuries. Simple handling.

Product details:

Plastic box with 4 ready-to-use sterile water bottles.

With wall holder - 250 ml sterile water per bottle.

Metered jet for agentle elimination of contaminants.

Defensibility 3 years.

Eye rinsing bottle

Art. No.: 1.7600.30.15



High chemical resistance – good grip when handling wet parts.

- Moderately heavy
- Chlorinated
- Silicon- free
- Abrasion resistance (3EN388)
- Cut protection level (1EN388)
- Tearing resistance (0EN388)

Product details:

1 pair / nitrile

Length: Approx. 600 mm

Strength: Approx. 0,5 mm

Gloves / long cuff / nitrile

Art. No.: 1.7600.30.94



Nitril gloves



- Ambidextrous
- Powder free
- Textured fingertips for better grip
- Rolled frame for additional stability
- Anti-static
- Silicone-free

Product details:

Colour: White
 Length: 300 mm
 100 pieces / box

S: Art. No.: 7.9840.00.98
 M: Art. No.: 7.9840.00.99
 L: Art. No.: 7.9840.01.00
 XL: Art. No.: 7.9840.01.01

Sleeve protectors

Art. No.: 1.7600.40.21



Sleeves are made from flash spun high density polyethylene, providing an ideal balance of protection, durability and comfort.

The fabric is permeable to both air and water vapour, yet repels water-based liquids and aerosols.

Ultra-low linting.

Product details:

Length: 50 cm
 Colour: White
 One size fits all.

Adjustable arm opening.
 Stitched internal seams.

Apron

Art. No.: 1.7600.30.87



Wipeable plastic.
 Clothing splash guard, e.g. for working on RiuS.

Product details:

1 piece
 Standard size.

Adhesive foil mat

Art. No.: 1.7600.30.42



Non-slip because of adhesive mat base.
 No cleaning necessary, foil layer is simply subtracted.

Product details:

8 pieces / carton
 Size: 1140 x 640 mm
 Thickness: 15 mm

Overalls



Suitable for the daily work in laboratory.
 Comfortable wearing.

- Banded collar with two press buttons
- Covered zipper
- Arms with deviated cuffs
- Press buttons for name ribbons on the left side (name ribbons need to be ordered separately)
- Press buttons on the leg for further regulation

Product details:

Colour: White
 Texture: 98 % polyester,
 2 % carbon
 Available in different sizes.

Please note: These overalls are one size bigger than normal sizes.

XXS: Art. No.: 7.9840.01.05
 XS: Art. No.: 7.9840.01.06
 S: Art. No.: 7.9840.01.07
 M: Art. No.: 7.9840.01.08
 L: Art. No.: 7.9840.01.09
 XL: Art. No.: 7.9840.01.10



We propose to let the overalls clean in a *specialised* laundry. This should be done in regular time intervals.

Perfectly suitable for the daily work in the laboratory. Comfortable wearing.

- Banded collar with two press buttons
- Covered zipper
- Arms with deviated cuffs
- Press buttons for name ribbons on the left side (name ribbons need to be ordered separately)
- Without pockets

Product details:

Colour: White
 Texture: 98 % polyester,
 2 % carbon
 Available in different sizes.

XS: Art. No.: 7.9840.01.11
 S: Art. No.: 7.9840.01.12
 M: Art. No.: 7.9840.01.13
 L: Art. No.: 7.9840.01.14
 XL: Art. No.: 7.9840.01.15
 XXL: Art. No.: 7.9840.01.16

Laboratory coat



One way laboratory coats



For visitors of the laboratory.
 Particle emission: Level II Helmke-Trommel classification

Product details:

Available in different sizes.
 Packing unit with 25 pieces.

S: Art. No.: 7.9840.00.60
 M: Art. No.: 7.9840.00.61
 L: Art. No.: 7.9840.00.62
 XL: Art. No.: 7.9840.00.63
 XXL: Art. No.: 7.9840.00.64

Ergonomic working place floor mat

Art. No.: 7.9840.00.12



Working place floor mat appropriate for hydrocarbon solvents. Slip resistant, non-skid working place mat. Absorbs shocks on hard industrial floorings, for less fatiguing and safer working.

Product details:
Dimensions: 62 x 92 cm
 Can be cleaned with all common agents.

Standing aid

Art. No.: 7.9840.00.94



Ergonomic working operation on extraction systems. Perfectly suitable for using in laboratory, manufacturing or logistic work places.

Product details:
Colour: Black
Weight: Approx. 7kg
 Height adjustable up to approx. 91 cm.

Wipes

Art. No.: 1.7600.30.09



- CL4 wipes
- Single sheet
- Single layer

Product details:
Colour: White
 Pack of 100 sheets.
Size: 30,4 x 30,4 cm

Versatile dispenser box

Art. No.: 7.9840.00.73



Versatile dispenser box with expandable cover for cleanliness-fair and structured storage of wipes, gloves or other laboratory utensils.

Product details:
Material:
 Transparent acrylic glass
Size: 315 x 315 x 45 mm

1-layer special Kimtech Science Wipes © for laboratory use. 100 % pure fiber / especially for cleaning and wiping of glass surfaces such as lenses, object frames and optical instruments.

Product details:
Size: 11,4 x 21,3 cm
 280 sheets / pack

Precision wipes / small

Art. No.: 1.7600.30.07



1-layer special Kimtech Science Wipes © for laboratory use. 100% pure fiber / especially for cleaning and wiping of surfaces such as lenses, object frames and optical instruments.

Product details:
Size: 30 x 30 cm
 196 sheets / pack

Precision wipes / large

Art. No.: 1.7600.30.08



- Process wipes – quarter folded
- Polypropylene cleaning cloth
- Low lint dissolver-resistant
- Reusable
- Ideal for oil and grease
- For residue-free wet cleaning of smooth surfaces

Product details:
 35 sheets / pack
Colour: Blue
Size: 49 x 38 cm

Process wiping cloths

Art. No.: 1.7600.30.10



With lid – specially cleaned and shrink-wrapped.

Product details:
 1 piece / pack
 250 ml

Wide-necked jar

Art. No.: 4936



Dirt trap / complete



5 - box includes:

- Brief instruction
- Cover paper
- Petri dishes
- Adhesive pads

Membrane analyses incl. appropriate documentation by Gläser.

Art. No.: 1.7600.30.49

A particle trap is an adhesive pad with a diameter of 47 mm. Catches and absorbs particles from the environment. Thus an assessment of environmental conditions is possible. (eg: high ambient pollution by internal transport routes).

10 - box includes:

- Brief instruction
- Cover paper
- Petri dishes
- Adhesive pads

Membrane analyses incl. appropriate documentation by Gläser.

Art. No.: 1.7600.30.48

20 - box includes:

- Brief instruction
- Cover paper
- Petri dishes
- Adhesive pads

Membrane analyses incl. appropriate documentation by Gläser.

Art. No.: 1.7600.30.46

Dirt trap / without analysis

Art. No.: 1.7600.30.45



Excl. membrane analysis. For membrane analysis in your own laboratory

Product details:
25 pieces / set

Microscope slide for particle traps and particle stamps

Art. No.: 7.9840.00.85



For use as a slide. Easy insertion under the microscope.

A particle stamp is an adhesive pad on a piece of foam with a diameter of 44 mm. By pressing and releasing the adhesive stamp on a desired surface, particles stick to the adhesive pad. This makes it possible to evaluate the surface contamination. Evaluations according to size classes according to VDA 19 / ISO 16232, including documentation.

5 - box includes:

- Brief instruction
- Cover paper
- Plastic round blank
- Foram padding
- Adhesive pads

incl. appropriate documentation by Gläser.

Art. No.: 1.7600.40.33

10 - box includes:

- Brief instruction
- Cover paper
- Plastic round blank
- Foram padding
- Adhesive pads

incl. appropriate documentation by Gläser.

Art. No.: 1.7600.40.34

Particle stamp



20 - box includes:

- Brief instruction
- Cover paper
- Plastic round blank
- Foram padding
- Adhesive pads

incl. appropriate documentation by Gläser.

Art. No.: 1.7600.40.35

Particle stamp / without analysis

Art. No.: 1.7600.40.36



Excl. membrane analysis. For membrane analysis in your own laboratory

Product details:
25 pieces / set

LABORATORY EQUIPMENT

ALL FROM ONE SOURCE



 Please note our Tips.
These products are our
recommendations for
you.

EasyDry II

Art. No.: 1.EDRY.02.02

The worldwide unique device for drying and re-cooling of analysis membranes for the determination of gravimetry of technical cleanliness of functionally relevant components in accordance with VDA 19 and ISO 16232. Engineered and patented by Gläser, already in the second generation.



- Time saving of 60 minutes to 7 minutes
- Increase of process safety during membrane drying
- Reduction of cross-contamination during handling the membranes
- LED for easy differentiation of six modes
- Ergonomic work position

Product details:

Size: 482 x 463 x 477 mm
 Weight: 30 kg
 230 V (+ / - 10 %)
 50 / 60 Hz

System solution for technical cleanliness measurement

Art. No.: 5.9840.02.44
 Export 5.9840.02.54

The all-in system (hardware and software) for the analysis of residual dirt particles is tailored to the special need of technical cleanliness.

This fully-automated system saves you time and money because of the software supported measurement of complete filters. The system is able to analyse particles equal to/larger than 15µm. The ideal system for users who need to analyse a medium to large number of samples. Incl. training



- Natural ventilation
- Continuous adjustable addition
- Exhaust lug with damper
- Microprocessor with integrated self-diagnostic system
- Digital automatic switchoff
- Digital temperature LED-display

Product details:

Size: 630 x 600 x 400 mm
 Weight: 47 kg
 230 V (+ / - 10%)
 50 / 60 Hz

Drying oven / universal / small

Art. No.: 1.7600.40.05



With muff and knob cover, without connector.

Product details:

Ø 250 mm
 Clear glass

Vacuum Desiccator

Art. No.: 1.7600.10.01



Material Porcelain.

Product details:

Ø 250 mm
 Temperature resistance from -40 °C up to +140 °C.

Desiccator plate

Art. No.: 1.7600.10.04



Dry beads

1 Liter: Art. No.: 1.7600.30.39

5 Liter: Art. No.: 1.7600.30.40



Practical dry beads, very hygroscopic! Usable for many drying and desiccant purposes. With heavy metal free colour indicator: When dry, the beads are orange and turn colourless when moist, i.e. almost saturated.



Can be dried in a drying oven at 130° - 160° C. For reuse. The color then changes back to orange.

Ionitization device

115V/60Hz: Art. No.: 1.7600.10.31

230V/50Hz: Art. No.: 1.7600.10.28



System to eliminate electrostatic discharges. The device is designed to eliminate electrostatic charges as well as for non-contact cleaning electrostatic adhering particles on films, glass, paper, cardboard, textiles, etc. The ionizer is placed next to the analysis scales. The membranes are passed by the system before the gravimetry.

Adaptor plate for petrislide

Art. No.: 1.7600.30.70



Material Aluminium.

Adaptor plate for petrislides for the use in microscope's cross tables.

Incl. 2 knurled head screws for the easy taking out of the cross tables.

Product details:

Exterior dimensions:

Appr. 80 x 80 mm

Interior dimensions:

Appr. 52 x 69 mm

The Kern calibrated 4-digit laboratory balance perfectly supports all weighing tasks in the laboratory sector:

- Automatic internal adjustment
- Adjusting program CAL for quick setting of the balance accuracy using an external test weight
- Dosage aid: High-stability mode and other filter settings can be selected
- Automatic data output to the PC / printer

Technical data:

Readability: 0,1 mg

Weighing capacity: max. 220 g

Weighing plate: 90 mm

Calibration value: 1 mg

Reproducibility: 0,2 mg

Analytical balance 4-digit

Art. No.: 7.9840.00.71



The Kern calibrated 5-digit laboratory balance perfectly supports all weighing tasks in the laboratory sector:

- Doors that open wide for optimal insertion and removal of your samples
- Fully automatic adjustment function can be configured (e.g. in the case of temperature fluctuations)
- Continuous monitoring of the levelling with warning signal
- Easy to clean due to appropriate surfaces

Technical data:

Weighing capacity: 0-82 g / 82-220 g

Readability: 0,01 mg / 0,1 mg

Dimensions weighing pan: Ø 80 mm

Analytical balance 5-digit

Art. No.: 7.9840.00.54



Useful tips & tricks



External influences can affect the accuracy of results on state-of-the-art, intuitive analytical balances. Below you will find useful tips to prevent this.

Temperature

- Keep the temperature of the room constant and avoid strong temperature fluctuations. Measurement values are strongly influenced by changes of temperature.
- Please avoid to place the analytical balances in the near of windows, radiators or cooling devices.

Atmospheric humidity

Ideally the relative humidity (given in %) should be between 45 % and 60 %. Analytical balances should be always operated in a measurement range between 20 % and 80 %.

In addition, this humidity is in the recommended range for your laboratory staff.

Light

If possible, place the analytical balance near a window-free wall. Direct sunlight (radiant heat) will influence the weighing results. Therefore, balances should be placed a significant distance from lighting fixtures to avoid heat radiation. This especially applies to light bulbs.

Airstreams

Protect your analytical balances from air turbulences caused for example by air conditioning systems. These systems influence also the weighing results. You can guarantee stable results by using a housing for balances (1.7600.10.35).

Vibrations

Take care that your balances are not exposed to vibrations initiated by machines, floor conveyors, roadworks or something similar. A weighing table (7.9840.00.88) can compensate vibrations and ensure the calibration of your analytical balance.

We recommend these tips also for our extraction systems.

Temperature and humidity logger with memory card

Art. No.: 7.9840.00.69



Perfect for measured value monitoring.

The data logger saves measured values on a removable memory card.

The card reader can be connected to the USB port of a computer for an instant report.

Product details:

Measuring range:

0 – 50 °C / 0 – 90 % rF /

-20 °C to + 50 °C dew point

Precision:

+/- 1 °C / +/- 7% rF / +/- 5,0 (20 - 85)

Size: 110 x 91 x 30 mm

Weight: 200 g

For the installation of analytic scales and checking devices to achieve more precise measurements. Even in touch the scale calibration will not diversify.

Product details:

Size: 770 x 815 x 650 mm

Weight: 92 kg

Weighing table

Art. No.: 7.9840.00.88



Housing for the Technical Cleanliness as cover for analysis scales.

The housing is made of 8 mm acrylic glass. All edges are polished.

Product details:

Size: 750 x 450 x 640 mm

Weight: ca. 11,9 kg

Dimensions fitting for our weighing table (7.9840.00.88) and our analysis scales.

Housing for analysis scale

Art. No.: 2.9840.10.64



Housing for the Technical Cleanliness as cover for microscopes.

The housing is made of black, 8 mm acrylic glass. All edges are polished. Protection against external light influences like reflexions, solar irradiation for constant light situation on the membrane.

Product details:

Height / Width adapted for microscopes.

Housing for microscope

Art. No.: 1.7600.10.34



Side table suitable for Technical Cleanliness to deposit membranes, tweezers etc. The desk is made of 5 mm transparent and stable acrylic glass. All edges are polished.

For a safe and easy membrane-handling, its height is adapted to the membrane holder.

Product details:

Size: 250 x 300 x 400 mm

Load capacity appr. 1kg

Side table acrylic glass

Art. No.: 1.7600.10.30




GLÄSER

ACM 18
protect
technology made in germany

DEVICES FOR ANALYSIS

MADE IN GERMANY



 Please note our Tips.
These products are our
recommendations for
you.

FUTURE-PROOF EXTRACTION SYSTEMS FOR TECHNICAL CLEANLINESS

Our machine concepts for Technical Cleanliness have been tested in practice in thousands of tests in our accredited laboratories. Constant further development of the machines guarantees that it is state of the art and hence the very latest system concepts – now in the second generation.

This further development guarantees a high degree of reliability, which leads to high equipment acceptance worldwide.

The second generation of our machines offers among further technical and ergonomic optimizations a special increased safety and answers the recommendations of VDA 19.1, chapter 11.2. This chapter focus different preventive measures for minimization of risks during testing with solvents.

Risks can be the contact with liquids or aerosol, inhalation of vapours and the explosion hazard.

In the course of the further development Gläser Group made different technical measures. All recommendations of VDA 19.1 are now in our extraction systems by default.

- Explosion-protected: Elimination of ignition sources in the analysis chamber
- Controlled temperature monitoring: Automatic switch off by reaching critical temperatures
- Using waterbased cleaners
- Suction of extraction workplace

With the Gläser extraction systems you can be sure working on future-proof equipment for Technical Cleanliness.

The contemporary and modern design has an appealing effect for the user as well as their customers.



ACM 17

MADE IN GERMANY



- Modularly designed cleanliness cabinet for component analysis of small parts with high product protection
- Compact, mobile analysis module for extraction of particles on precision parts
- User-friendly emptying and filling of the system
- Exhaust booth to actively protect the components and analysis basins from contamination

Art. No.: 1.GACM.17.02

Product details:

Electric Supply: 230VAC +/- 10 %
50 / 60Hz

Size: 1150 x 1850 x 770 mm

Weight: 180 kg

Procedure options:

- Spraying
- Ultrasound
- Rinsing

- Siemens SPS S7-1200
- Control with 12" touch panel „Basic“
- Testing procedures can be saved (32 programs, each with 30 individual steps)
- Display parameters: Volume / flow volume / Ultrasound time and power / medium temperature / system pressure / filter situation and many more
- Languages: German / English / Spanish / Italian / Polish / Chinese (Mandarin) – during operation, you can toggle between languages at any time

System control



- 300 mm half round basin with collar up to 500 mm
- Polished stainless steel basin
- Integrated spray protection
- Basin filling device
- The 4-part personal protection window can be opened sideways or upwards

Basin





The user-friendly, lifting and tilting membrane holder includes three individual cascade rings with tweezer lead for safe and simple membrane fitting and removal of $\varnothing 47$ mm membrane filters.

Membrane holder and filter cascade



This membrane holder has been specially developed for Technical Cleanliness and can be opened and closed without friction using one hand.

One-handed operation



Suction strip:

- Up to 90% of emerging aerosol will be gripped by the exhaust in the back of the working place

A retrofitting still will be possible at any later date

Deionised water:

- Integration of deionised-water compatible components of stainless steel
- Accredited tenside: SurTec 084 (0,5%)

Remote maintenance:

Provide and maintain IT hardware to establish a VPN connection through a provided VPN client (Mon–Fri, 08:00–17:00 CET).

Additional operating languages:

Individual, on request

Available options

ACM 18

MADE IN GERMANY



- Modularly designed newest generation cleanliness cabinet for component analysis of small parts (up to 15 kg and a size of 600 -700 mm) featuring high product protection
- Compact, mobile analysis module for extraction of particles on precision parts
- Exhaust booth to actively protect the components and analysis basin from contamination
- Equipped with an extraction system in the front work area for the protection of persons and products

Art. No.: 1.GACM.18.02

Product details:

Electric Supply: 230VAC +/- 10%
50 / 60Hz

Size: 1100 x 1900 x 860 mm

Weight: 280 kg

Procedure options:

- Spraying
- Ultrasound
- Rinsing
- Flooding

- Siemens SPS S7-1200
- Control with 12" touch panel „Basic“
- Testing procedures can be saved (32 programs, each with 30 individual steps)
- Display parameters: Volume / flow volume / Ultrasound time and power / medium temperature / system pressure / filter situation and many more
- Languages: German / English / Spanish / Italian / Polish / Chinese (Mandarin) – during operation, you can toggle between languages at any time

System control



- Polished stainless steel interior
- Round 300 mm basin integrated in 600 x 750 mm basin
- Extraction in the front working area
- Integrated spray protection
- LED lighting
- Parts holder and grid for parts with different dimensions

Basin





The user-friendly, lifting and tilting membrane holder includes three individual cascade rings with tweezer lead for safe and simple membrane fitting and removal of Ø 47 mm membrane filters.

When ordering optional interior flush with second membrane support.

Membrane holder and filter cascade



The Internal flush marks a completely closed flushing circle for the testing of the interior geometries and surfaces e.g. of pipes, tubes, manifolds, filter housings according to the VDA19.1, 6.4.4 recommendation.

Available in two versions: Manual or automatic ball valve.

Optional internal flush



Comfort touch panel incl. wireless key board and separate touch pen

- Saving PDF documents
- Saving pictures of samples or test procedures
- Information lines: Saving up to 20 characters for further text information

Remote maintenance:

Provide and maintain IT hardware to establish a VPN connection through a provided VPN client
(Mon–Fri, 08:00–17:00 CET)

Deionised water:

- Integration of deionised-water compatible components of stainless steel
Accredited tenside:
SurTec 084 (0,5 %)

Additional operating languages:

Individual, on request

Available options

RIUS SINGLE

MADE IN GERMANY



Art. No.: 1.RIUS.10.00

- The Gläser Analytics Centre RiuS Single provides product protection
- Exhaust booth for high protection of the components against contamination
- Front slider to close the work area
- Equipped with an extraction system in the front work area for the protection of persons and products

Product details:

Electric supply:
230VAC +/- 10 %
50 / 60Hz
Size: 1650 x 2150 x 1130 mm
Weight: 500 kg

Procedure options:

- Spraying
- Rinsing

- Siemens SPS S7-1200
- Control with 12" touch panel „Basic“
- Testing procedures can be saved (32 programs, each with 30 individual steps)
- Display parameters: Volume / flow volume / Ultrasound time and power / medium temperature / system pressure / filter situation and many more
- Languages: German / English / Spanish / Italian / Polish / Chinese (Mandarin) – during operation, you can toggle between languages at any time

- Polished stainless steel interior
- Width appr. 1200 mm x Height appr. 800 mm x Depth appr. 800 mm
- Wall flushing device facilitates automatic cleaning of all four walls
- LED-lighting in the analysis chamber
- Parts holder for parts up to 100 kg
- Protecting window with oblique-installed openings with flexible slats

The user-friendly, lifting and tilting membrane holder includes three individual cascade rings with tweezer lead for safe and simple membrane fitting and removal of Ø 47 mm membrane filters. When ordering optional interior flush with second membrane holder.

The Internal flush marks a completely closed flushing circle for the testing of the interior geometries and surfaces e.g. of pipes, tubes, manifolds, filter housings according to the VDA19.1, 6.4.4 recommendation.

Available in two versions: Manual or automatic ball valve.

System control



Basin

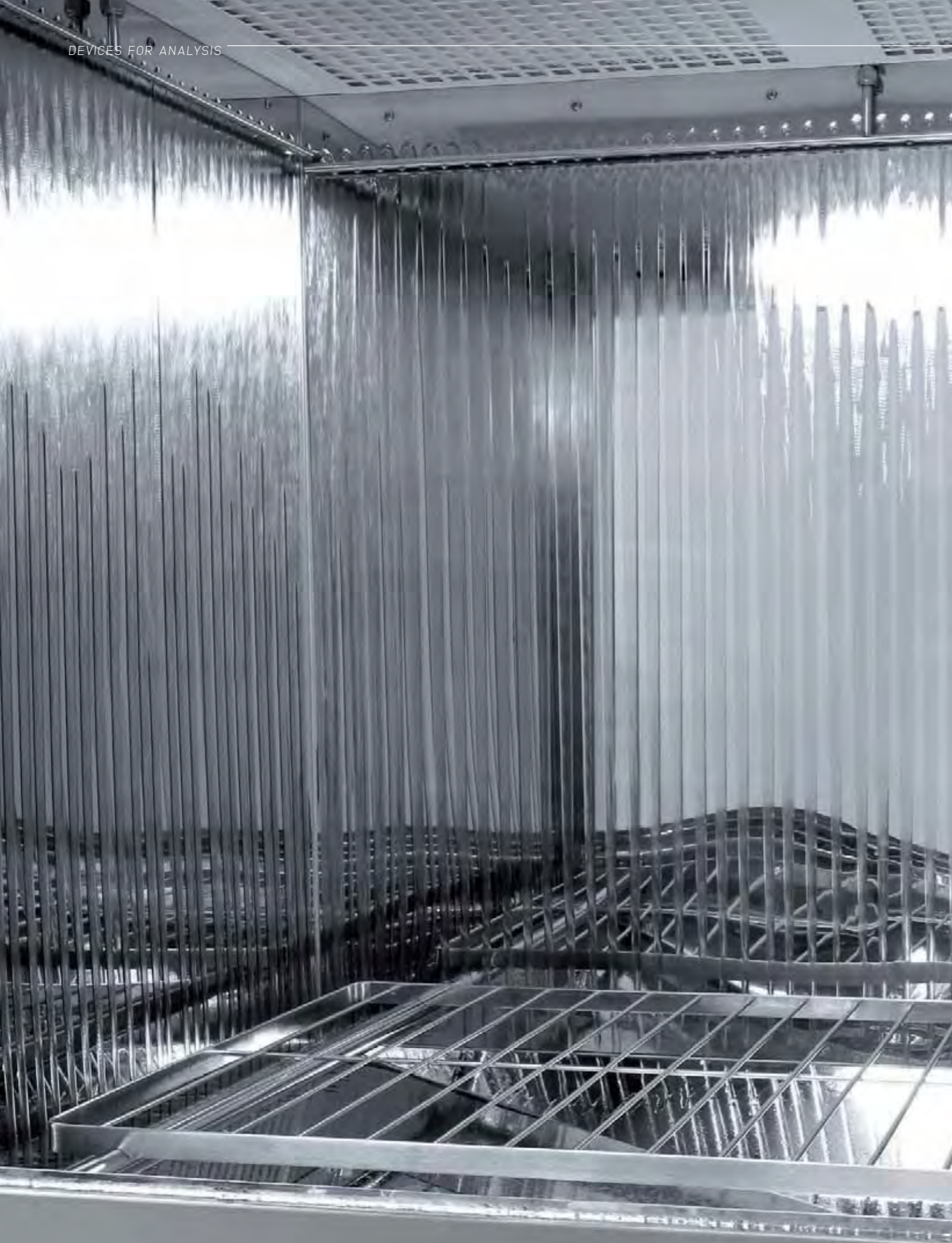


Membrane holder and filter cascade



Optional internal flush





Available options

Integrated height adjustment:

- Electric-hydraulic
- Simply press a button to adjust the correct working height
- A lift of 300mm is possible even with a component weighing up to 50 kg

Enlarged tank capacity with a volume of 35l

Drip-stop protection (pinch valve):

- Pinch valve closes automatically the outlet pipe on opening the membrane holder
- Minimize the risk of rinse out solvent medium

Fixed gloves interventions:

- On the opening of the sliding door window of the basin
- Gloves arm length size
- For repetitive use

Comfort touch panel incl. wireless key board and separate touch pen

- Saving PDF documents
- Saving pictures of samples or test procedures
- Information lines: Saving up to 20 characters for further text information

Remote maintenance:

Provide and maintain IT hardware to establish a VPN connection through a provided VPN client (Mon–Fri, 08:00–17:00 CET)

Deionised water:

- Integration of deionised-water compatible components of stainless steel
- Accredited tenside: SurTec 084 (0,5 %)

Additional operating languages:

Individual, on request



RIUS SINGLE 1700

MADE IN GERMANY



Art. No.: 1.RIUS.30.00

- The Gläser Analytics Centre Rius Single 1700 provides product protection
- Enlarged analytik chamber
- Exhaust booth for high protection of components against contamination
- Front slider to close the work area
- Equipped with an extraction system in the front work area for the protection of persons and products

Product details:

Electric support:
230VAC +/- 10% / 50Hz
Size: 1700 x 1000 x 1000 mm
Weight: 600 kg

Procedure options:

- Spraying
- Rinsing

- Siemens SPS S7-1200
- Control with 12" touch panel „Basic“
- Testing procedures can be saved (32 programs, each with 30 individual steps)
- Display parameters: Volume / flow volume / Ultrasound time and power / medium temperature / system pressure / filter situation and many more
- Languages: German / English / Spanish / Italian / Polish / Chinese (Mandarin)– during operation, you can toggle between languages at any time

- Polished stainless steel interior
- Enlarged analysis chamber approx. 1694 x approx. 1048 x approx. 1009 mm (W x H x D)
- Wall flushing device facilitates automatic cleaning of all four walls
- LED-lighting in the analysis chamber
- Parts holder for parts up to 100 kg
- Protecting window with oblique-installed openings with flexible slats

The user-friendly, lifting and tilting membrane holder includes three individual cascade rings with tweezer lead for safe and simple membrane fitting and removal of Ø 47 mm membrane filters. When ordering optional interior flush with second membrane support.

The Internal flush marks a completely closed flushing circle for the testing of the interior geometries and surfaces e.g. of pipes, tubes, manifolds, filter housings according to the VDA19.1, 6.4.4 recommendation.

Available in two versions: manual or automatic ball valve.

System control



Basin



Membrane holder and filter cascade



Optional internal flush





Available options

Drip-stop protection (pinch valve):

- Pinch valve closes automatically the outlet pipe on opening the membrane holder
- Minimize the risk of rinse out solvent medium

Comfort touch panel incl. wireless key board and separate touch pen

- Saving PDF documents
- Saving pictures of samples or test procedures
- Information lines: saving up to 20 characters for further text information

Remote maintenance:

Provide and maintain IT hardware to establish a VPN connection through a provided VPN client
(Mon–Fri, 08:00–17:00 CET)

Deionised water:

- Integration of deionised-water compatible components of stainless steel
- Accredited tenside: SurTec 084 (0,5%)

Additional operating languages:

Individual, on request



RIUS DOUBLE

MADE IN GERMANY



Art. No.: 1.RIUS.20.00

- The Gläser Analytics Centre Rius Double provides two workplaces
- Exhaust booth for the active protection of components against contamination
- Front slider to close the work area
- Equipped with an extraction system in the front work area for the protection of persons and products

Product details:

Electric supply:
230VAC +/- 10 %
50 / 60Hz
Size: 1550 x 2200 x 1000 mm
Weight: 520 kg

Procedure options:

- Spraying
- Rinsing
- Flooding
- Ultrasound

- Siemens SPS S7-1200
- Control with 12" touch panel „Basic“
- Testing procedures can be saved (32 programs, each with 30 individual steps)
- Display parameters: Volume / flow volume / Ultrasound time and power / medium temperature / system pressure / filter situation and many more
- Languages: German / English / Spanish / Italian / Polish / Chinese (Mandarin)–during operation, you can toggle between languages at any time

- For wide components
- Polished stainless steel interior equipped with wall flushing
- Equipped with wall flushing
- Dimension of the big basin: 800 x 800 x 800 mm (W x H x D)
- Half round basin Ø 300 mm for small and smallest parts
- Separate membrane holder for both basins
- LED-lighting

- Electric-hydraulic
- Simple use by pressing a button
- Stepless
- Lifting of 300 mm possible (Height: 2100–2400 mm), even with a component weighing up to 100 kg
- Ergonomy and working safety for your employees will become better

The user-friendly, lifting and tilting membrane holder includes three individual cascade rings with tweezer lead for safe and simple membrane fitting and removal of Ø47 mm membrane filters.
When ordering optional interior flush with third membrane holder.

System control



Basin



Optional height adjustment



Membrane holder and filter cascade





Available options

Drip-stop protection (pinch valve)

- Pinch valve closes automatically the outlet pipe on opening the membrane holder
- Minimization of solvent leakage

Internal flush

Enlarged tank capacity with a volume of 35l

Fixed gloves interventions

- On the opening of the sliding door window of the big basin
- Gloves arm length size
- For repetitive use

Comfort touch panel incl. wireless key board and separate touch pen

- Saving PDF documents
- Saving pictures of samples or test procedures
- Information lines: saving up to 20 characters for further text information

Remote maintenance:

Provide and maintain IT hardware to establish a VPN connection through a provided VPN client
(Mon–Fri, 08:00–17:00 CET)

Deionised water:

- Integration of deionised-water compatible components of stainless steel
- Accredited tenside: SurTec 084 (0,5 %)

Additional operating languages:

Individual, on request

RIUS GT

MADE IN GERMANY



Art. No.: 1.9840.01.50

- The Gläser Analytic Centre Rius GT provides a workplace for the sampling of large parts
- Flow cap with HEPA filter for the active protection of the components and the rinsing pans against contamination
- Interior fully lined with polished stainless steel
- Equipped with an extraction system in the work area for the protection of persons and products

Product details:

Electric supply:
230VAC +/- 10 %
50 / 60Hz
Size: 2500 x 2400 x 1200 mm
Weight: 800 kg

Procedure options:

- Spraying
- Rinsing

- Siemens SPS S7-1200
- Control with 12" touch panel „Basic“
- Testing procedures can be saved (32 programs, each with 30 individual steps)
- Display parameters: Volume / flow volume / Ultrasound time and power / medium temperature / system pressure / filter situation and many more
- Languages: German / English / Spanish / Italian / Polish / Chinese (Mandarin)– during operation, you can toggle between languages

Equipped with high quality polished surfaces (2150 x 900 mm) to enable fastest possible cleaning as well as best possible blank values. The analysis area is equipped with wall rinsing and therefore can hold particularly large and long components.

Two user-friendly, liftable/pivotable membrane supports incl. cascade for the intake of up to three filter membranes in Ø 47 mm for both the analysis basin as well as the interior component cleaning.

Interior rinsing:
The ideal opportunity to rinse pipes and components directly on a second membrane holder.

Strong team of Rius GT with the Manipulator for up to 500 kg for the testing of large parts.

System control



Basin



Interior Rinsing and Membrane Support



Manipulator



SERVICE AGREEMENT FOR ALL TYPES OF MACHINES

YOUR ADVANTAGES IN SUMMARY:

- Permanent low costs for the service
- Optimally maintained test device
- Extended warranty
- Low probability of failure
- Planning secure
- Expert advice
- Cost savings
- No stress

The preventative service maximize the lifetime of your testing device. Because of the professional cleaning from our service technician, the basic cleanliness will be preserved, so that the achievement of save blank values and the compliance with your limits can become warranted.

Furthermore wearing parts will be changed, sensors, the electrics and the hydraulic will be tested, plus the safety of the machine will be checked. In this way your extraction cabinet is well prepared for further operation.

Besides we will take the effort of the controlls and we will inform you about the service interval in time.

Contact us and use this chance.

Phone +49 (0) 7451 5392-0


www.glaeser-group.com
service@glaeser-group.com

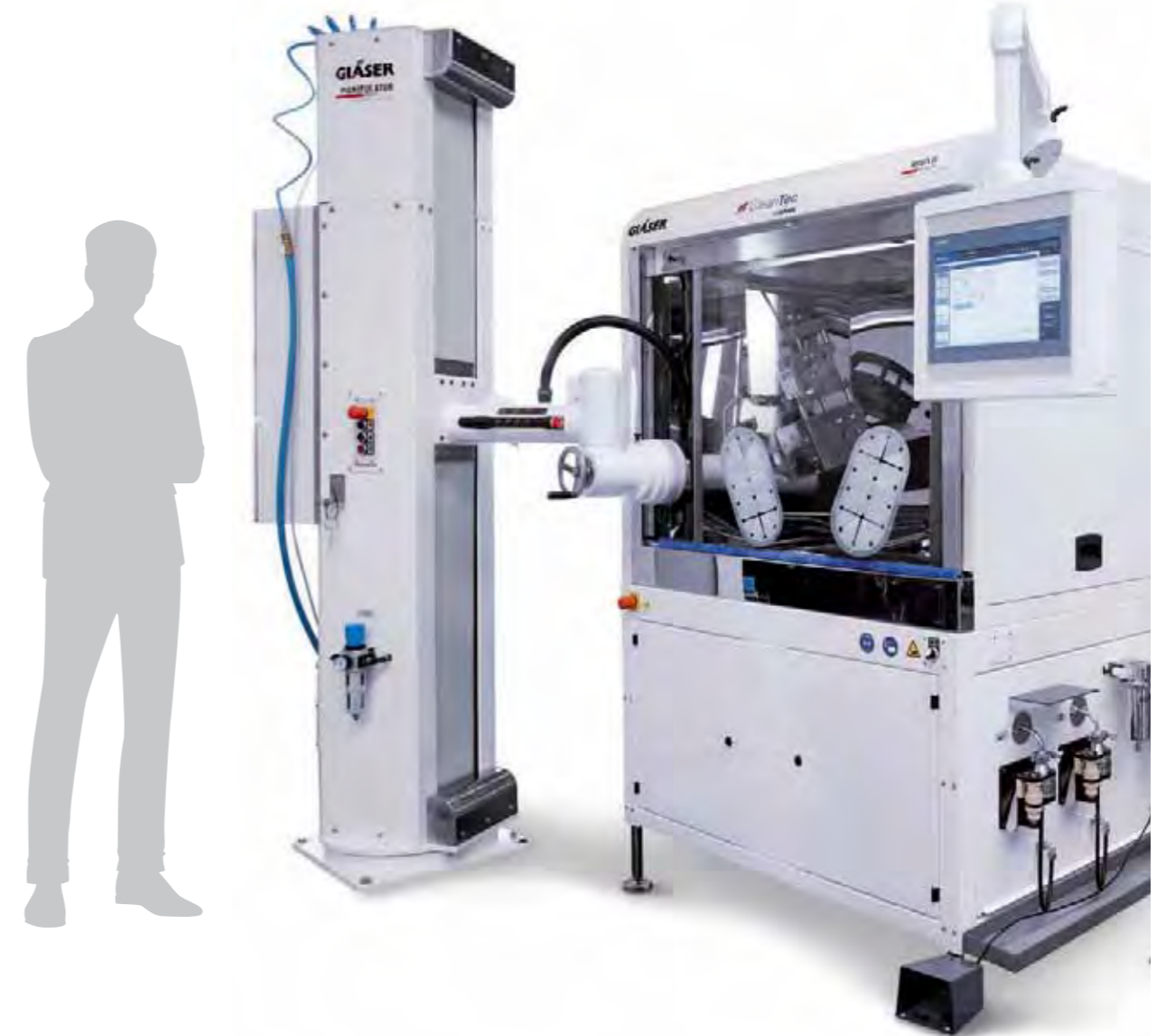


ACCESSORIES FOR DEVICES

USEFUL ACCESSORIES



 Please note our Tips.
These products are our
recommendations for
you.



Manipulator – RiuS

Art. No.: 1.9831.00.56



The Gläser manipulator as a prolonged and tireless arm relieves the worker from heavy physical work and protects also the analysis from generating additional particles by carrying and fixing the component's load during all movements in different axes.

He is specially adapted to the essential points of technical cleanliness.

The front arm incl. rotary drive with gearbox and adapter flange is suitable and designed for Ex-Zone II.

Product details:

For components up to 100 kg

Height: 2350 mm

Base plate: 500 x 500 mm

Connection: 230VAC +/- 10%
50 / 60Hz

Compressed air: max. 7 bar

Weight: 520 kg

The Gläser manipulator as a prolonged and tireless arm relieves the worker from heavy physical work and protects also the analysis from generating additional particles by carrying and fixing the component's load during all movements in different axes.

He is specially adapted to the essential points of technical cleanliness.

The front arm incl. rotary drive with gearbox and adapter flange is suitable and designed for Ex-Zone II.

Product details:

For components up to 500 kg

Height: 2042 mm

Base plate: 900 x 700 mm

Connection: 230VAC +/- 10%
50 / 60Hz

Compressed air: max. 7 bar

Weight: 520 kg

Manipulator – RiuS

Art. No.: 5.9840.02.36



Inlay for ACM parts holder



For extra small components

Ø 220 mm / mesh aperture 3,0 mm / wire diameter 0,8 mm

Art. No.: 1.9800.05.00

Ø 220 mm / mesh aperture 4,0 mm / wire diameter 1,0 mm

Art. No.: 1.9800.05.01

Ø 220 mm / mesh aperture 1,8 mm / wire diameter 0,5 mm

Art. No.: 1.9800.05.02

Ø 220 mm / mesh aperture 1,0 mm / wire diameter 0,5 mm

Art. No.: 1.9800.05.03

Ø 220 mm / mesh aperture 0,3 mm / wire diameter 0,205 mm

Art. No.: 7.9840.00.97

Ø 400 mm / mesh aperture 0,5 mm / wire diameter 0,3 mm

Art. No.: 7.9840.01.02

Parts holder for ACM17

Art. No.: 1.9831.06.61



For holding the parts during rinsing irradiation. There are eight support points on the circumference of the ring. Suitable for components up to 5 kg.

Product details:

Smooth / Standard

Maximum load capacity:

5.000 g

Parts holder for ACM17

Art. No.: 1.9831.06.59



For holding the parts during rinsing irradiation. There are four support points on the circumference of the ring. Suitable for components up to 5 kg.

Product details:

Smooth / Standard

Maximum load capacity:

5.000 g

To put the components in the solvent during the examination. With four support points.

For the 2nd generation of machines.

Art. No.: 1.9831.06.37

Product details:

Deep / Standard / Ø 280mm

Mesh aperture 10 mm

Wire diameter 1 mm

Maximum load capacity of the parts holder: 500 g

Parts holder for ACM 17/18

Art. No.: 5.9820.80.01



To put the components in the solvent during the examination. With three support points.

For the 2nd generation of machines.

Art. No.: 1.9831.06.39

Product details:

115mm deep

Standard Ø 280 mm

Mesh aperture 10 mm

Wire diameter 1 mm

Maximum load capacity of the parts holder: 500 g

Parts holder for ACM 18

Art. No.: 5.9840.00.94



High quality parts holder for Technical Cleanliness. To support component parts in the ACM 18. Included in ACM 18 – for purchase of spares.

Product details:

Measurements:

600 x 400 mm / polished

Maximum load capacity of the parts holder: 15 kg

Prepared for Ex-Zone 2 in analytic chamber.

Grid ACM 18

Art. No.: 2.9840.01.91



Funnel / long adaptation

Art. No.: 1.9831.06.50



Suitable for fast inspection of extra small components.
With high blank value request.
For fixing the membrane filter below the funnel with a clamp.
The „Adaptation long“ allows a comfortable working height. The adaptation is applied to the drain and vacuum pumped by the ACM.

Product details:
Stainless steel funnel with 500ml
Ø funnel 120 mm
Total height 490 mm from drain

Prepared for EX-Zone 2 in analytic chamber:
Usage of grounded materials.

Funnel / short adaptation

Art. No.: 1.9831.06.48



Suitable for fast inspection of small components. The adaptation is applied to the drain and vacuum pumped by ACM 18.
The membrane is still in the membrane support.
For extra small components with high blank value request.

Product details:
Stainless steel funnel with 500ml
Ø funnel 120 mm
Total height 10 mm from drain

Prepared for EX-Zone 2 in analytic chamber:
Usage of grounded materials.

Parts holder for RiuS Single

Art. No.: 2.9831.10.12



High-grade parts holder (grid) for Technical Cleanliness, for holding the components in the RiuS Single (1200 x 800 mm).

Product details:
Measurements:
600 x 900 mm / polished
Maximum load capacity of the parts holder: 20 kg

High-grade parts holder (grid) for Technical Cleanliness, for holding the components in the RiuS Single (1200 x 800mm).
Does not cover the whole basin, so there's enough place for handling.

Product details:
Measurements:
600 x 800 mm / polished
Maximum load capacity of the parts holder: 20 kg

Parts holder for RiuS Single

Art. No.: 2.9807.28.15



To put the components in the solvent during the examination.
With 4 support points.
Included in RiuS Double.

Product details:
Smooth / standard Ø 240 mm
Mesh aperture 6 mm
Wire diameter 1 mm
Maximum load capacity of the parts holder: 500 g

Parts holder for RiuS Double

Art. No.: 5.9840.00.94



To put the components in the solvent during the examination.
Holds components side by side.
With 3 support points.

Product details:
Deep / standard Ø 285 mm
Mesh aperture: 10 mm
Wire diameter: 1 mm
Maximum load capacity of the parts holder: 500 g

Parts holder for RiuS Double

Art. No.: 5.9800.50.00



High-grade parts holder (grid) for Technical Cleanliness, for holding the components in the RiuS Double (800 x 800 x 300).

Product details:
Measurements:
650 x 600 mm / polished
Maximum load capacity of the parts holder: 20 kg

Prepared for EX-Zone 2 in analytic chamber

Parts holder for RiuS Double

Art. No.: 2.9831.09.51



Suitcase set with nozzles

Art. No.: 1.9831.03.49



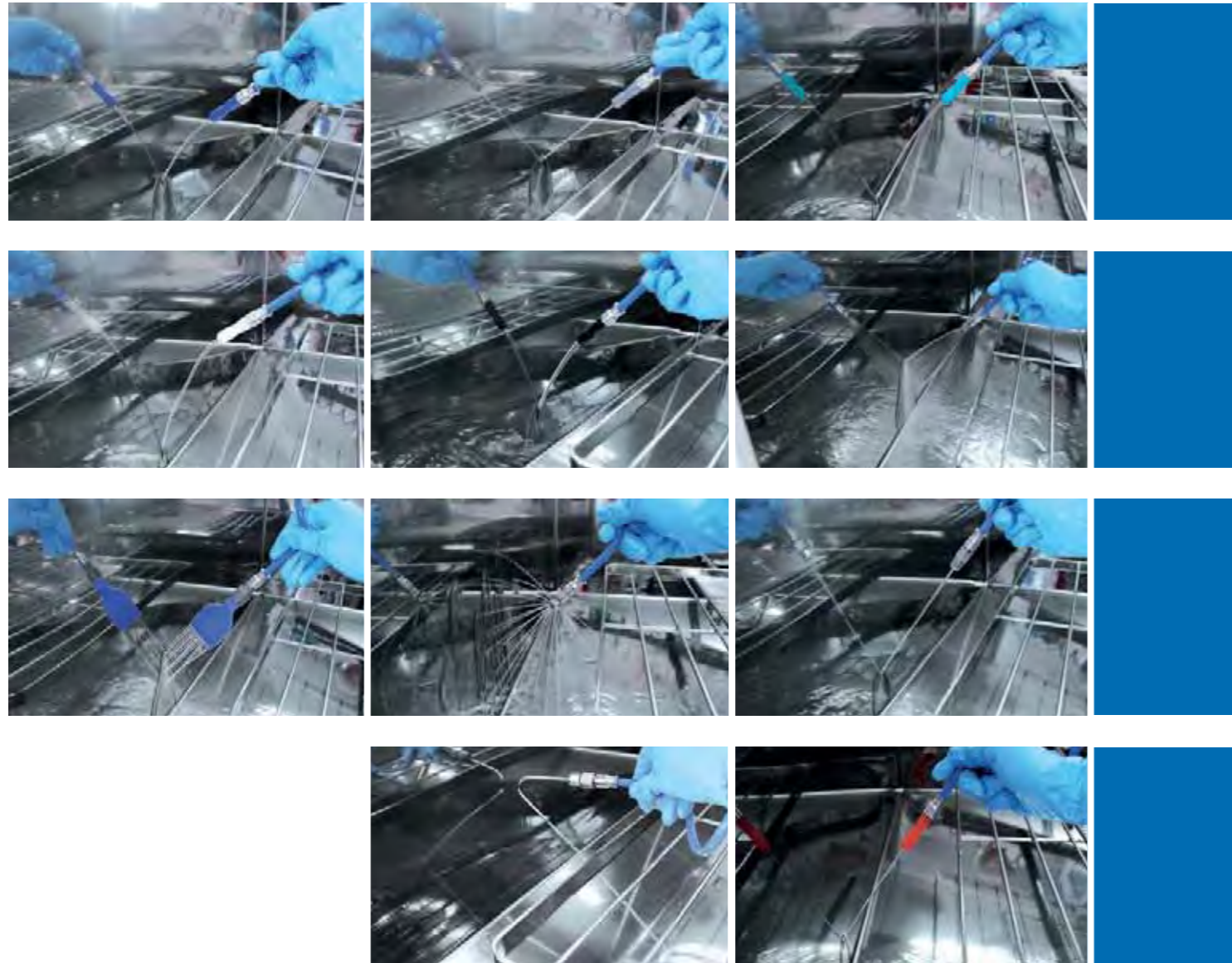
11 different types of nozzles with different diameters enable straightforward and simple working in the laboratory in order to meet different customer specifications. Simple plug-in connection for quick exchange.

Product details:

Dimensions case:

270 x 185 x 93 mm

Weight case: Approx. 0,7 kg



Product details:

Ø 63 mm

Shower head small

Art. No.: 1.9831.02.48



Product details:

Ø 80 mm

Shower head large

Art. No.: 1.9831.02.47



In triplicate / replacement filter membrane carrier with basis / bottom part and two sieve inserts suitable for Gläser membrane support.

Included in all ACM and RiuS - for purchase of spares.

Product details:

Ø 47 mm

Filter membrane carrier / Complete

Art. No.: 5.9800.19.10



Suitable for the quick and thorough cleaning of analytic basin. The spliced set of quality bristles is extra gentle. In this way damages can't be arise in the analysis basin. The oval form makes cleaning at hard accessible places possible. For all types of extraction systems.

Product details:

Dimensions: Approx. 15 x 12 cm

Material: Plastic, qualitative bristles, elastic hem protection

Grip: Rubber

Colour: Silver / black / blue

Cleaning brush

Art. No.: 7.9840.01.04



Assembly gloves

Art. No.: 7.9840.01.03



- Cut resistant assembly gloves with high wearing comfort
- Good handle properties
- Ergonomic fit
- Available in different sizes

Protective cover bag



Rectangular cover bag. The precleaned system will be protected against particle contamination during transport by the protective cover bag. The protective hood can be quickly and easily mounted by one person. The bag protects your system until commissioning, during vacation times and also on weekends.

Product details:

Material: PVC nylon
Colour: White
 Model sewn with integrated zipper.

Suitable for ACM17 Gen I:
Art. No.: 1.9800.06.01

Suitable for ACM18 Gen I:
Art. No.: 1.9800.06.07

Suitable for ACM17 Gen II:
Art. No.: 1.9800.06.09

Suitable for ACM18 Gen II:
Art. No.: 1.9800.06.07

For the delivery of your machine.

Suitable for ACM17:
Art. No.: 1.9800.06.21

Suitable for ACM18:
Art. No.: 1.9800.06.22

Suitable for RiuS 1200:
Art. No.: 1.9800.06.23

Suitable for RiuS 1700:
Art. No.: 1.9800.06.24

Wooden boxes



SERVICES

RELIABLE TESTING RESULTS – WORLDWIDE



We offer you our complete scope of services on almost 200 m² in Germany, USA, China and Mexico.



Laboratory Services / Service / Worldwide

Service centres for Technical Cleanliness in compliance with VDA 19.1 / ISO 16232 and customer-specific requirements.

We analyse component sizes from a few milligrams up to 500 kg weight and up to 2.50 m length on extraction systems for Technical Cleanliness from own production.

OUR SERVICES AT A GLANCE:

Extraction measurement as qualification test:

The qualification must be conducted once for each component / module. It comprises 6 extraction steps with downstream light-microscopy evaluation to determine the suitable test parameter and corresponding documentation.

Double inspection

Routine Check / Technical Cleanliness:

- Particle extraction: Rinsing, Spraying, Ultrasound, oil and liquid analyses
- Coordination of the cleaning areas / scope
- Evaluation according to the request form with / without cascade
- Blank value determination
- Gravimetric and light-microscopy evaluation
- Incl. test report

The range of services can be individually adapted to your requirements. Further information on request.

Gläser GmbH



MATERIAL DETERMINATION WITH SEM/EDX

Automated counting of membrane filters:

- Particle number in size classes and chemical classification of particles
- Identification of separate particles
- Check of unknown residues

The Gläser test laboratory became accredited as the first Technical Cleanliness service provider throughout Germany and thus set a milestone in the sector. Gläser was also a member of joining in the development of VDA 19.1 and VDA 19.2.

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Glaeser, Inc



Glaeser, Inc has been based in the US state of Alabama since 2011. In a modern industrial area with direct proximity to companies from the automotive industry, the entire services for technical cleanliness is offered.

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www.glaeserinc.com

Glaeser (Nanjing) Co., Ltd. Is official VDA QMC (Verband der Automobilindustrie Qualitäts Management Center) licence partner in China.

The primary task of the VDA QMC training department is to convey the output of the Working Groups to employees of the automotive industry via sector-specific QM training programs.

As official VDA QMC licence partner in China Glaeser Nanjing gives workshops in the field of Technical Cleanliness and conveys fundamental know-how gained from the experiences in the own laboratory.

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China

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Glaeser (Nanjing) Co., Ltd.



Glaeser Mexico S. de R.L. de C.V.



„Glaeser Mexico S. de R.L. de C.V. has moved into Conin Business Park, a newly-developed modern industrial area at the beginning of the year 2018. When choosing the location, attention was paid to the direct proximity to the customer because many companies, in particular also companies from the automotive industry, are based there. The Mexican location has commenced operations on 1st July 2018.

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km. 201+100
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76240, Mexico

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TRAINING

QUALIFICATION OF YOUR EMPLOYEES

Training

Gläser GmbH offers you and your employees an extensive training programme. From the basics of technical cleanliness to assembly cleanliness in compliance with VDA 19.2. We are happy to coordinate the training programme to suit your individual needs.

- Appointment by arrangement
- Venue at Gläser GmbH in Horb a.N. or at your company
- Full-day training / 9 a.m.–4 p.m.
- Participants up to 6 persons / additional persons on request

Lecturers:

The lecturers of the Gläser team, with experience in many thousands of analyses and as members of many standardisation bodies, will share their expertise with your employees.



Training / Testing and System Technology

This training raises the awareness of your laboratory staff for technical cleanliness and qualifies them. Your employees learn how to operate our systems and how to correctly conduct analyses.

You increase the reproducibility of your component analyses and thereby prevent wrong interpretations of the analysis reports. Projects of technical cleanliness can be processed at a high standard of quality with your suppliers and customers.

1. Theoretical introduction

- General introduction to technical cleanliness
 - What is TecSa (Industrial Association for Technological Cleanliness)?
 - Why do I need TecSa?
 - What do I have to bear in mind?
- Component handling / packaging
- General introduction for inspecting the technical cleanliness of components
 - What kind of methods are there?
 - Why do I have to conduct inspections?
 - What is a blank value?
 - What is an extraction curve?
 - Why is a double inspection required?
 - How do I conduct analyses in compliance with standards / specifications?
- Introduction to the ACM / RIUS control system

2. Practical introduction

- Explaining ACM / RiuS
- Explaining the control system
- Individual initiative of trained employees on ACM / RiuS
- Possibly conduct a component analysis
- Discussion about open questions (support / organisation / etc.)
- Care of the system (medium change / troubleshooting / maintenance) and how Gläser provides you with relevant support

Training location option:

- Training at Gläser GmbH in Horb a.N.
- Training at your company

Art. No. at Gläser: Internal Training

Art. No. in your company: External Training



Assistance / Laboratory Support



Conducted in a Gläser laboratory or in your company laboratory.
Assistance per day / Person = 6–8 h

- Assistance for the laboratory staff
- Conduct component analyses (on Gläser systems)
- Create findings (on Jomesa microscope)
- Support in Technical Cleanliness
- Time for open questions to technical cleanliness in general / on handling the system / on reliable workflows in the lab / on the implementation of specifications and standards particularly for changes like e.g. the new VDA 19.1 / on handling of your components during sampling / evaluation and interpretation of the results, etc.
- Content can be individually coordinated, e.g. according to your specifications / components and other factors
- Particularly suitable as process-related repetition or in the event of personnel changes

Art. No. at Gläser: AssistenzTecSa1

Art. No. in your company: AssistenzTecSa2

Training / Assembly Cleanliness



Clean assembly is the prerequisite for the achievement of threshold values in technical cleanliness.
Qualify your employees now for competent handling of assemblies.

Contents:

- Terminology clean assembly and technical cleanliness
- Influencing factors relevant to clean assembly
- Environment
- Logistics
- Personnel
- Assembly facility
- Measurement of cleanliness flows
- Practice workshop / production / assembly / test field / logistics
(Please coordinate the visit to the department in advance)
- Final discussion

Art. No. at Gläser: SchulungMontSa1

Art. No. in your company: SchulungMontSa2

Gläser Expert Days

Which challenges do you have in the field of Technical Cleanliness you would like to discuss with experts?

Gläser organizes an Expert Day to current topics of Technical Cleanliness each year. High-class speaker of considerable companies are presenting solutions and practice examples of different issues of Technical Cleanliness. The exhibition offers also more possibilities for conversation.

Are you interested to learn more about the next events? Do not hesitate to contact us.



Expand your knowledge about Technical Cleanliness.

Gläser offers all-day trainings two times a year. In the morning you learn theoretic aspects from our planer and experts and in the afternoon, it's your turn to apply your new knowledge practically. With the help of a self assessment you can proof your newly gained knowledge. At the end of the day you will receive a certificate.

Are you interested to learn more about the next events? Do not hesitate to contact us.



Seminars

RECOMMENDATIONS FOR THE INTRODUCTION AND CONTINUATION OF QUALITY MANAGEMENT SYSTEMS

In the development of the VDA books all results of extensive examinations, which were carried out in the context of the industry association as well as the longterm experiences of involved companies were included.

Gläser was also a member of joining in the development of VDA 19.1 and VDA 19.2.

Inspection of Technical Cleanliness – Particulate contamination of functionally relevant automotive components.

German version: Art. No.: 7.9840.00.95

English version: Art. No.: 7.9840.00.96

VDA 19.1



Technical Cleanliness in assembly – Environment, logistics, personnel and assembly equipment.

German version: Art. No.: 7.9840.00.83

English version: Art. No.: 7.9840.01.63

VDA 19.2



The international companion piece to VDA 19.

ISO 16232



Technical Cleanliness in Electrical Engineering

ZVEI



INDIVIDUAL SYSTEMS – FOR SPECIAL REQUIREMENTS

PARTICLE ANALYSES IN AN ACCREDITED TEST LABORATORY

Over 90.000 analyses completed and over 5.000 components tested are only a small part of the laboratory's 15 years of experience. The highly trained laboratory team of ten assistants works on self-produced extraction systems and with state of the art laboratory equipment according to the Technical Cleanliness guidelines.

PARTICLE ANALYSES



EXTRACTION SYSTEMS FROM OWN PRODUCTION

As an experienced system engineer, Gläser designs, constructs and produces cutting edge extraction systems for the inspection of Technical Cleanliness according to VDA 19.1 and ISO 16232. Gläser produces standard versions and systems built completely individually to your instructions and requirements.

SYSTEM ENGINEERING



Two sectors combined

The company Gläser, headquartered in Horb, is divided into two main sectors: **Gläser Hydraulics** and **Gläser CleanTec**.

As a leading specialist in all areas of Technical Cleanliness, Gläser offers solutions in the CleanTec sector. The experts optimize assembly and production processes in accordance with the guidelines of Technical Cleanliness of VDA 19.1 and ISO 16232.

The range of services extends from consulting on component analyses to complete test systems from the own production. As a service provider and plant manufacturer, **Gläser CleanTec** is also strongly represented internationally.

With its subsidiaries Glaeser Inc. in the USA, Glaeser Nanjing in China and Glaeser S. de R.L. de C.V. in Mexico, the Gläser Group offers its international customers all services relating to technical cleanliness in proven German quality.

Gläser Hydraulics is the second pillar of Gläser GmbH. For more than four decades it has focused on the design and manufacture of hydraulic control blocks.

CleanTec
by GLÄSER

Hydraulik
by GLÄSER



GLÄSER



WHATEVER YOU HAVE IN MIND –
WE MAKE THE PERFECT
SYSTEM FOR YOU!

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