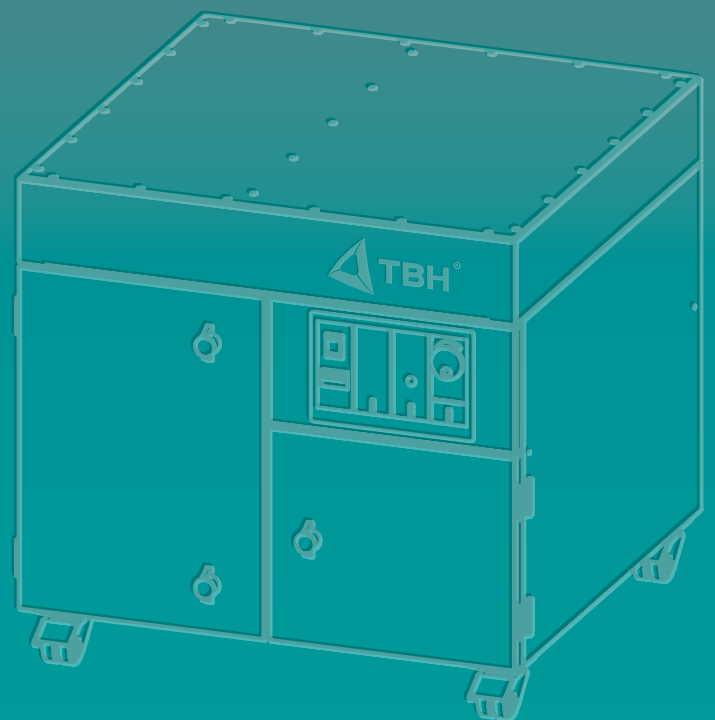
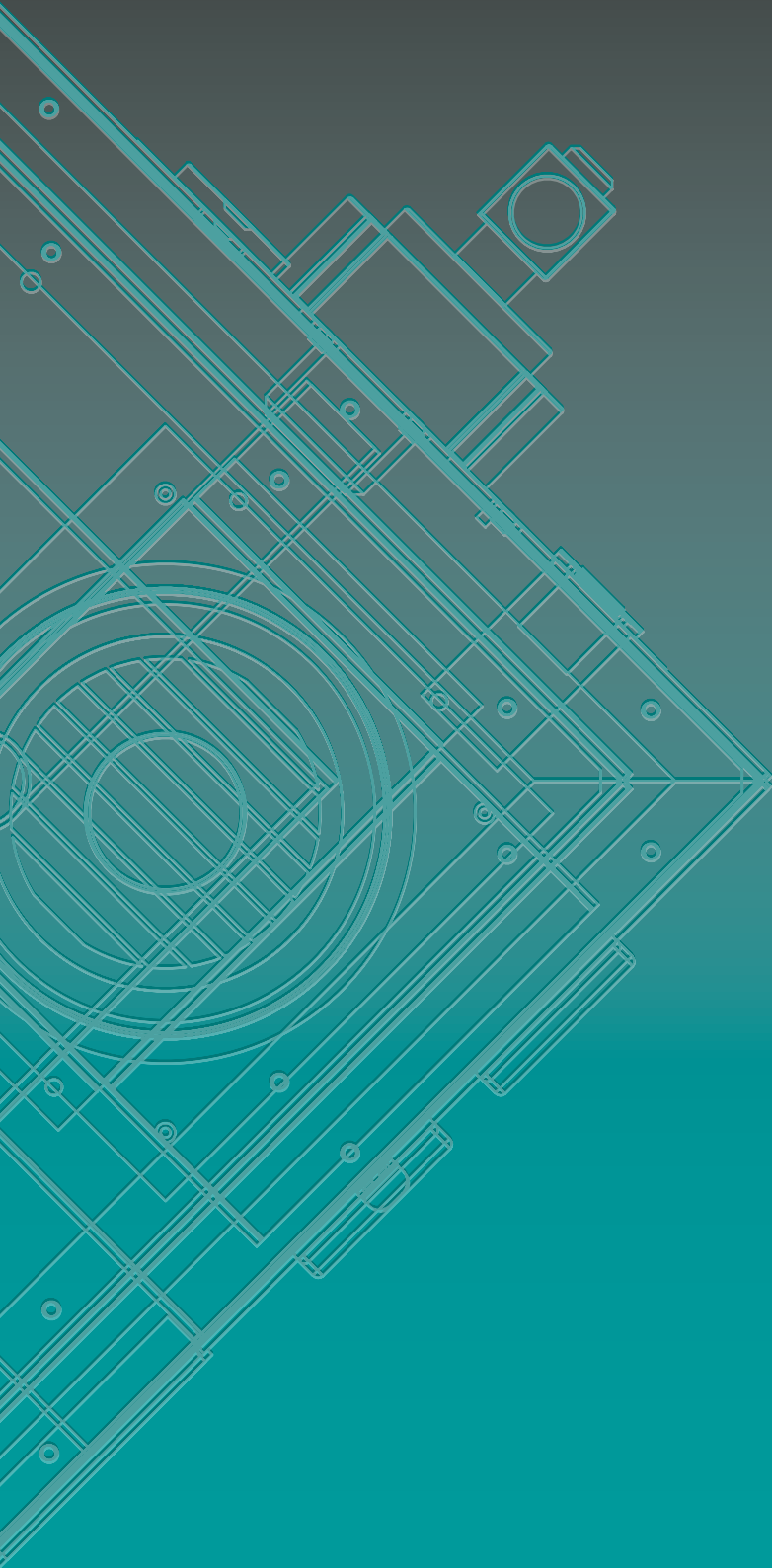


GL DESK-SERIES

EXTRACTION / FILTER / POLLUTION CONTROL // TECHNOLOGY



APPLICATION

The units in the GL Desk-Series were specially designed as base units for compact lasers. They allow space-saving positioning of the laser and extraction and filter system and eliminate the need for an extra work bench. Together with the GL series, they were designed as particularly environmentally friendly extraction and filter systems, reflecting the requirements of TBH GmbH as an environmental technology company. We use special energy-saving and noise-reduced blowers that allow for use even in low-noise environments, such as laboratories and offices. Due to constantly increasing energy costs, device concepts such as the GL Desk-Series are becoming increasingly important.



Similar to image

AREAS OF APPLICATION:

- Base unit for compact lasers
- Extraction and filter system as work bench

THE SYSTEM INCLUDES NUMEROUS FEATURES:

- Space-saving positioning of compact lasers
- Easy filter replacement
- Energy-saving, powerful and quiet
- Powerful electronics

FUNCTIONAL PRINCIPLE

A flexible hose is used to extract the contaminated air from one of the compact lasers positioned on the system and transport the contaminated air into the filter unit. In the filter unit, the contaminant particles are filtered into different filter levels according to their size. Filter units that are equipped with a molecular sieve (for example activated carbon/BAC Filters) remove the majority of gaseous contaminants. Afterwards the purified air can either be circulated back into the work area or diverted outdoors through an exhaust duct. Recirculating the air in the work area is an easy way to reduce energy costs.

PRODUCT FEATURES

SPACE-SAVING POSITIONING OF COMPACT LASERS

The units in the GL Desk-Series were specially designed as base units for the positioning of compact lasers with a maximum area of approx. 700 x 700 mm. They allow space-saving positioning of the laser on the extraction and filter system and eliminate the need for an extra work bench.



EASY FILTER REPLACEMENT

The filters can be easily replaced by simply removing the filters through the front doors of the system. This means that you can easily replace the individual filter levels without getting dirty and without having to open the entire system.



ENERGY-SAVING, POWERFUL AND QUIET

Use of the latest technologies has allowed us to create a very powerful and energy-saving extraction and filter system series. In addition to special noise-reduced blowers, the systems are equipped with integrated acoustic insulation measures that achieve values of 53 db(A), which allows for use even in low-noise environments. The energy savings as compared to traditional systems are another PLUS for this system series.

POWERFUL ELECTRONICS

The GL 30 is equipped with the interface known from the GL-Series (25-pin D-sub). The following functions can be controlled and monitored using both the display and this interface:

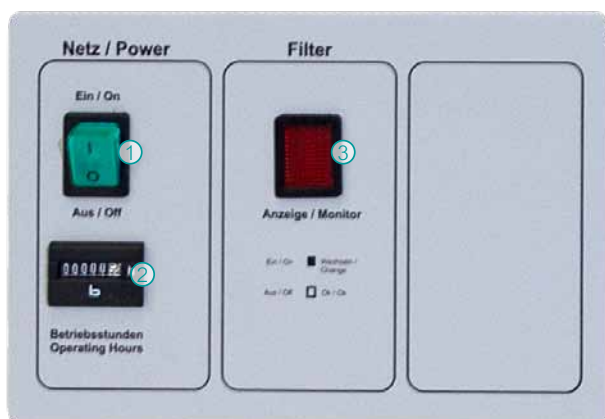
- Fully adjustable speed control (automatic readjustment as the filter saturation increases)
- Advance warning when filter saturation reaches 75%
- Visual and acoustic signals when filter is saturated
- Displays notification of malfunctions
- Switching between start and stand-by modes



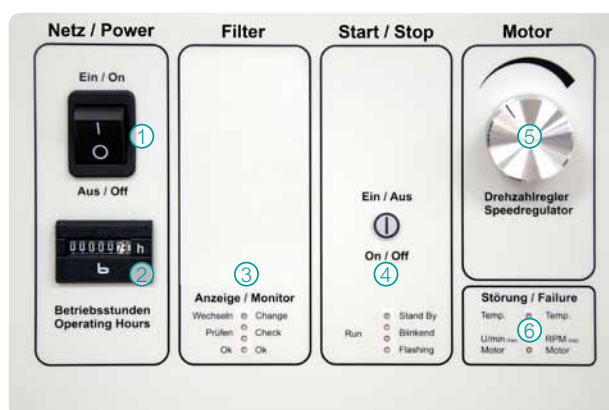
The GL 20 and GL 25 were specially designed as cost-optimised units and are not equipped with an interface.

OPERATING ELEMENTS:

- 1) Power switch
- 2) Operating hour meter
- 3) Filter saturation indicator
- 4) Switch between run and stand-by modes
- 5) Manual speed control
- 6) Temperature and turbine malfunction indicator



GL 20/25

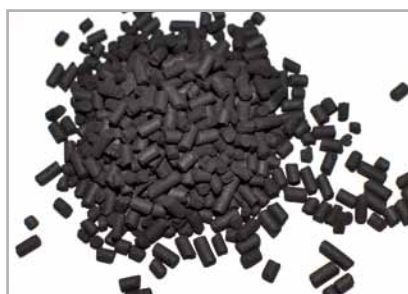


GL 30

ADSORPTION OF GASEOUS SUBSTANCES

Two complimentary filter materials are used for the adsorption of gaseous substances. The activated carbon facilitates the physical adsorption process while the BAC granules facilitate a chemical adsorption process. Neutralisation of specific gaseous substances is achieved through chemical binding with the reaction substance that is deposited on the carrier material. Because the physical and chemical adsorption processes are complementary, an extremely wide range of gases and odours can be collected.

Activated carbon



BAC granules



Activated carbon/BAC



TECHNICAL DATA



Similar to image

AREAS OF APPLICATION:

- Base unit for compact lasers
- Extraction and filter system as work bench

INCLUDES:

- Fully assembled (incl. the filter configuration of your choice)
- 4 wheels for mobile use
- Power cable

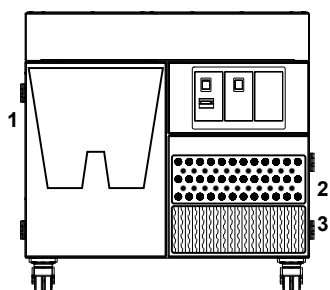
TECHNICAL SPECIFICATIONS	UNIT	GL DESK 20	GL DESK 25	GL DESK 30
Unimpeded air flow rate	m ³ /h	max. 560	max. 560	max. 560
Effective air flow rate	m ³ /h	480	480	180-480
Max. static pressure	Pa	4000	4000	4000
Voltage	V	230/120*	230/120*	230/120*
Frequency	Hz	50/60	50/60	50/60
Power input	kW	0.24	0.24	0.24
Protection class	-	1	1	1
Motor and drive system	-	brushless motor	brushless motor	brushless motor
Noise level	db(A)	ca. 53	ca. 53	ca. 53
Serial interface	D-sub	25-pin	25-pin	25-pin
Weight	kg	ca. 125	ca. 135	ca. 135
Dimensions (HxWxD)	mm	700x710x700	700x710x700	700x710x700
DN 100 intake socket	number	1	1	1
Colour	RAL	7035	7035	7035

* The 120 V version has a reduced extraction level of a maximum of 10% (due to technical reasons)

FILTER CONFIGURATION

Pocket filter (F5/F6)	optional	optional	optional
MP-TEC filter (F7)	✓	✓	✓
Particle filter (H13)	✓	✓	✓
Activated carbon/BAC filter	26 liter	43 liter	43 liter

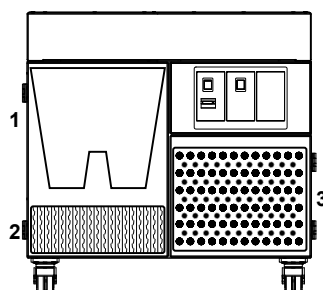
ORDER DATA



GL DESK 20

DESCRIPTION	ART.-NO.
GL DESK 20 230V 50/60Hz	90242
GL DESK 20 120V 50/60Hz	90243

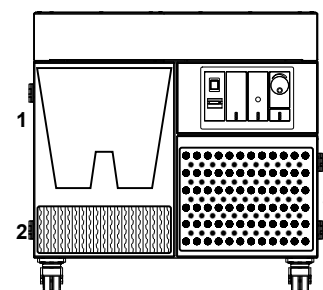
REPLACEMENT FILTERS		
MP-TEC filter	13310	1
Particle filter	13590	2
Activated carbon/BAC	14184	3



GL DESK 25

DESCRIPTION	ART.-NO.
GL DESK 25 230V 50/60Hz	90240
GL DESK 25 120V 50/60Hz	90241

REPLACEMENT FILTERS		
MP-TEC filter	13310	1
Particle filter	13590	2
Activated carbon/BAC	13591	3



GL DESK 30

DESCRIPTION	ART.-NO.
GL DESK 30 230V 50/60Hz	90249
GL DESK 30 120V 50/60Hz	90165

REPLACEMENT FILTERS		
MP-TEC filter	13310	1
Particle filter	13590	2
Activated carbon/BAC	13591	3

ACCESSORIES



INTAKE HOSE-SET

DN (mm)	USE	ART.-NO.
63	GL DESK 20/25/30	14342
70	GL DESK 20/25/30	14373
80	GL DESK 20/25/30	14341
100	GL DESK 20/25/30	14340



DESCRIPTION	USE	ART.-NO.
Brush set for cleaning the DN 50 laser	GL DESK 20/25/30	12721



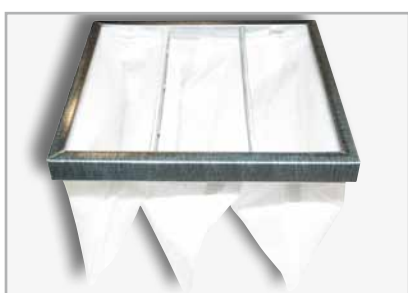
DESCRIPTION	USE	ART.-NO.
Stop valve for the brush set*	GL DESK 20/25/30	13640

* for rear mounting on DN 100 intake fittings, and DN 50/100 intake fittings for the brush set



DESCRIPTION	USE	ART.-NO.
Flow rate control kit**	GL DESK 20/25	14353

** throttle valve for manual reduction or control of the air current at the suction opening Filter accessories



FILTER ACCESSORY	USE	ART.-NO.
Pocket filter	GL DESK 20/25/30	13620

can be optionally used in place of the MP-Tec filter, when lasering rubber or acrylic (for example)



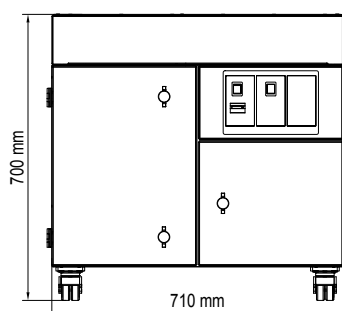
DESCRIPTION	USE	ART.-NO.
Upgrade-Kit (from GL 20 to GL 25)	GL DESK 20	14301

ELECTRONIC CONTROLS

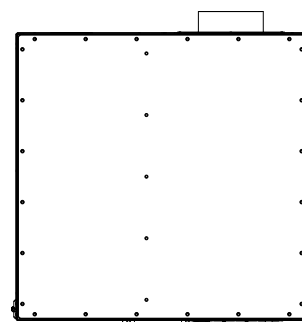
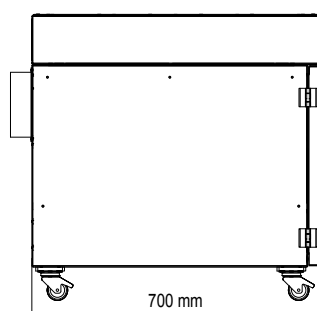
FUNCTION	GL DESK 20	GL DESK 25	GL DESK 30
Fully adjustable speed control	-	-	✓
Automatic speed readjustment	-	-	✓
Visual advance warning at 30% and 75% saturation	-	-	✓
Visual advance warning at 100% saturation	✓	✓	-
Visual signal when filter is saturated (device switches off)	-	-	✓
Real-time operating hour meter	✓	✓	✓
Malfunction notification display (temp./turbine)	-	-	✓
Switching and indicator for start and standby modes	-	-	✓

INTERFACE FUNCTIONS	GL DESK 20	GL DESK 25	GL DESK 30
Interface	-	-	D-sub
Start/stop operation via interface	-	-	✓
Filter saturation signal	-	-	✓
Speed control via interface	-	-	✓
Notification of malfunctions via interface (temp./turbine/collective fault)	-	-	✓

TECHNICAL DRAWINGS



GL DESK 20/25/30





TBH GmbH

EXHAUST- AND FILTRATION TECHNOLOGY

GERMANY

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