Technical documentation

series 260
LAS 260 HD FK

LASER FUMES

DUST AND SMOKE

SOLDERING FUMES

ODORS, GASES, AND VAPORS

CLEANING INDUSTRIAL GASES

NEW EMISSIONS

WELDING FUMES

OIL AND EMULSION MISTS

COMPLETE SOLUTIONS

Date of issue: 11/2013

ULT
UMWELT - LUFTTECHNIK

Extraction. Filtration. Persistence.

Technical documentation

LAS 260 HD FK

LASER FUMES

Use and application

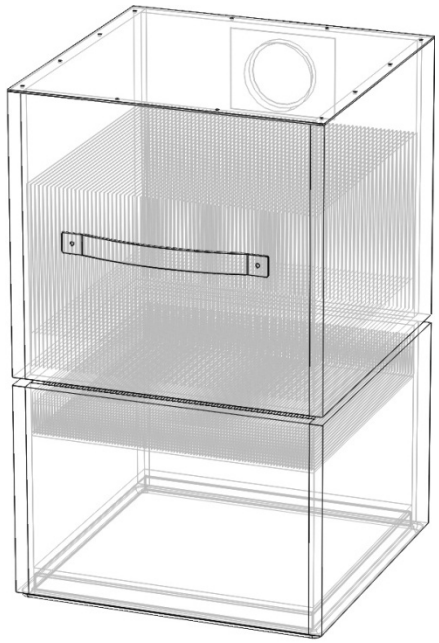
The **LAS 260 HD FK** is suitable for collecting and filtering dry and non-combustible types of dust contained in non-explosive air mixtures produced during laser machining. Any emitted and partially unhealthy **types of dust, fumes and gases** ought to be extracted by collecting elements directly at their place of origin and filtered by the LAS 260 HD FK. The innovative filter concept offers a significantly **larger filtering surface** and **reduces** the occurring **maintenance costs** thanks to the **huge storage capacity**. A **thick layer of activated charcoal** enables a **long contact time** with the contaminated air flow. Gases and fumes are adsorbed effectively.

Examples

- laser cutting,
- laser engraving,
- laser structuring
- laser processing of metal, plastic or organic material

ULT 260 mobile extraction and filtration unit

- mobile unit with castors
- with filter replacement system
- all interfaces on the back side
- control panel and access to filter elements on the front side
- easy filter handling
- robust steel housing
- powder coated RAL 7047 tele gray



Filter system:

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

Filter technology:

(1) Particle filter cassette F9

filter class: F9 fine dust filter according to DIN EN 779

(2) Combined filter cassette H14A10

(2.1) Particle filter H14

filter class: H14 HEPA-filter according to DIN EN 1822

(2.2) Adsorption filter A10

filter medium: activated charcoal (ca. 10 kg)

Configuration

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

Technical documentation

LAS 260 HD FK

LASER FUMES

LAS 260.0-HD.16.10.5014

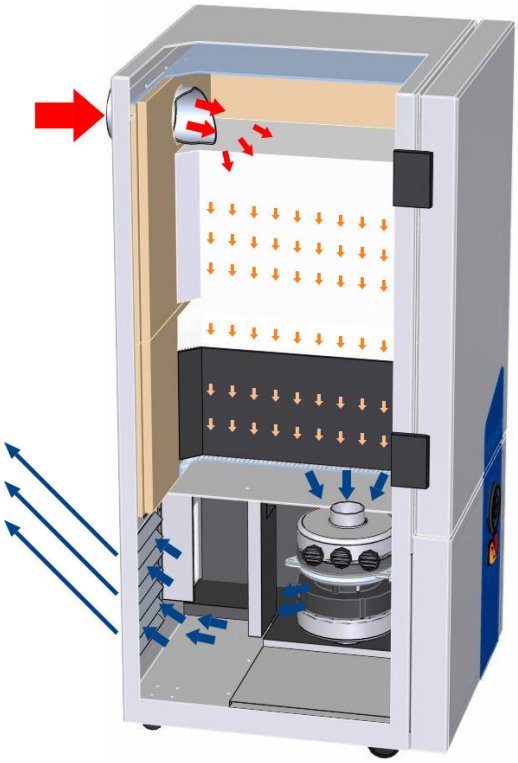
Parameter	unit	-HD.16.10	
Max. air flow	m^3 / hr	200	
Max. vacuum	Pa	22.000	
Nominal capacity	m^3/hr / Pa	120 / 12.000	
Motor-nominal power	kW	1,20	
Nominal voltage	V	230	
Nominal current	A	10	
Frequency	Hz	50 / 60	
Protection class	IP	54	
Type blower		EC-Turbine	
Noise level (at 50 - 100%)	dB(A)	60 - 70	
Air flow controller		yes	
Loaded particle filter indicator	optical	yes	
SUB D9 interface		optional	
Air intake		1x Ø 80 mm nozzle	
	position	upper part of the backside	
Air outlet		air exhaust louver, optional Ø 100 mm exhaust nozzle	
	position	lower part of the backside	
Width	mm	460	
Depth	mm	475	
Height	mm	975	
Weight	kgs	75	
Length of power cable	m	3,0	
Filter system		filter set consisting of:	
	(1)	Particle filter cassette F9	ULT 02.1.711
	(2.1)	Combined filter cassette H14A10: Particle filter H14	ULT 02.1.721
	(2.2)	Adsorption filter A10	

unit with option SUB-D9 and exhaust air louver from the back:

Technical documentation

LAS 260 HD FK

LASER FUMES



raw gas

filtration

clean gas

Functional principle:

At the clean-air side of the filter, a turbine 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 volume flow of the unit; the contact time is based on a medium adsorption reaction.

The filter combination can be accessed through the front door. Thanks to the user-friendly design of the filter space the replacement of the filter elements requires little effort.

Storage filter system

Filters which are replaced once they are saturated.

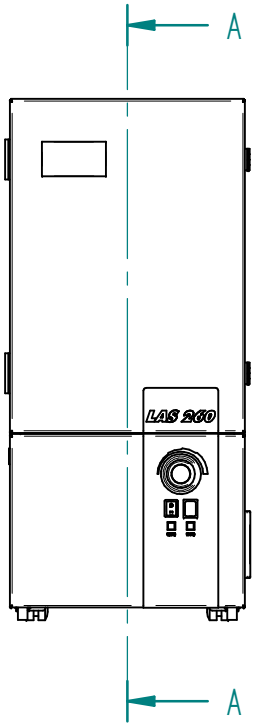
Pre-filtration cassette

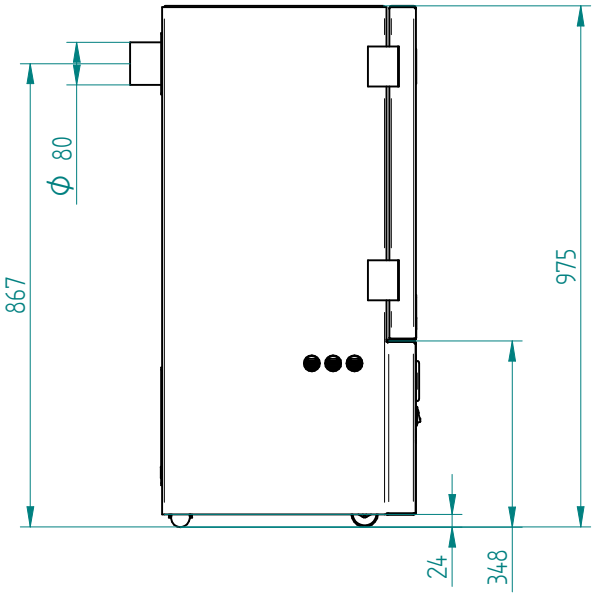
(1)	**fine dust filter**	Particle filter F9

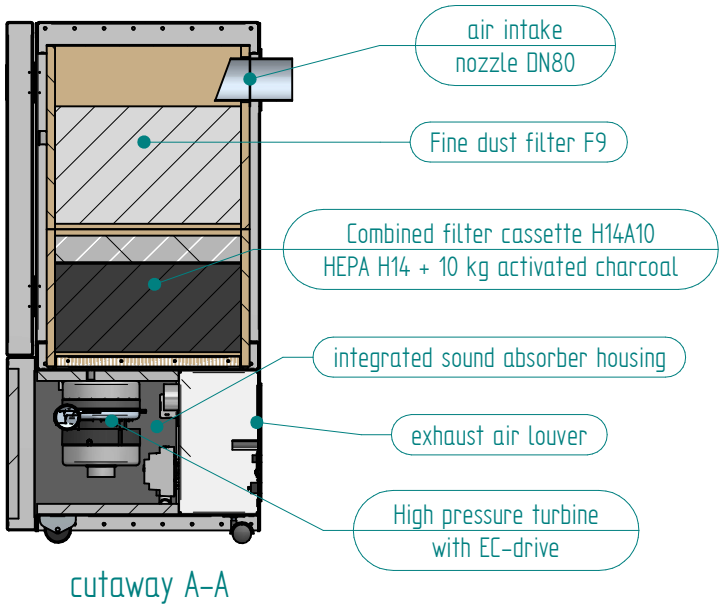
Combined filter cassette

(2.1)	**particulate filter**	HEPA filter H14
(2.2)	Gasfilter	Adsorption filter A10 (10 kg activated charcoal)

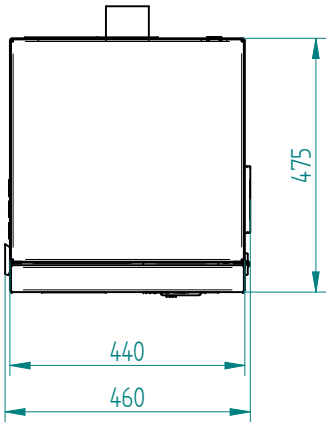
This excellent filter efficiency makes it possible to recirculate the **filtered air** and reduce energy costs.

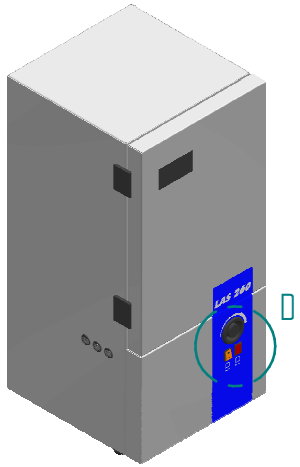


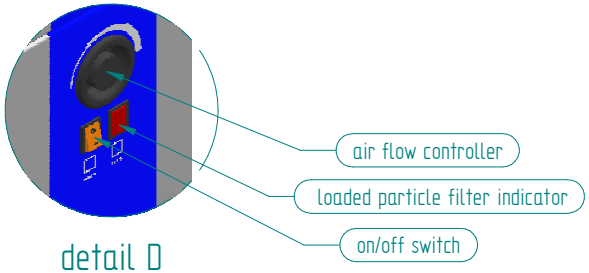




cutaway A-A







detail D

Allgemeintoleranzen DIN ISO 2768-mK

issue	revision	day	name
002	Designübern.	08.10.13	A. Rei
001	Maße	28.06.13	A. Rei
000	Basis Dok	26.04.13	A. Rei

ULT AG
Am Gopelteich 1
D-02708 Löbau

	date	name
2013		
edit.	26.04.	A. Reichmann
veri.		
Norm		

designation:
LAS 260 HD FK / 120 m³/h-VF

drawing number:
ULT260_00_001_001

scale:
1 : 10