Effective and hazard-free filtration and separation of combustible dusts from thermal processes.

Metal oxides created during laser processes can be separated safely and space-saving.

TRGS 560 requirements are met with the optional H13 secondary filter and clean air recirculation back into the room is possible.
Compact and efficient

Applications

<table>
<thead>
<tr>
<th>All metals and non-metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joining</td>
</tr>
<tr>
<td>Separation</td>
</tr>
<tr>
<td>Surface Treatment</td>
</tr>
</tbody>
</table>

Filter housing

The housing is of welded design with a variable dirty air inlet opening. The integrated spark pre-separator protects the filter elements against damage that could be caused by coarse, potentially glowing particles. All relevant components, i.e. disposal bin, filter elements, motor-impeller section, solenoid valves, electrical switch and control system are accessible for servicing from the front.

Filter cartridges

The cartridges consist of a star-shaped folded filtering material which is molded at the bottom and top into an end plate made of sheet steel. A basket of perforated metal plate or wire mesh is installed in the clean air zone which ensures form stability.

Electrical Switch and Control system

The cleaning intervals can be adjusted individually for each type of application by means of an integrated control. The fan’s volume flow almost remains constant. Optionally, the cleaning process can be released either via an electronic differential pressure measuring gauge or an additional cleaning can be programmed in the offline follow-up. Equipped with high-quality components according to VDE guidelines.

Waste disposal

The one-way dust collection bins form an air-tight connection to the filter hoppers by means of a clamping device.

Fan

The built-in, directly driven radial fan operates at very low sound levels. The cleaned air is directed upward through an integrated silencer.
## Functional description

Dirty air flows through the dirty air inlet (10) into the spark pre-separator (11) where larger particles are separated. The collected dust can be emptied during operation by closing the manual slide gate. The separated dust is compressed in the disposal container (8) by means of a dust compression nozzle (18). Air is deflected after the spark pre-separator (11) which reduces speed when the air contacts the filter elements (12). The dust particles settle onto the surface of the filter elements, are cleaned off by compressed air pulses and then fall into the two disposal containers.

The cleaned air flows through an intermediate level (5) into the clean air chamber where it is pulled through the fan (6) and then exits through the silencer (13).

### Technical data L-CUT

<table>
<thead>
<tr>
<th>Unit type L-CUT</th>
<th>0.5</th>
<th>1</th>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airflow m³/h</td>
<td>approx. 500-1000</td>
<td>approx. 1000-1800</td>
<td>approx. 2000-3000</td>
<td>approx. 3200-4500</td>
</tr>
<tr>
<td>Sound Level dB(A)</td>
<td>70</td>
<td>70</td>
<td>&lt; 75</td>
<td>&lt; 78</td>
</tr>
<tr>
<td>Size L x B x H (mm)</td>
<td>950 x 950 x 2000</td>
<td>1050 x 1200 x 2000</td>
<td>1400 x 1400 x 2000</td>
<td>1600 x 1600 x 2900</td>
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<tr>
<td>Weight kg</td>
<td>550</td>
<td>850</td>
<td>1025</td>
<td>1550</td>
</tr>
</tbody>
</table>

1) 1 m in front of the door, measured according to DIN EN ISO 3744, with connected suction ductwork. Subject to modification.
Separation technology dust collector L-CUT

References

L-CUT 0.5

L-CUT 1

L-CUT 2

L-CUT 4

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