Extraction and Filtration Technology for Odours, Gases, and Vapours
Adhesives not only have an unpleasant smell, they are also harmful. Therefore, effective extraction and filtration technology is mandatory in many industrial processes.
Many production processes in industries such as chemical, pharmacy, food, metallurgy, machinery, plant engineering or automotive release airborne pollutants in the form of gases and vapours. Quite often, they are accompanied by unpleasant odours.

**Odours, gases, and vapours**

Chemical processes produce gases, acid fumes or solvent vapours that irritate eyes and lungs. Some of them – even in small concentration – act as respiratory poisons or neurotoxins; other generate danger of explosion.

Gases and vapours are mainly accompanied by particles and aerosols. They affect the respiratory tract and can also damage machinery and products by creating firmly attached dirt layers. Therefore, legal regulations on the removal of such contaminants from the air at workplaces are strict.

**Extraction and filtration technology**

ULT’s ACD type extraction and filtration technology is distinguished by individually designed capture solutions and cost-saving innovative filtration systems. Available are mobile units requiring little space, e.g. to be utilized in laboratories. In addition, ULT provides solutions that are suited for automated production facilities because of their versatility and operating reliability.

**Typical fields of application**

» Glueing
» Varnishing
» Laminating
» Coating
» Laboratory activities
» Chemical processes
» Chemical cleaning
» Dosing
» Moulding
Extraction and filtration with stepped performance levels.

Filtration system

Type ACD devices are saturation filter units. Their complex filtration systems retain gaseous contaminants as well as dust particles and aerosol droplets. The purified air can then be re-circulated back into the working room, greatly enhancing energy management. Saturated storage filters are easily exchanged and can partly be refurbished. Due to innovative filter concepts enabling long filter service life, investment expenses are low.

To precisely capture pollutants, extraction and filtration units may be equipped with suitable extraction arms and collecting elements. For this purpose ULT offers high quality products from leading suppliers.

*Activated carbon filter*
*Fan*
*Resublimation filter / spark protection*
*Submicron particulate filter*
**Performance classes**

ACD extraction and filtration technology includes a broad range of units, graded for air capacity. The offerings extend from small, ergonomically designed mobile units for individual workstations to high performance systems for automated or semi-automated production lines. Some models can be optimised for special operating conditions, e.g. for caustic or explosive gas mixtures and high amounts of emissions. To eliminate odours, suitable adsorbents such as activated carbon are used.

<table>
<thead>
<tr>
<th>ACD series</th>
<th>Volume flow max. [m³/h]</th>
<th>Vacuum max. [Pa]</th>
<th>Nominal capacity [m³/h at Pa]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULT JUMBO Filtertrolley 2.0 ACD</td>
<td>170</td>
<td>2,800</td>
<td>80/1,900</td>
</tr>
<tr>
<td>ACD 160</td>
<td>190</td>
<td>3,200</td>
<td>80/1,900</td>
</tr>
<tr>
<td>ACD 200.1</td>
<td>320</td>
<td>9,000</td>
<td>230/1,000</td>
</tr>
<tr>
<td>ACD 300</td>
<td>900</td>
<td>3,650</td>
<td>250/3,500</td>
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<tr>
<td>ACD 400 Ex</td>
<td>900</td>
<td>1,650</td>
<td>400/1,400</td>
</tr>
<tr>
<td>ACD 400</td>
<td>1,000</td>
<td>2,600</td>
<td>400/2,300</td>
</tr>
<tr>
<td>ACD 1200</td>
<td>2,100</td>
<td>2,880</td>
<td>800/2,700</td>
</tr>
</tbody>
</table>

*Upper row: ACD 1200 and ACD 400
Lower row: ULT JUMBO Filtertrolley 2.0 ACD, ACD 200, ACD 300.*

ACD stands for sophisticated production devices of extraction and filtration units for odours, gases, and vapours – organised in modules according to user requirements.

If needed, they allow for an optimised adaptation to respective operating conditions and become an integral part of the production plants.

**Particularly user friendly**

Low noise level and low energy consumption. Simple operation and maintenance. Recirculation operation possible. Easy and contamination low filter exchange.

**From compact to large**

ULT’s solutions range from mobile equipment for individual work places to automated production. Also for environments with a lack of space.

**Safety for automated production lines**

The filter systems’ long service life significantly reduces down time and maintenance costs.

**Individual extraction solutions**

The design of the extraction point gets adapted to the individual workplace condition.

**Open to special requirements**

Available in ESD and ATEX design, respectively. They are also available with stainless steel housing, for corrosive gases, special supply voltage and frequency, digital control for pressure stabilisation, timer function, filter analysis and interfaces for external control.

**Exceptional service.**

On-site installation and commissioning by ULT. Functional warranty included.

*Space-saving mobile ACD type units can be utilised at laboratory work places.*
ULT AG

ULT AG provides extraction and filtration technology that really works: in-house developed excellent series units, adapted to individual requirements by sophisticated engineering. From single workplaces to full site solutions. Permanent research ensures that even the latest production processes are safely served.

Based on sophisticated series devices ULT AG provides adapted solutions for extraction and filtration technology.
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ULT is certified according to ISO 9001:2015. The plants are designed according to international standards. If required, they will be certified according to ATEX and W3 and tested to meet H requirements.

In addition, the plants always comply with current EC directives on energy efficiency (ErP directive: Total energy efficiency of ready-to-use ventilation systems or minimum energy efficiency of electric motors).

Detailed technical information can be found on device specific data sheets or on our website. All technical data is general and not binding and does not guarantee the suitability of a product for a specific application.