

Nothing beats a neo.
**Dust collection for your thermal processing requirements now...
with modular features to meet your future needs, later.**

The Task

The L-CUTneo series is specially designed with laser-cutting and other thermal process manufacturers in mind.

- Collection of dust and fumes, including the finest metal oxide particles.
- Compact, low profile for tight indoor spaces
- Spark pre-separation for coarse and glowing particles
- Low noise for placement near operators / thermal equipment
- Sturdy housing with dirty air inlets on either side
- All relevant components easily accessible for servicing (i.e. disposal bin, filter elements, solenoid valves, etc.)

L-CUTneo is also customizable (with its New Equipment Options), for those operators that have more specific manufacturing needs.

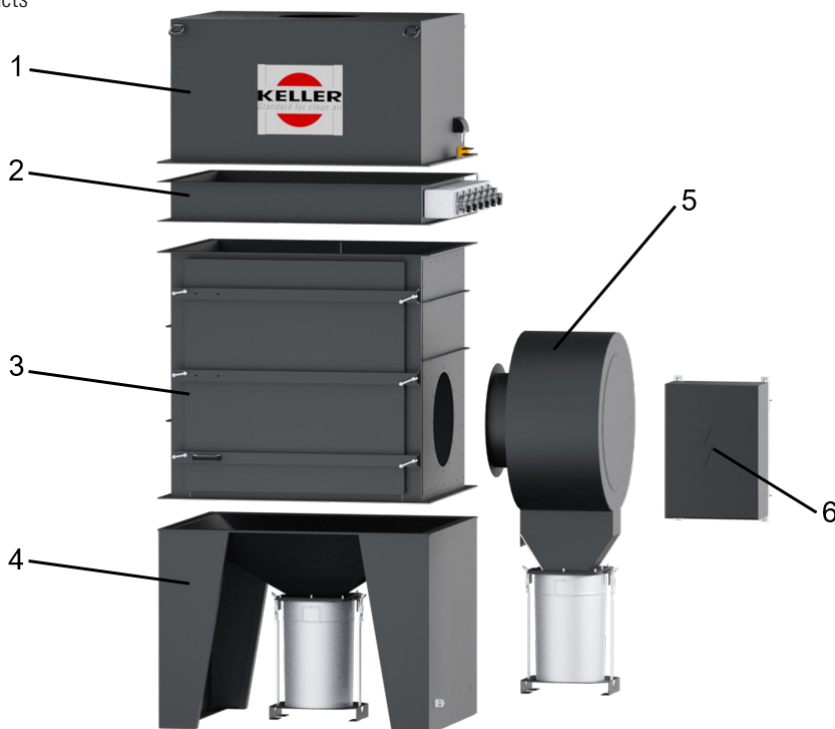
Functional Description

Dirty air flows through the inlet into the cyclone spark pre-separator (5) where larger particles are removed from the dirty air and collected in a disposal container. Air is deflected after the pre-separator, which reduces its speed when it contacts the filter elements (3).

The dust particles settle onto the surface of the filter elements, and are cleaned off by compressed air pulses. Dust then falls into the disposal container.

The cleaned air is pulled through the fan (1) and recirculated back into the facility or exhausted outside, if preferred.

- 1 - Integrated fan housing
- 2 - Compressed air cleaning
- 3 - Filter housing
- 4 - Disposal
- 5 - Cyclone Spark Arrestor
- 6 - Electrical control



Components Explained

1- Fan

The built-in, directly driven, radial fan operates at very low sound levels with the help of the L-CUTneo's insulated metal housing.



2- Compressed Air Cleaning

Keller dust collectors are designed with automatic self-cleaning cycles to extend the effectiveness and life of filter elements. The cleaning process can be initiated by the filter via a differential pressure that is monitored in the electrical control, or it can be programmed with cleaning cycles.

The L-CUTneo's compressed air connections are located on the outside of the housing for easy connection and maintenance accessibility.

3- Filter Elements

Standard filter elements for the L-CUTneo are nanofiber cartridge-style or KLR-bran plate-filters. The nanofiber cartridges consist of a star-shaped, folded, filtering material molded at the bottom and top into an end plate made of sheet steel.



The KLR-bran plate filters offer increased filter life and greater surface area coverage. They are made with a pleated high-absorbency material affixed into a PTFE membrane.

4- Dust Disposal

Basic disposal needs are met through the dust collection bin of the L-CUTneo at both the spark arrestor and the main unit. This bucket allows for a smaller overall collector height, perfect for low ceilings.

For higher volumes of dust, the disposal section can be exchanged for other methods, such as a rotary lock with 55 Gallon drum disposal.



5- Spark Arrestor

A high-efficiency side-mounted cyclone spark arrestor comes with every L-CUTneo. It also functions to separate out larger particles from the dirty air and reduce the load on the filter elements.

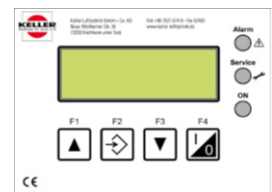


The new side-mounted design allows for installation flexibility and easy maintenance. Its separate disposal helps avoid mixing sparks with the fine dust in the collector's disposal.

6- Electrical Control

Keller's standard ASB-500 electrical control system is equipped with high-quality components. It can be mounted at the L-CUTneo or by the thermal process machine.

The collector's parameters, including the cleaning intervals, are individually adjustable within the control.



Airflow	1,200 cfm (2,000 m ³ /h)	1,800 cfm (3,000 m ³ /h)		3,000 cfm (5,000 m ³ /h)	
L-CUTneo	M-8K	M-4P	L-8K	L-6P	L-12K
Filters	8 qty. Plate Filters KLR-bran 900/12	4 qty. Cartridge Filters Nanofiber 985	8 qty. Plate Filters KLR-bran 1200/18	6 qty. Cartridge Filters Nanofiber 1200	12 qty. Plate Filters KLR-bran 1200/18
Sound Level ¹	< 75 d(B)a	< 75 d(B)a	< 75 d(B)a	< 75 d(B)a	< 75 d(B)a
Motor (460V 60Hz)	5.5 hp (4 kW)	7.5 hp (5.5 kW)	7.5 hp (5.5 kW)	10 hp (7.5 kW)	10 hp (7.5 kW)
Disposal (Main Spark)	1 1 qty. 15 gal (58L) Bin	1 1 qty. 15 gal (58L) Bin	1 1 qty. 15 gal (58L) Bin	1 1 qty. 15 gal (58L) Bin	1 1 qty. 15 gal (58L) Bin
Weight ²	2,350 lb (1,060 kg)	2,350 lb (1,060 kg)	2,500 lb (1,130 kg)	2,500 lb (1,130 kg)	2,500 lb (1,130 kg)
Size (L x W x H) ²	63" x 39" x 110" (1600 x 860 x 2800 mm)	63" x 39" x 110" (1600 x 860 x 2800 mm)	82" x 46" x 132" (2060 x 1200 x 3350 mm)	82" x 46" x 132" (2060 x 1200 x 3350 mm)	82" x 46" x 132" (2060 x 1200 x 3350 mm)

Measurements are shown in Standard & (Metric)

¹ 1 m in front of the door, measured according to DIN EN ISO 3744, with connected suction ductwork.

² Weights and dimensions are approximated and may vary, especially with customized features.

Subject to modification

Accessories

Injector Vacuum Set



- General maintenance vacuum
- Up to 70" w.g.
- Operates with compressed air

HEPA Stage



- Secondary filter for air recirculation
- Recommended for stainless steel
- Efficiencies < 99.97% @ 0.3 micron

Charcoal Filter



- Secondary stage for odor reduction
- Easy install on top of collector or integrated in the housing

DOS-K

- Online dosing of pre-coating material into dust collector
- Fully automatic operation
- Electrical control system attached



Automatic Fire Suppression

- Auto-extinguishing of filter fire
- With fire sensors for early detection
- Agents: CO₂ or Argon



PREMOS

- Smart, predictive system monitor
- Reduces unscheduled downtime
- Web-based data transfer & remote monitoring

