

series 160  
LRA 160 MD K



LASER  
FUMES



DUST AND  
SMOKE



SOLDERING  
FUMES



ODORS,  
GASES, AND  
VAPORS



CLEANING  
INDUSTRIAL  
GASES



NEW  
EMISSIONS



WELDING  
FUMES



OIL AND  
EMULSION  
MISTS



COMPLETE  
SOLUTIONS

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## Use and application

The **LRA 160 MD K** is suitable for the extraction and filtering of soldering smoke. Soldering processes produce large quantities of **soldering smoke** (flux residues, gases and vapours as well as other substances) which can be filtered by the LRA 160 MD K. The material of the filter elements ensures effective filtering out of the various dust particle sizes. A combination of filter mats with the filter classes M5 and F7 protects the following filter stages from prematurely saturation. The following H13-filter separates even the smallest particles from the polluted air. At the adsorption filter a layer of activated charcoal is holding back gases and fumes effectively.

## Examples

- ➔ hand soldering
- ➔ small machines and devices for single soldering stations

## ULT 160 stationary extraction and filtration unit

- ➔ stationary unit with rubber feet
- ➔ optional mounting of castors for mobile unit
- ➔ replacement filter system
- ➔ control panel on the front side
- ➔ easy filter handling, accessible from the top
- ➔ robust steel housing
- ➔ powder coated RAL 7035 light grey

## Filter system:

Storage filter system  
Filters which are replaced once they are saturated.

## Filter technology:

- (1) Filter mats M5/F7  
filter classes: M5 medium dust filter and F7 fine dust filter according to DIN EN 779
- (2) Combined filter cassette H13A
  - (2.1) Particle filter H13  
filter class: H13 HEPA-filter according to DIN EN 1822
  - (2.2) Adsorption filter A  
filter medium: activated charcoal



## Configuration

Air flow controller: suction power is continuously adjustable  
Loaded particle filter indicator: visualization of the particle filter condition



**LRA 0160.0-MD.bb.cc.6001**

Parameter	unit	-MD.11.10
Max. air flow	m <sup>3</sup> / hr	190
Max. vacuum	Pa	3.200
Nominal capacity	m <sup>3</sup> /hr / Pa	80 / 1.900
Motor-nominal power	kW	0,15
Nominal voltage	V	1~ 230
Nominal current	A	1
Frequency	Hz	50 / 60
Protection class	IP	54
Type blower		EC-blower
Noise level (at 50 - 100%)	dB(A)	45 - 49
Air flow controller		yes
Loaded particle filter indicator	optical	yes
Air intake	Ø	1 x 50 mm; max. 2x
	position	on the top
Air outlet		air exhaust louver
	position	lower part of the backside
Width	mm	390
Depth	mm	380
Height	mm	450
Weight	kgs	ca. 20
Length of power cable	m	3,0
Filter system		filter system: storage filter filter set complete consisting of:
	(1)	Filter mats M5/F7 <span style="float: right;">ULT 02.0.574</span>
	(2.1)	Combined filter cassette H13A: <span style="float: right;">ULT 02.1.521</span>
	(2.2)	Adsorption filter A
Options		
air intake	(1*)	2x Ø 50 mm on top
mobile unit	(2*)	4 castors, without break, new height: 503 mm

(1\*)



(2\*)



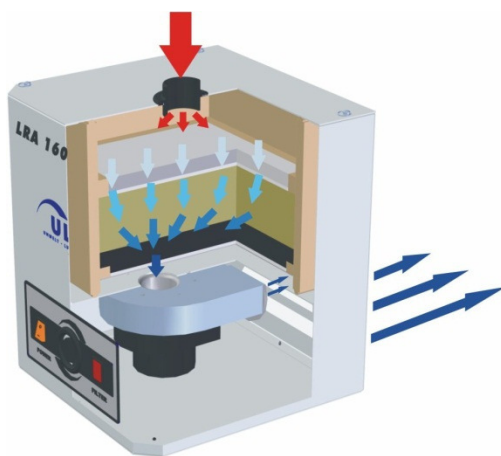


**Functional principle:**

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 **particles** are separated and held back at the first filtration level in multiple stages. **Gaseous and vaporous air pollutants** are separated (adsorbed) in an activated charcoal filter.

The filtering effect of activated charcoal is based on adsorption, i. e. an accumulation of substances (to be filtered out) on the surface of the activated charcoal. During this process there are no chemical reactions and changes of the captured substances. The construction of the filter elements underlies the air volume of the unit; the contact time is based on a medium adsorption reaction.



-  raw gas
-  filtration
-  clean gas

Storage filter system

Filters which are replaced once they are saturated.

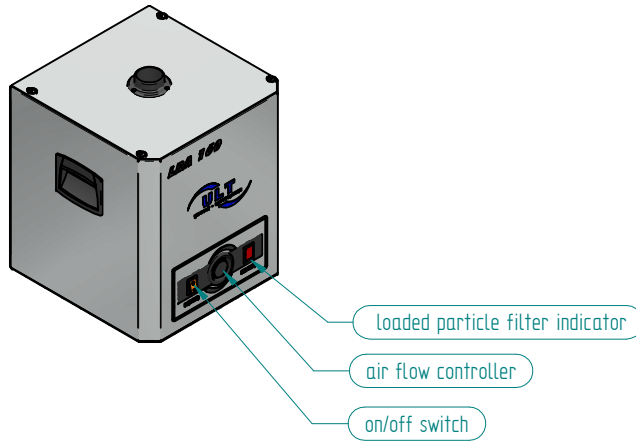
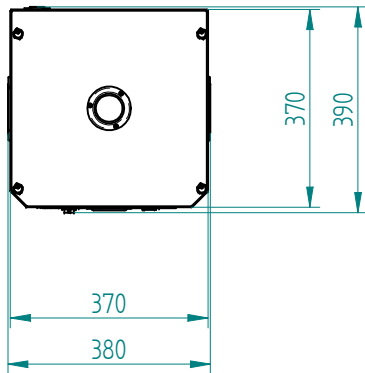
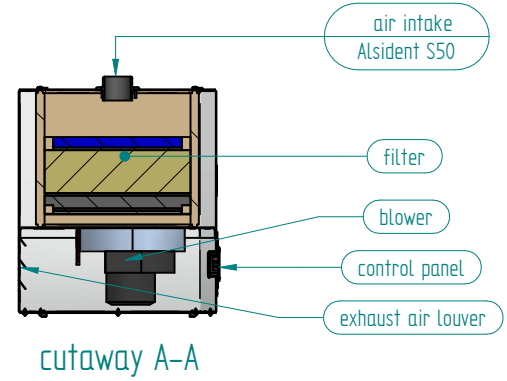
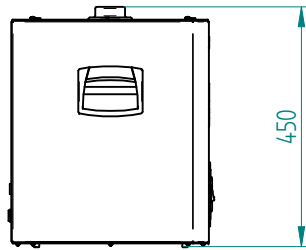
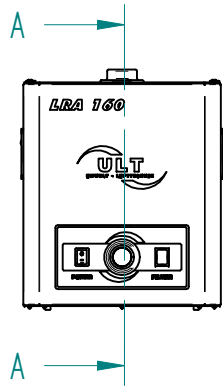
Filtration set complete:

- (1) **fine dust filter** filter mat M5
- (2) **fine dust filter** filter mat F7

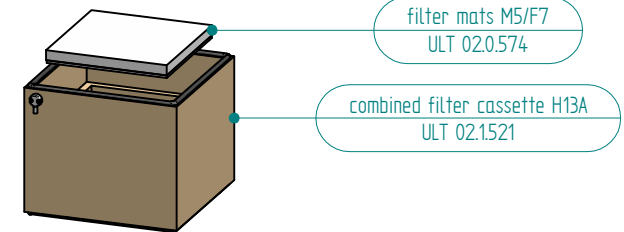
Combined filter cassette

- (2.1) **particulate filter** HEPA filter H13
- (2.2) **gas filtration** Adsorption filter A (activated charcoal)

This excellent filter efficiency makes it possible to recirculate the **filtered air** and reduce energy costs.



filter consisting of:



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				ULT AG Am Gopelreich 1 D-02708 Lobau		designation LRA 160 MD K / 80 m³/h VF	
				2013	date	drawing number:	
001	base	18.04.13	JSACZ	edit.	18.04.	JSACZ	1 : 10
issue	revision	day	name	verf.		Norm	ULT 160_00_109_001