

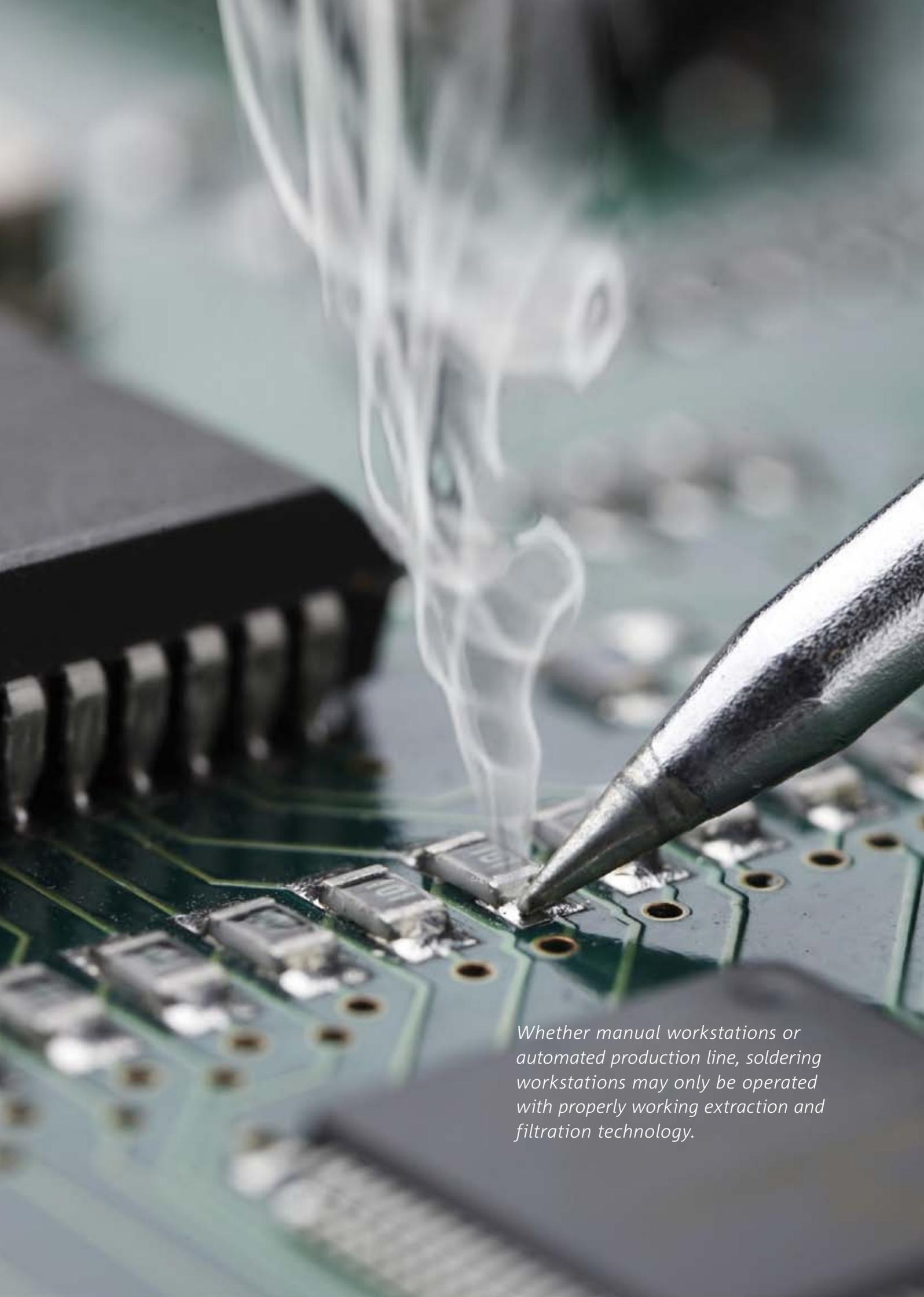
# LRA



## Extraction and Filtration Technology for Soldering Fumes

Extraction. Filtration. Persistence.





*Whether manual workstations or automated production line, soldering workstations may only be operated with properly working extraction and filtration technology.*

# Only Granted without Smoke Plume: the Licence for Soldering.

An automated electronics production line creates many thousands of solder joints per hour, a craftsman will perhaps only make ten of them in the same time. However, all soldering processes emit fume and this fume is anything but harmless.

## Soldering fumes

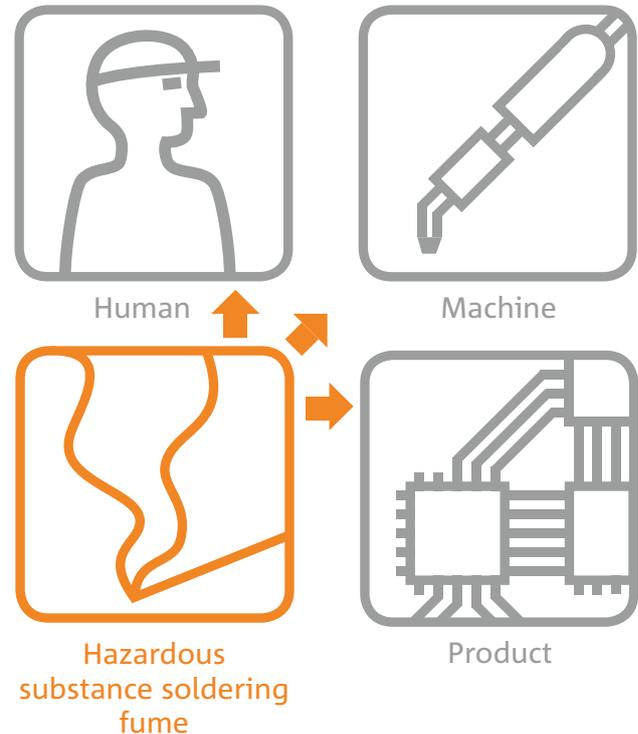
Substances that are perceived as soldering fumes are decomposition products from flux, soldering alloys and residues of cleaning agents, which often join up to tacky aerosols. These airborne pollutants may impose adverse effects on human health, therefore, legal regulations on the removal of soldering fumes from the air at workplaces are strict. It is about human health, but not only: those airborne pollutants also compromise machinery and products as they create firmly attached dirt layers.

## Extraction and filtration technology

ULT's LRA type extraction and filtration technology removes soldering fumes reliably without residue from the air at the workplace. Available are units for individual workplaces, where low footprint and freedom of movement are of great importance.

In addition, ULT offers solutions for automated and semi-automated soldering processes, where it is about long service life and highest availability as, for instance, in electronics production.

## The threefold damaging effect of soldering fumes



## Typical fields of application

- » Wave soldering machines
- » Reflow ovens
- » Selective soldering machines
- » Robotic soldering cells
- » Laser soldering machines
- » Vapour phase soldering machines
- » Manual soldering workstations
- » Semi-automated soldering processes

# Extraction and Filtration with Stepped Performance Levels.

## Filtration system

Type LRA devices are saturation filter units. Complex filter systems retain dusts, gaseous pollutants and aerosols. The purified air can then be re-circulated back into the working room, greatly enhancing energy management.

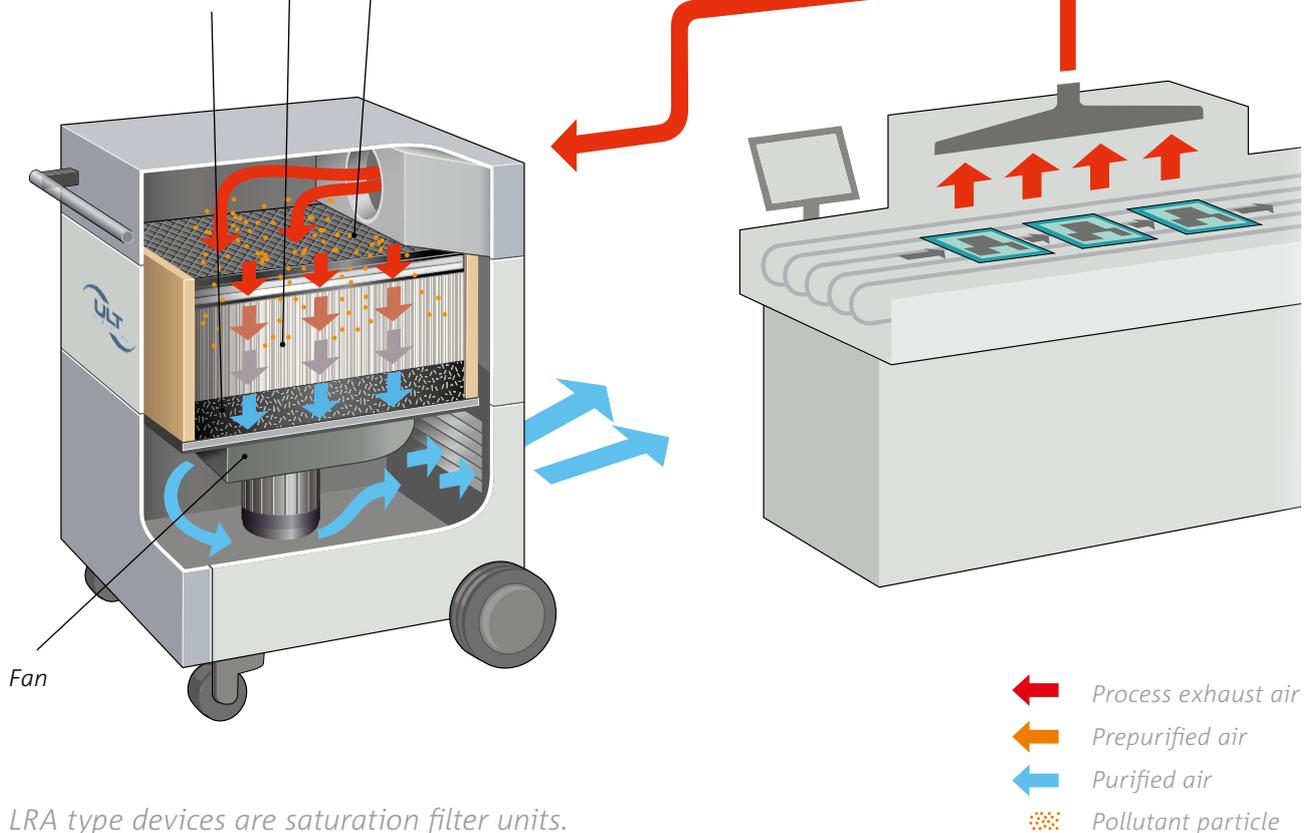
To precisely capture pollutants, extraction and filtration units may be equipped with suitable extraction arms and collecting elements. For this purpose ULT offers high quality products from leading suppliers.

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.

*Resublimation filter / spark protection*

*Submicron particulate filter*

*Activated carbon filter*



## Performance classes

LRA 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. strong smoke emission or large amounts of certain harmful substances by exchanging or adding filtration modules.

To eliminate odours, suitable adsorbents such as activated carbon are used.

LRA series	Volume flow max. [m <sup>3</sup> /h]	Vacuum max. [Pa]	Nominal capacity [m <sup>3</sup> /h at Pa]
ULT JUMBO Filtertrolley 2.0	170	2,800	80/1,900
LRA 160 MD.11	190	3,200	80/1,900
LRA 200 HD.12	220	22,000	120/1,200
LRA 200 MD.14	635	3,200	250/2,000
LRA 300 HD.12	220	22,000	120/1,200
LRA 300 MD.16	900	3,650	250/3,000
LRA 400-0	900	1,650	400/1,400
LRA 400-1	1,000	2,650	400/2,300
LRA 400-2	1,500	3,250	600/2,500
LRA 1200 MD.18	1,500	3,250	1,000/1,700
LRA 1200 MD.45	1,700	2,600	1,000/1,800



ULT JUMBO Filtertrolley 2.0 LRA, LRA 160, LRA 200, LRA 300, LRA 400 and LRA 1200

# LRA: Perfect Serial Products. Built on Sophisticated Engineering.

LRA stands for sophisticated production devices of extraction and filtration units for soldering workplaces – 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. Air recirculation operation possible. Easy filter exchange – no protective measures required.



*Manual soldering workstation with extraction and filtration technology.*

## Tailored solutions: from compact to large

ULT's solutions range from mobile equipment for individual workplaces to complete solutions for entire production halls. Solutions for environments with lack of floor space included.

## 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. Housing made of stainless steel, supplied with special voltage and frequency, digital control for pressure stabilisation, timer, filter analysis and interfaces for external control.

## Exceptional service

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

## 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 hall solutions. Permanent research ensures that even the latest production processes are safely served.



LASER FUMES



DUST AND SMOKE



SOLDERING FUMES



ODOURS, GASES, AND VAPOURS



CLEANING INDUSTRIAL GASES



PROCESS AIR DRYING



WELDING FUMES



OIL AND EMULSION MISTS



COMPLETE SOLUTIONS



*Based on sophisticated series devices ULT AG provides adapted solutions for extraction and filtration technology.*

ULT is certified according to ISO 9001:2008. 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.

ULT\_LRA\_10/15/EN



**Made in Germany**

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