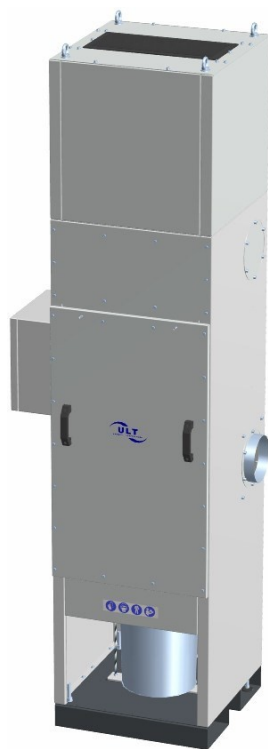


series 1500 LAS 1500 MD.61 2PaR25



LASER
FUMES



DUST AND
SMOKE



SOLDERING
FUMES



ODORS,
GASES, AND
VAPORS



CLEANING
INDUSTRIAL
GASES



NEW
EMISSIONS



WELDING
FUMES



OIL AND
EMULSION
MISTS



COMPLETE
SOLUTIONS

Version: 002



air quality



Use and application

The **LAS 1500** is suitable for collecting and filtering dry and non-combustible types of dust contained in non-explosive air mixtures produced during laser machining. Mostly every laser machining process produces mixtures of partially unhealthy **dust, gases and fumes** in different concentrations. Those substances ought to be extracted by collecting elements directly at their place of origin. All dust particles are filtered by the LAS 1500. The material of the filter element ensures effective filtering out of the various dust particle sizes with a separation efficiency lying significantly above 99%. Regular **automatic pneumatic cleaning** cycles of the cartridge filters with rotation air nozzles guarantee very long main filter lifetimes. An optional non-return flap at the raw gas intake can prevent pressure fluctuations in the air intake piping system during the pneumatic cleaning process.

Examples

- ↳ laser cutting,
- ↳ laser engraving,
- ↳ laser structuring
- ↳ laser welding

ULT 1500 stationary extraction and filtration unit

- ↳ cartridge filter system with automatic cleaning
- ↳ easy filter handling, Quick-Lock system
- ↳ 30 l dust collecting bin
- ↳ control elements located in separate cabinet
- ↳ robust steel housing
- ↳ powder coated
 - RAL 7035 light grey

Filter system:

Cartridge filter system
 automatically cleanable filter elements
 for high pollutant emission

Filter technology:

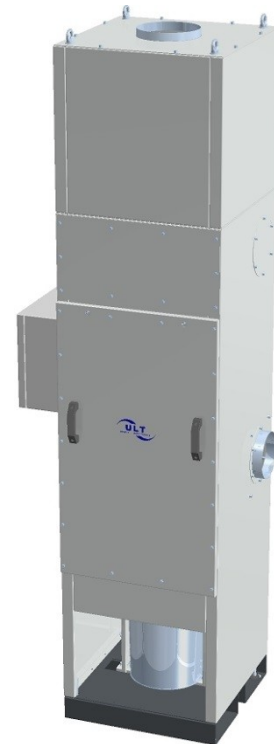
- filter cartridges: 2 pieces, conical, mounting from raw gas side
- cleaning: rotation air nozzles, triggered by rising differential pressure
- filter material: Polyester fibre, PTFE coated
- filter class: class M according to DIN EN 60335-2-69:2008
- filter surface: 25 m² (2x 12,5 m²)

Vacuum generator

Middle pressure fan with 3-phase drive, integrated noise modulation

Configuration

Loaded particle filter indicator: visualization of the particle filter condition

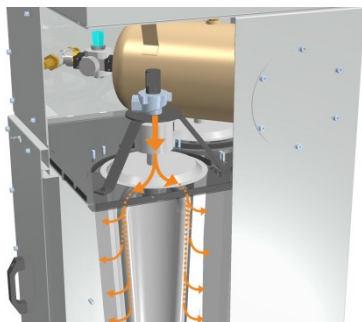




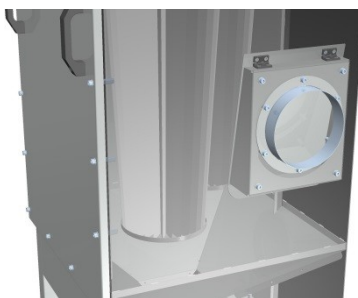
1-00079 LAS 1500.0-MD.61.30.4017

| Parameter | unit | MD.61 |
|-----------------------------------|-------------------------|--|
| Max. air flow | m ³ / hr | 3.240 |
| Max. vacuum | Pa | 3.450 |
| Nominal capacity | m ³ /hr / Pa | 1.200 / 2.500 |
| Motor-nominal power | kW | 2,2 |
| Nominal voltage | V | 3~ 400 |
| Nominal current | A | 4,5 |
| Frequency | Hz | 50 |
| Protection class | IP | 54 |
| Type blower | | ventilator |
| Air intake | Ø | 1x 200 mm |
| | position | lower back on the right side, optional back side |
| Air outlet | Ø | Exhaust air louver |
| | position | on top |
| Width | mm | 680 |
| Depth | mm | 750 |
| Height | mm | 2.980 |
| Weight | kgs | ca. 375 |
| Length of power cable | | Has to be connected to the control cabinet |
| configuration | | |
| Automatic pneumatic cleaning | (1*) | pneumatic, rotation air nozzles |
| Loaded particle filter indicator | | visualization with signal lamp |
| non-return flap (optional) | (2*) | no pressure fluctuations in intake piping |
| 30 l dust collecting bin | (3*) | = disposal containment, high capacity |
| Transportation feet, lifting eyes | | Easy handling during transportation and installation |
| Filter system | | filter system: cartridge filter, automatic cleaning by rotating wing |
| | | Filter cartridge set - Polyester fibre, PTFE coated <div> <div>2x filter cartridge 12,5 m²</div> <div>4-00152</div> </div> |

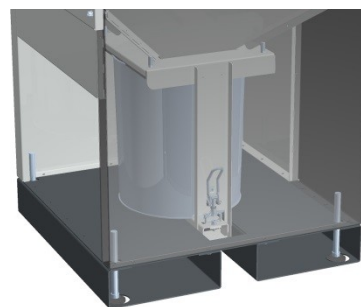
(1*)

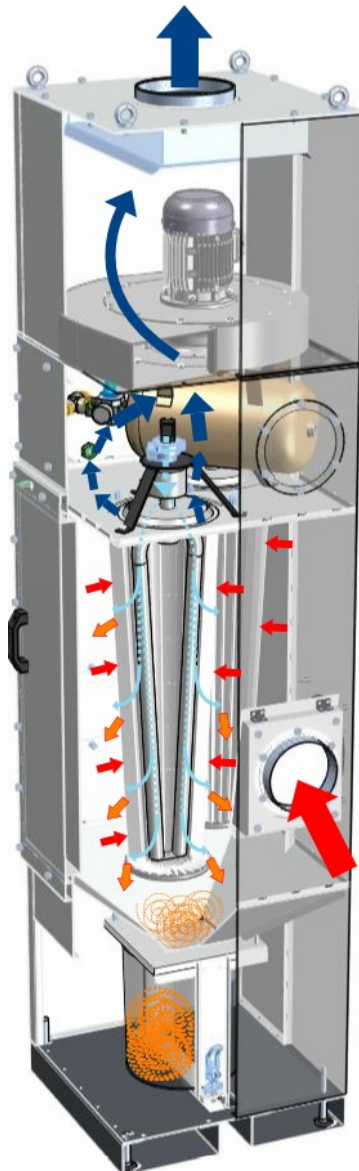


(2*)



(3*)





- ← raw gas
- ← filtration
- ← clean gas
- ← detached filter material
- ← collected filter material
- ← cleaning air stream

Functional principle:

At the clean-air side of the filter, a vacuum generator with a high pressure reserve produces a volume flow matched to the respective application. This volume flow can be individually and infinitely variably regulated. Thus, the polluted air will be reliably extracted.

The **dust particle fractions** are captured directly at the place of their origin by appropriate collecting elements and through an applicable piping system the pollutants are carried to the filter elements. To prevent the filter elements from getting worn out in short time they are protected by a baffle plate or a non-return flap at the air intake holding back large particles.

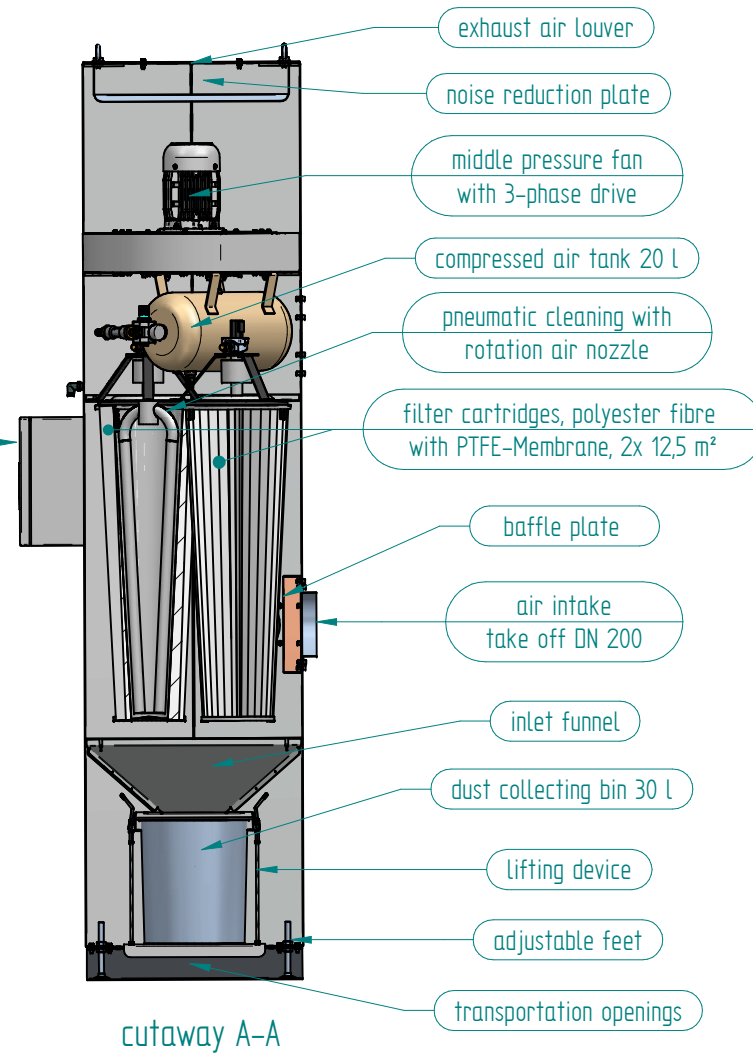
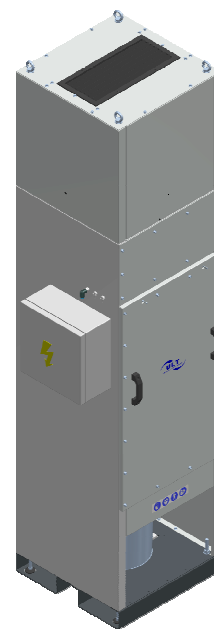
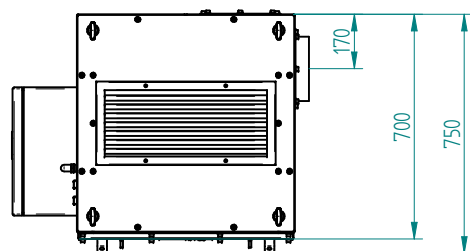
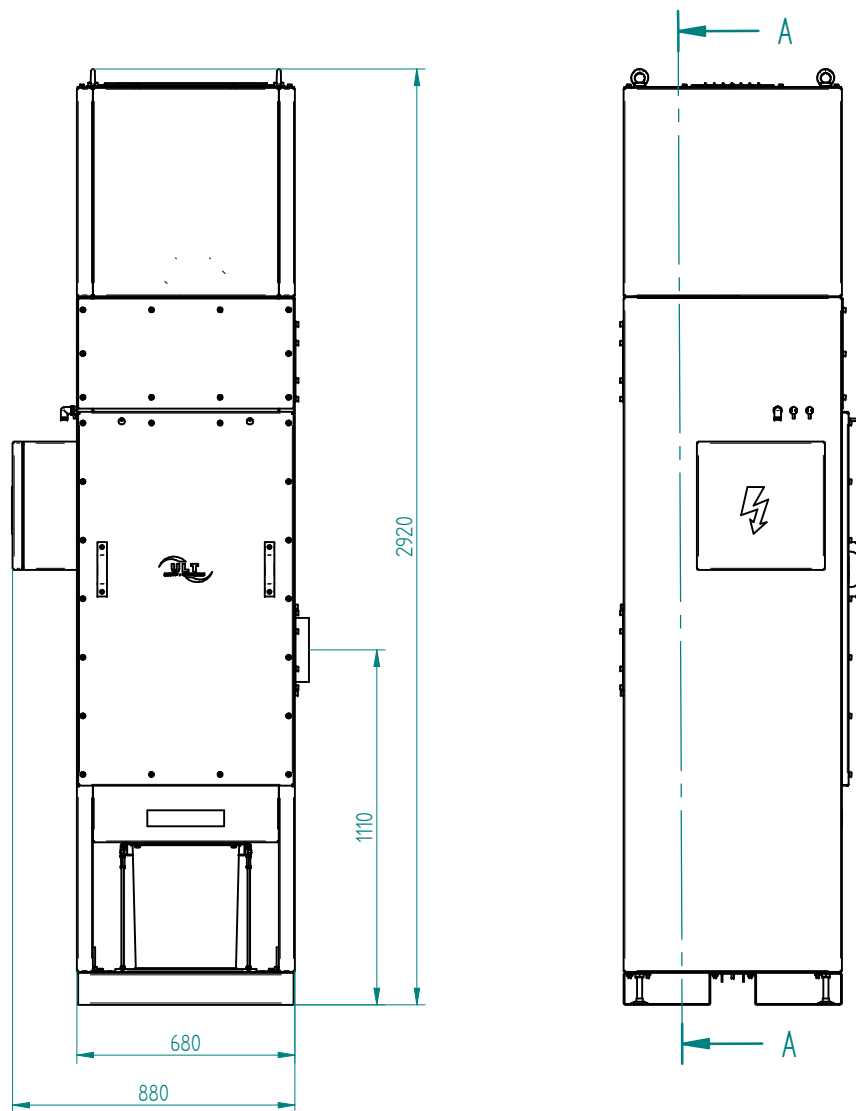
The **particles** are separated and held back on two **filter cartridges** (PTFE coated polyester fibre) by the **surface filtration principle**. Clogged filter cartridges are automatically and individually treated with rotation air nozzles on the basis of the **counter flow cleaning principle**. Operating the cleaning system requires compressed air supply (4 – 5 bar). The **particles blown off** fall into a 30 l one-way collecting bin provided for the removal and disposal of the filter deposits.

Cartridge filter system

automatically cleanable filter element for high pollutant emission

- (1) **particulate filter** 2 filter cartridges, class M according to DIN EN 60335-2-69:2008, separation efficiency > 99,99%
(at particle size of 0,3 µm)
filter surface 25 m²

This excellent filter efficiency makes it possible to recirculate the **filtered air** (please pay attention to your regional regulations) and reduce energy costs.



cutaway A-A

Allgemeintoleranzen DIN ISO 2768-mK

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Other measure are to be taken from the 3D record. For the drawing we reserve ourselves all rights.

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|-------|------------|----------|-------|--|--------|------|--|------------------------------------|--------|
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