USER MANUAL

Filtertrolley 2.0





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1. Preface

Hazardous materials in form of dusts, smokes, or vapours may arise in almost every working environment.

In order to assure the safety of employees, law states: These materials have to be removed from the air!

This is just the right task for the *ULTJUMBO*[®] Filtertrolley 2.0. It combines features such as high mobility, low weight, and noiselessness in an optimal manner. These qualities are made possible by innovative components and the use of synthetic materials.

The device impresses with its functional, up-to-date, and appealing design.

Work without draft

The **ULTJUMBO**[®] Filtertrolley 2.0 removes air borne hazardous substances directly from the place of their origin and filters them instantaneously. With supreme power. With the lowest possible energy consumption. Noiseless and adaptable. The extreme filter efficiency guarantees purest air quality. A loss of heat energy belongs to the past.

The filtered air is instantly returned to the working environment – without any form of draft.

Assignment decisive

A special feature: The *ULTJUMBO*[°] Filtertrolley 2.0 is a basic device designed for hundreds of applications. It can be variably modified with different filters and suction elements. Soldering smoke, laser smoke, and dusts can be captured and filtered. Another usage is the adsorption of gases and vapours.

The device is also capable of handling two workstations simultaneously.

Interfaces without problems

The **ULTJUMBO**[°] Filtertrolley 2.0 can be controlled and supervised digitally. Interfaces and joints with other devices create no hassle.

The filters are recyclable. The user does not have to dispose them inconveniently.

2. Use and application

2.1 Models

The **ULTJUMBO**[•] Filtertrolley 2.0 is a versatile filter device. Many different device types with specified filter systems are available for their respective application cases. Each particular device type may only be used to capture, suck off, and filter those suction goods for which the producer determined the tool.

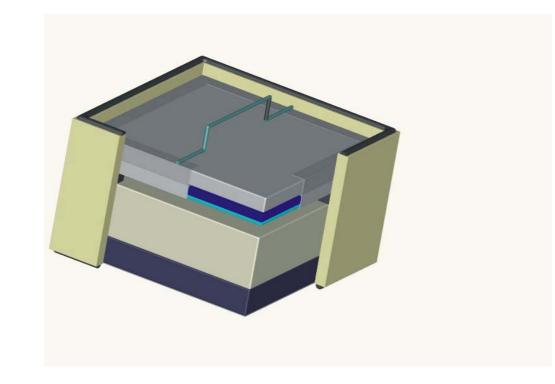
Туре	Filter system	Use / application
LRA	Multi-level filter-system	hand soldering, robot soldering, special work places in the electronic industry
LAS	Multi-level filter-system	laser works, laser marking, laser cutting, laser welding
ACD	Adsorption filter	gluing and pre-treatment, painting and printing, cleaning, laminating, founding, extraction of solvents
ASD	Combined HEPA filter	extraction of dusts, sawing, grinding, sintering, engraving, polishing, restoring and cleaning of art objects

The following device types are existing:

For proper application please consult the producer's operation, user, and maintenance instructions.

Every use beyond these instructions is not as agreed. The manufacturer is therefore not liable for damages resulting from improper operation.

2.1.1. Filtertrolley 2.0 LRA



metal filter

Filter system: multi-level filter - sublimation pre-filter

pre-filter	replacement frame	
	with filter mat F5	
	and filter mat F7	
absolute filter	HEPA filter H13	
adsorption - gas filter	adsorption filter	

The combination of sublimation-, pre-, absolute- and adsorption filters guarantees an efficiency of more than 99% due to multiple cleaning stages, provided that the filter is maintained and replaced regularly.

Use and Application

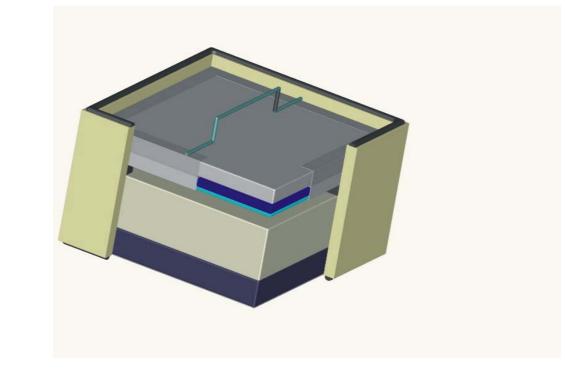
The suction and filter device Filtertrolley 2.0 LRA is suitable for removing and filtering soldering smoke, in particular:

- for hand soldering
- for robot soldering
- at special work places

The Filtertrolley 2.0 LRA may be used for direct suction cleaning at the soldering tip (e.g. robot) as well as in combination with joint suction arms.

Soldering processes generate a lot of soldering smoke (fine dust from soldering flux, gases, vapours, fumes, and others). Therefore, certain rules for the design and the equipment of working environments have to be observed. Soldering smoke and gases of vaporising solvents and activators as well as their decomposition products are mainly inhaled trough the respiratory tract. Most components of soldering smoke and gases are hazardous to our health. As a result of their inhalation, such components can badly harm the respiratory tract. Therefore, these hazardous substances have to be captured directly where they originate.

2.1.2. Filtertrolley 2.0 LAS



Filter system: multi-level filter

- sublimation pre-filter	metal filter
- pre-filter	replacement frame
•	with filter mat F5
	and filter mat F7
- absolute filter	HEPA filter H13
- adsorption - gas filter	adsorption filter

The combination of sublimation-, pre-, absolute- and adsorption filters guarantees an efficiency of more than 99% due to multiple cleaning stages, provided that the filter is maintained and replaced regularly.

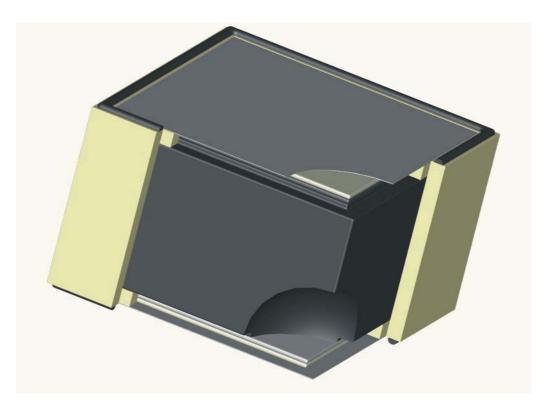
Use and Application

The Filtertrolley 2.0 LAS is suitable to capture and filter dusts and vapours resulting from laser processing. Laser smoke is hazardous to health.

Mixtures of dusts, gases, and vapours in different compositions occur in most laser processes. According to working environment regulations they have to be removed from the air.

The Filtertrolley 2.0 LAS has to be utilized directly at laser work places or at laser units; thus, emerging hazardous substances can be removed at the place of their origin.

2.1.3. Filtertrolley 2.0 ACD



Filter system: adsorption filter

- pre-filter mat G2
- filter foam
- special activated carbon
- filter foam
- after-filter mat G2

The combination of pre-filter and activated carbon guarantees a high filtration efficiency of unhealthy gases, vapours, and fumes. A thick layer with tiny pieces of activated carbon assures a long contact time between the polluted air and the adsorption substance. In this process gases, vapours, and fumes are adsorbed with high efficiency.

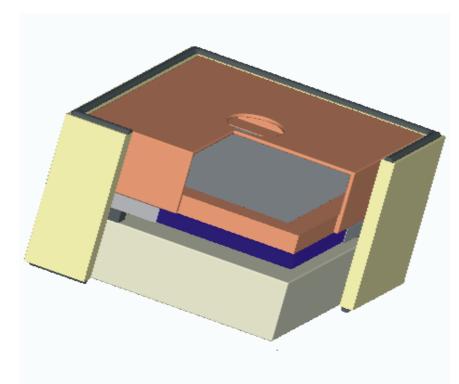
Use and Application

The Filtertrolley 2.0 ACD is a robust device for mobile and stationary workshop application and industrial use. It is suitable for extracting and filtering gases, vapours, and malodours, for instance for:

- gluing and pre-treatment
- painting and printing
- cleaning
- laminating
- founding

The Filtertrolley 2.0 ACD is an essential device that helps to protect the human health as well as the workplace environment. Partly unhealthy gases and vapours released to the air are immediately captured at their origin by suction elements and thereafter filtered with the Filtertrolley 2.0 ACD. The clean air can be led back to the working premises. (Not valid for carcinogenic substances!)

2.1.4. Filtertrolley ASD



Filter system: combined HEPA filter

- coarse filter	pre-filter bag G4
- fine filter	replacement frame
	with filter mat F5
	and filter mat F7
- absolute filter	HEPA filter H13

The combination of different filter levels guarantees a high efficiency of filtrating multiple particle fractions of dusts. The replacement of the absolute filter can be delayed by separately replacing the respective filter levels. Hence, money can be saved. The efficiency of the filter is significantly higher than 99%.

Use and Application

The Filtertrolley 2.0 is a suction and filter device for mobile and stationary use. It is suitable for capturing and filtering dry, non-combustible, and non-explosive dusts. The range of application covers:

- grinding
- engraving
- polishing
- restoring and cleaning art objects

The Filtertrolley 2.0 ACD is an essential device that helps to protect the human health as well as the workplace environment. Partly unhealthy gases and vapours released to the air are immediately captured at their origin by suction elements and thereafter filtered with the Filtertrolley 2.0 ACD. The clean air can be led back to the working premises. (Not valid for carcinogenic substances!)

3. Safety

Operate the **ULTJUMBO** Filtertrolley 2.0 only as described in this user information; thereby, on hand dangers will not appear.

- The **ULTJUMBO**[®] Filtertrolley 2.0 is suitable for demanding tasks in commercial and industrial applications.

- The **ULTJUMBO**[°] Filtertrolley 2.0 is a state-of-the-art device and therefore save to operate. Nonetheless, there are remaining dangers, which can appear if untrained staff operates the device or if the user manual is not observed.

3.1. Workstation Safety

- Read the user manual, in particular the safety instructions, before installing and operating this device!

- Trained staff has to be determined by the supervisor for the operation and maintenance of the *ULTJUMBO* Filtertrolley 2.0. Employees have to be instructed and trained by an authorised person before putting the device into operation for the first time. At this time, safety instructions, operation applications, and possible dangers have to be explained to the users.

- The device may only be operated, maintained, and repaired by authorised and trained staff.

- Any application that might threaten the safety of humans, the device, or working premises has to be refrained!

- The user is obliged to immediately report any changes of the device that might threaten its safe operation.

- Pay close attention to attached signs.

- Turn off and unplug the device at any break.

- In case of danger immediately switch off the device.

3.2. Safety Instructions

- The *ULTJUMBO*° Filtertrolley 2.0 may neither be used for vacuum cleaning nor for siphoning off liquid media!

- Filtered air must not be led back to the working environment if the unit is used for filtering carcinogenic substances according to TRGS 900.

- The device only works with alternating current. In addition, the **ULTJUMBO**[®] Filtertrolley 2.0 has to be protected with a 6A fuse against electrical damage!

- The *ULTJUMBO*[°] Filtertrolley 2.0 <u>may not</u> be used for sucking off gasses, steams, and dusts in <u>explosive concentrations</u>!

- Unplug power cable before opening the device!

- Always carry out disposal of worn out filter media according to valid waste regulations!

- Use only original substitute and spare parts of ULT AG!

- Improper use and alterations of the *ULTJUMBO* Filtertrolley 2.0 may affect its safety.
- Never clean the appliance with a stream of liquid (hose etc.).
- Prevent damage to the power cable by not pulling, jamming, or running over it.
- Regularly examine the power cable for symptoms of damage.

- Do not use the machine if its power cable is damaged in any way. Use only original spare parts as a substitute for the power cable.

- Safety equipment for the prevention of accidents needs to be maintained regularly in order to observe § 39, paragraph 3, VBG 1. A safety check has to be carried out at least once a year in order to keep the unit running properly.

- Unplug the **ULTJUMBO** Filtertrolley 2.0 after using, before cleaning/maintaining, and prior to repairing and replacing any parts.

- Do not suck off liquid media or flammable substances.

- If liquids or flammable substances are sucked off accidentally, instantly switch off the device because the filter may be damaged.

3. 3. Remaining Risks

3.3.1. Accident Prevention – Mechanics

- All moving parts (fan, motor) are covered by securely mounted protection equipment. The cover can only be removed with the help of tools.

- Remaining Risk:

Serious injuries may occur if safety covers are removed while the device is still running.

3.3.2. Accident Prevention – Electrics

- All energized parts of the device are either isolated against touching or covered by securely mounted protection equipment, which can only be removed with the help of tools. The appliance complies with protection class I according to EN 60 335.

- Remaining Risk:

If safety covers are removed while the device is still running or not unplugged, serious injuries may occur resulting from electrical stroke.

3.3.3. Accident Prevention – Pollutants

- Only filters suitable for the device may be used. Do not run the appliance without or with damaged filters.

- Remaining Risk:

If damaged or unsuitable filters are used, serious dangers to health may occur.

4. Specifications / Technical Features



max. air flow: max. vacuum: constant air flow: electrical connection: input power: dimension: weight: noise level: 170 m³/h 2,800 Pa 80 m³/h at 1,400 Pa 230 V/50 Hz 150 W 450 x 340 x 530 mm 18 kg 49 db (A)

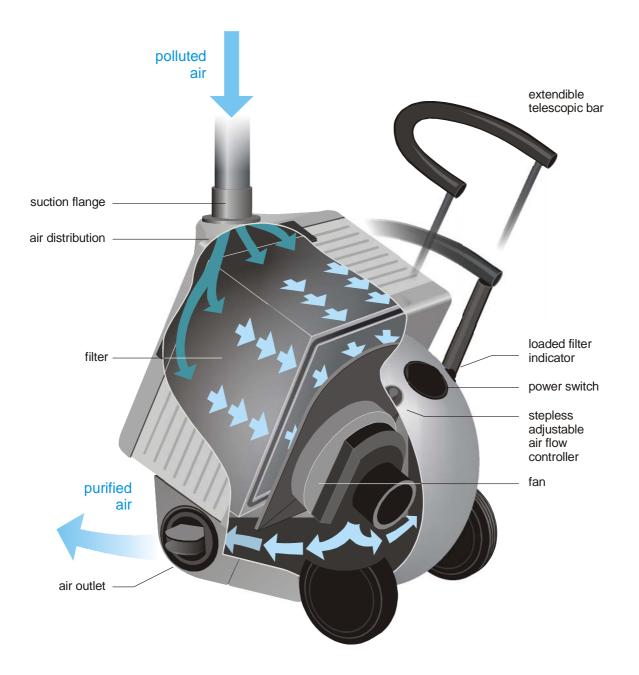
material: ABS stroke tough (synthetic material), chemical-resistant, corrosion-resistant blow out direction adjustable option: waste air business

additional equipment (option):

- V: continuously adjustable air flow controller
- F: loaded filter indicator

5. Design and Description

5.1. Operation

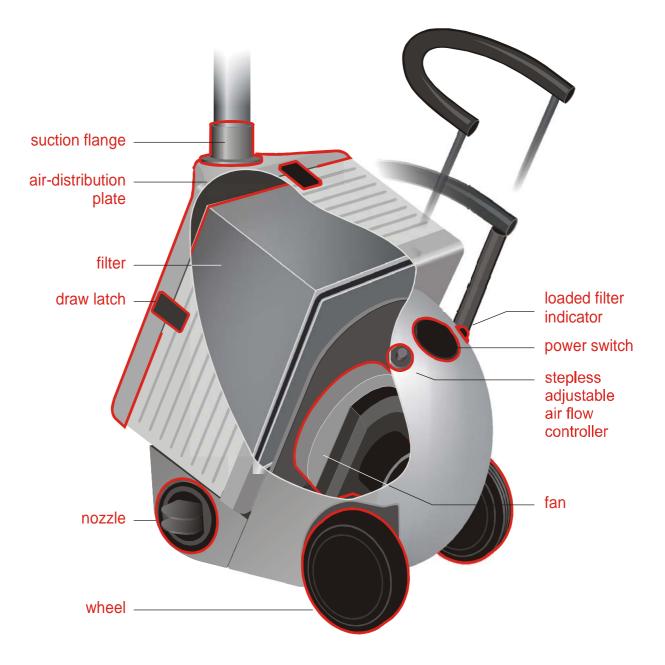


DEFJUMBO[®] Filtertrolley 2.0's built-in fan produces a vacuum at the suction flange or the respectively attached suction element. Air pollutants are immediately captured and sucked off at their place of origin.

The polluted air is led trough the filter, whereby it is cleansed. The manufacturer offers filter cassettes with special filter combinations for dusts, smokes, gases, and vapours.

The purified air is supplied back to the working premises trough an internal sound absorber and two lateral nozzles.

5.2. Parts Identification



6. Start-up

6.1. Initial Operation

Unpack the **ULTJUMBO**° Filtertrolley 2.0 and set it up.

- unlock the black draw latches on its side and take off the cover
- check the tightness of the filter cassette
- put the cover back onto the device and lock the draw latches

Attention: Never operate the device without a filter!

- Connect the device with an electrical outlet of alternating current and 230 V/50 Hz. Protect the electrical outlet with a fuse of at least 6A.
- Check whether the device type meets your requirements and suits your application.

6.2. Device Set Up and Connection



This picture shows the Filtertrolley 2.0 lying on the ground. You can rotate the suck-in plate so that the suction flange meets your requirements.



The **ULTJUMBO**[°] Filtertrolley 2.0 may be operated standing or lying.



Set up the suction unit according to your work place. To safely capture all pollutants, position the suction element close to the place where the hazardous substances emergence.





If the suction element is not directly attached to the **ULTJUMBO** Filtertrolley 2.0, connect it with a short hose.



6.3. Operation

Push the big black button on top of the **ULTJUMBO**[°] Filtertrolley 2.0 to turn the device on. Check whether the connections are made properly and whether the blow-out nozzles are open.

If your device possesses the optional airflow controller, you may adjust the suction capacity with the potentiometer.

The optionally installed "loaded filter indicator" shows the current state of the filter. As long as the LED glows green the **ULTJUMBO**[®] Filtertrolley 2.0 is in normal mode. The filters are saturated when the LED changes to red. Then proceed as described in section 7.

Then proceed as described in section 7.

7. Maintenance and Filter Replacement

The maintenance confines itself to the check of the filter contamination state and the replacement of the filter. Devices with the optionally installed "loaded filter indicator" signal with their LED the required filter replacement.

LED: -green-	filter is in good condition
LED: -red-	filter replacement necessary: - replacement of the pre-filter mat

If no improvement takes place: - replacement of the whole filter



The picture illustrates a filter replacement in lying position. Before the filter can be taken out, the black draw latches have to be unlocked, and the cover needs to be removed.

Available filter types: LRA LAS ACD ASD

Disposal: professional; according to valid regional regulations

Attention: The device has to be unplugged before repairs, maintenance, or filter replacements are carried out!

- The device is subject to inspection for portable electrical equipment.

8. Possible Malfunctions

Problem	Cause	Elimination of problem
- fan does not run	- no electrical power	- check mains voltage
- fan does not run	- malfunction of device or	- repair by a specialist
	control electronic	(specialist dealer)
- not enough suction capacity	- filters are saturated	- filter replacement
(option "F" - LED glows red)	- air passage is blocked	- check of air inlet and outlet
- bad filtration	- filters are clogged up	- filter replacement
(option "F" - LED glows red)	- filters are not in the right	- check filter installation
	position	(put it in the right position)

Attachment - Accessories

Suction arms

alternatively mounted either on the device or on separate desk/wall

Alsident S 50 d: 50mm Range: 550, 750, 950 or 1350mm

Alsident S 75 d: 75mm Range: 650, 900 or 1050mm

Suction elements

(matching the Alsident suction arms)

S 50	S 75
in mm	in mm
1 = 210 1 = 310	1 = 250
w = 200	w = 250
d = 200	d = 200
1 = 245 w = 220	1 = 420 w = 320
	in mm 1 = 210 1 = 310 w = 200 d = 200 1 = 245

Mounting elements for suction arms

desk mounting for Alsident S 50 and S 75 wall mounting for Alsident S 50 and S 75

Hoses

Connection hoses from the device to the suction element

Attachment – Wear and Spare Part List

Original spare parts from ULT AG

- power switch loaded filter indicator (LED) potentiometer (volume flow controller) power cable power inlet socket fan control module
- suction flange blow-out nozzle draw latch wheel wheel cover telescopic bar handle

filter see attachment filter list

To guarantee faultless device and operation safety, use only original spare parts from ULT AG.

Device warranty is void if spare parts from other manufacturers are used!

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Attachment - Filter List

Туре	Description
LRA / LAS	multi-level filter cassette (complete) multi-level filter cassette - up to H13 sublimation pre-filter replacement frame with filter mat F5/F7 replacement frame filter mat combination F5/F7 1 pc. filter mat combination F5/F7 10 pcs.
ASD	dust-filter-cassette (complete) dust-filter-cassette up to H13 pre-filter cassette EU4 1 pc. pre-filter cassette EU4 10 pcs. replacement frame with filter mat F5 replacement frame empty filter mat F5 1 pc. filter mat F5 10 pcs.
ACD	adsorption filter cassette

Use only filters from ULT AG! Otherwise, the specified filter quality and quantity may not be reached.