

**ULTJUMBO<sup>®</sup>**

**JUMBO Filtertrolley MED**



LASER FUMES



DUST AND SMOKE



SOLDERING FUMES



ODORS, GASES, AND VAPORS



MED



RESTAURO



CLEANING INDUSTRIAL GASES



NEW EMISSIONS



WELDING FUMES



OIL AND EMULSION MISTS



COMPLETE SOLUTIONS

Version: 001

Date of issue: 04/2020



Extraction. Filtration. Persistence.



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## Series MED – Medical applications

### Area of application

personal air locks | offices | hospitals | Communal areas in public facilities | waiting rooms in medical practices or clinics | dental treatments

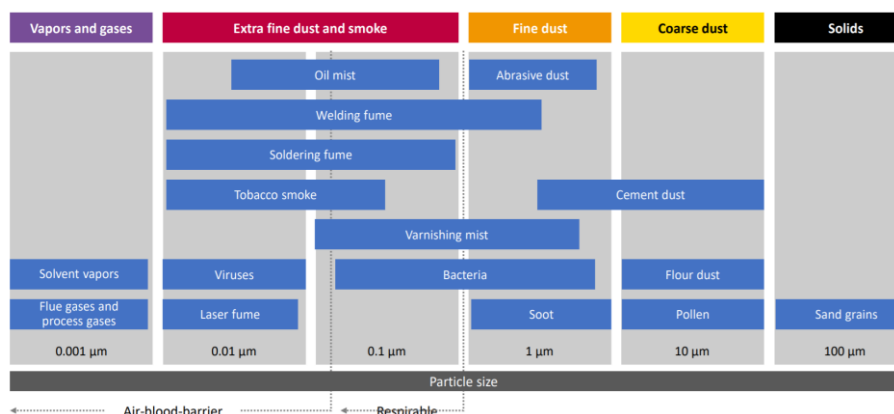
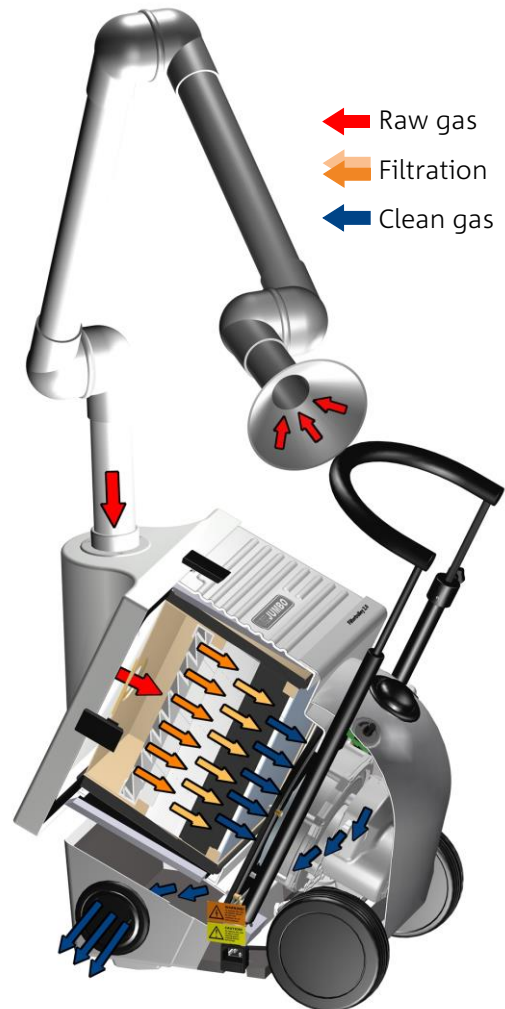
### Functional principle:

An EC blower with a high pressure reserve generates a volumetric flow suitable for the application on the clean-gas side of the filter. The volumetric flow can be controlled individually and steplessly. The pollutant-laden **raw gas** is thus reliably extracted.

Air contaminated with viruses and bacteria in waiting rooms and in the environment of medical treatments poses a health risk to patients and medical personnel. A simple face mask is not sufficient here. The contaminated air must therefore be removed directly at the point of origin as efficient as possible.

The filter set-up used is suitable for cleaning the respiratory air from **SARS-CoV-2 viruses (formerly Corona) in circulating air**. The combination of prefiltering, suspended matter filtering and a large activated carbon layer ensures a high rate of precipitation by using the multi-stage storage filter system. Extremely fine **suspended substances** are retained by the ULPA U15 filter in the U15 combined filter cassette. This guarantees a **particle precipitation rate significantly greater than 99.9995%**.

The filter structure cleans the interior air off particles and viruses. Especially in a particle size class from 60... 120nm (size of the SARS-CoV-2, see illustration).



The precipitation (adsorption) of **gaseous** air contamination takes place in the activated carbon bed of the U15A combined filter cassette.

The filter effect of the activated carbon is based on **adsorption**, i.e. on the depositing of (gaseous)



substances on the surface of the activated carbon. In general, no chemical changes of the adsorbed substance take place in physical adsorption. The nominal volumetric flow of the devices is based on the filter construction, the contact period is oriented to a medium adsorption response.

Thanks to the high degree of cleaning, the **filtered clean gas** can then be returned to the working area (**recirculated-air** operation). This avoids any loss of heat.

Recirculated air operation is not permitted for the suctioning and filtration of carcinogenic, mutagenic or reprotoxic substances.

#### Device variants:

Units in the **JUMBO Filtertrolley** series can be equipped with the following filter set-up for extracting and filtering laser smoke resulting from medical applications:

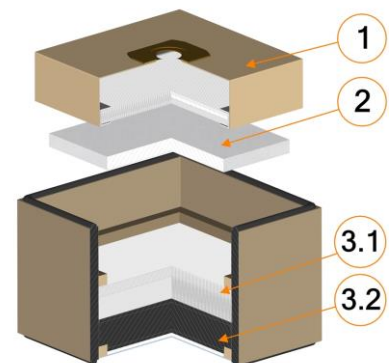
### Jumbo MED

**Part number:** MED Jumbo 2.0-BM.3.0

#### Filter set-up for medical applications:

##### Combined suspended matter filter

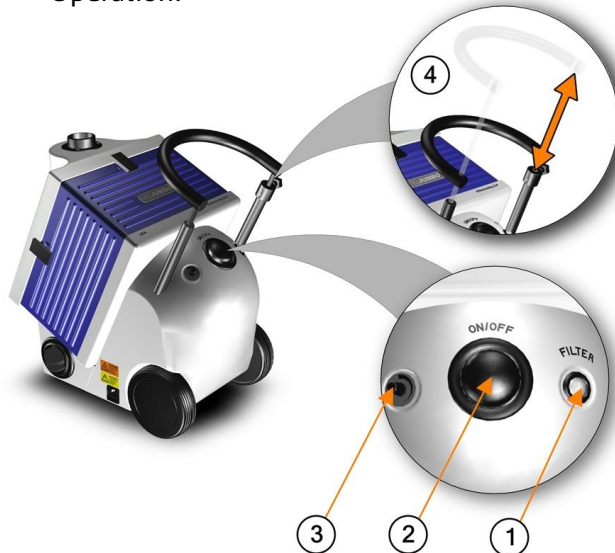
- |       |  |
|-------|--|
| (1)   | G4 Z-Line filter cassette: ISO Coarse 90% according to ISO 16890   |
| (2)   | Filter mat M5:<br>Filter class ISO Coarse >85% according to ISO 16890:   |
| (3)   | U15A combined filter cassette  |
| (3.1) | U15 particulate filter<br>Filter class: U15 Ultra Low Penetration Air (UPLA) filter, suspended matter filter according to DIN EN 1822. |
| (3.2) | Adsorption filter A<br>Filter medium: Activated carbon bed   |





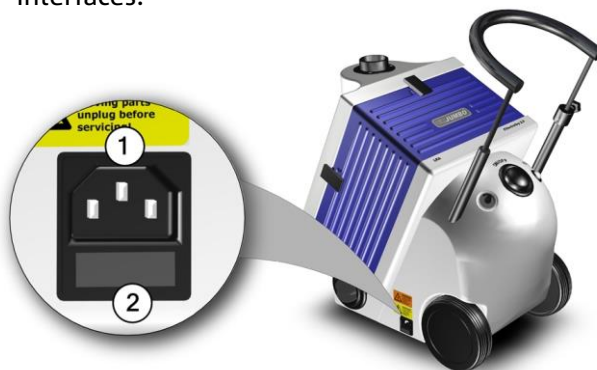
## Equipment

### → Operation:



- 1 Loaded particle filter indicator
  - When the particulate filter is saturated, the indicator lights up (red)
- 2 On/Off switch
- 3 Potentiometer
  - Direct control of the blower speed
- 4 Retractable telescopic handle

### → Interfaces:



- (1) Mains connection socket
- (2) Fuse for mains voltage

### → Air intake versions:

Standard configuration:  
1x intake nozzle Ø 50 mm

Option (for ACD, LAS, LRA only):  
1x intake nozzle Ø 75 mm





MED

Version: 001

### Technical data ULT JUMBO Filtertrolley

Parameter		Unit	230 V	100 - 120 V
Volumetric flow, max.		m <sup>3</sup> / h	190	150 (100 V) - 160 (120 V)
Vacuum max.		Pa	3,200	2,500 (100 V) - 2,700 (120 V)
Rated operating point		m <sup>3</sup> /h @ Pa	80 @ 1,900	65 @ 1,300 (100 V) 80 @ 1,400 (120 V)
Protection rating		IP	54	54
Noise level (@ 50 - 100% air throughput)		dB(A)	49 - 54	49 - 54
Vacuum generator type			EC blower	EC blower
Rated voltage		VAC	1~230	1~100 - 120
Rated frequency		Hz	50/60	50/60
Motor rating		kW	0.15	0.15
Rated current		A	1.0	2.0
Air flow controller				Yes
Loaded particle filter indicator		optical		Yes
Interface SUB D9				No
Dimensions	Width	mm	340	
	Depth	mm	450	
	Height	mm	530 - 850	
Weight (without filter)		kg	approx. 21	
Max. filter weight		kg	approx. 15	
Air intake versions:			Standard: 1x Ø 50 mm nozzle Option: 1x Ø 75 mm nozzle	
Connection options			Hose connection or arm installation	
Extracted air outlet:			2 adjustable exhaust nozzles	
Location			On the bottom on both sides	
Mains power cable		m	3.0	