Airline Compact LC

The integrated extraction solution for safe laser and plasma cutting

novus® | **ULT** air quality

Integrated fine dust filter*

Spark and material pre-separator
with separate collection bin

Integrated shutoff valve*

Level sensor in dust
container

CO_2 extinguishing system*

Fume detector

*Extensions
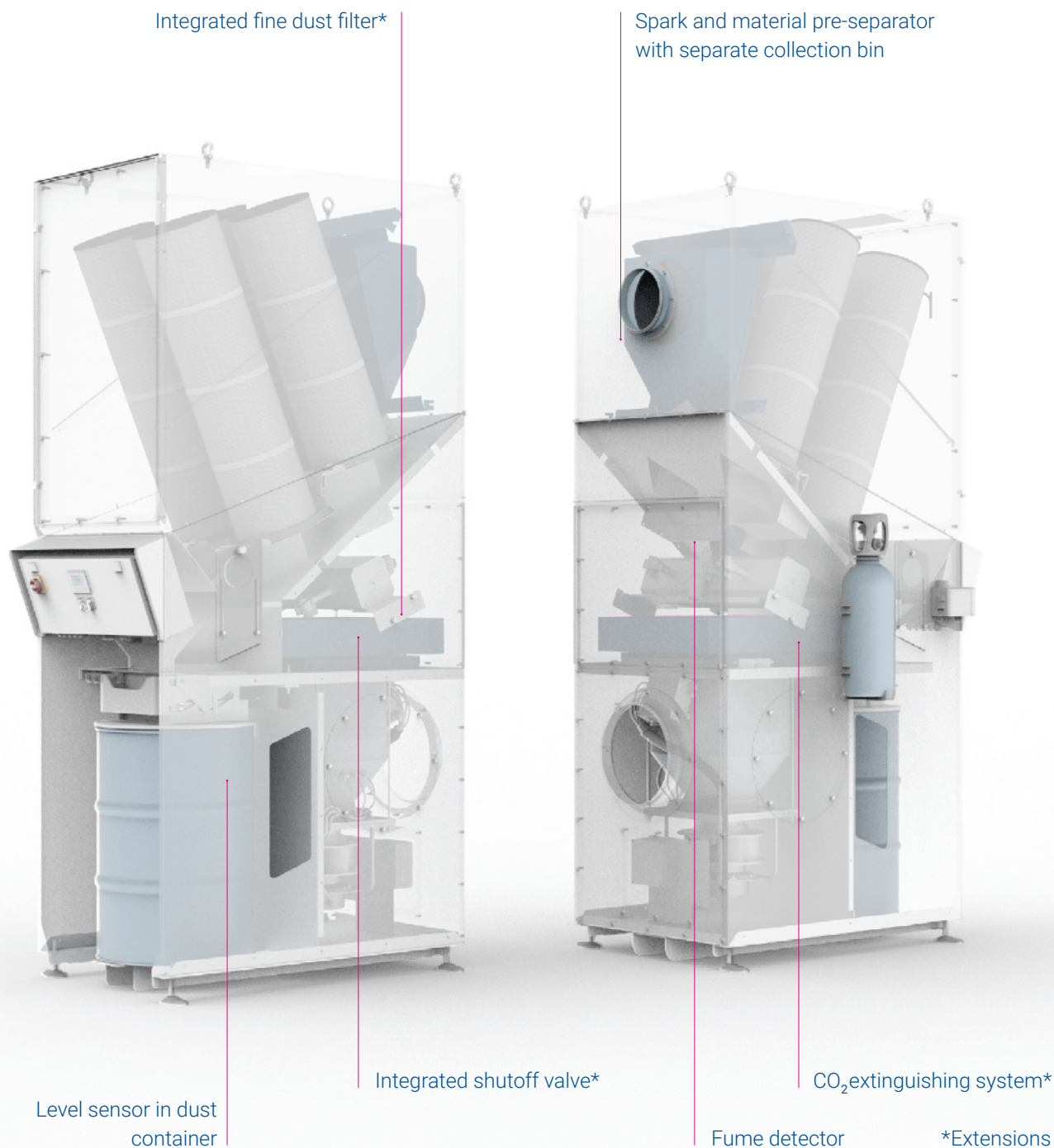
Our commitment to you

☑ **24/7 continuous operation thanks to efficient online filter cleaning**

☑ **DGUV test certificate for welding fume filtration class W3**

☑ **Unrivalled energy efficiency with NOVUS EC-Turbo technology**

☑ **Optional integrated fine dust filter up to class H14**

The AIRLINE – precision and efficiency in laser cutting

Laser cutting – what's the challenge?
Extraction systems remove dust and fumes from the ambient air to protect high-performance laser and plasma technology. Depending on the process, the emissions vary in composition and health risk for operators. The dusts generated during laser cutting are among the most challenging to capture. They consist of extremely fine fume particles that place very high demands on filtration technology:

· Cutting stainless steel, for example, can produce carcinogenic substances.
· Both coarse and ultrafine particles can occur in large quantities.
· The strong air flow also draws in larger, sometimes still glowing, metal particles.

While an enclosure protects employees from direct exposure to these emissions, it does not shield the highly sensitive laser optics. To ensure consistent production quality, NOVUS and ULT have jointly developed an extraction system specifically designed to handle these demanding types of dust.

Long service life thanks to efficient online filter cleaning
The AIRLINE features a technologically advanced filtration system for centralized extraction. Connected to a ducting network, it is the ideal solution for processrelated emissions and production equipment in continuous operation.

Since laser cutting is a 24/7 process, the online cleaning function – performed during operation – must work flawlessly to maintain a constant air flow even under heavy dust loads. Additionally, the system cleans itself automatically during downtime.

As powerful as your process requires
The two model variants, 4P and 6P, vary by the number of filter cartridges installed. The AIRLINE 6P Compact LC can also be equipped with one or two fan units to generate higher negative pressure at the operating point – perfectly adaptable to various customer or machine requirements.
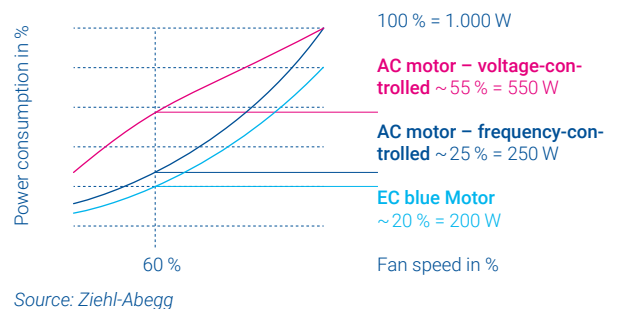
System benefits

· Targeted project management
· Prioritized delivery times
· Personal contact partners near you

Comparison: power consumption
of fans with speed control

The highlight: the patented EC Turbo unit
In the fan units developed by NOVUS, we combine
the efficiency potential of high-performance EC fans
with the power of a fan with housing. Thanks to
this patented design, we have been able to further
enhance the already outstanding efficiency of EC
technology – unlocking even greater energy savings.

100 % = 1.000 W

**AC motor – voltage-con-
trolled** ~ 55 % = 550 W

**AC motor – frequency-con-
trolled** ~ 25 % = 250 W

EC blue Motor
~ 20 % = 200 W

Fan speed in %

Power consumption in %

60 %

Source: Ziehl-Abegg

AIRLINE Compact LC – technical data

Device type	4P Compact LC	6P Compact LC
Motor	2 × 3.9 kW, EC	2 × 3.9 kW, EC | 4 × 3.9 kW, EC
Power supply	400 – 480 VAC; 50/60 Hz	400 – 480 VAC; 50/60 Hz
Connection	Terminal inside control cabinet	Terminal inside control cabinet
Fuse protection	16 A	16 A | 32 A
Max. power consumption (ECT*)	7.3 kW	7.3 kW | 14.6 kW
Nominal air flow (AP**)	2,000 – 3,500 m³/h	2,000 – 3,500 m³/h | 4,000 – 4,500 m³/h
Max. air flow (ECT*)	6,800 m³/h	6,800 m³/h | 13,600 m³/h
Static pressure (AP**) (ECT*)	4,300 – 4,100 Pa	4,300 – 4,100 Pa
Max. pressure (ECT*)	4,800 Pa	4,800 Pa
Dust collection bin	200 l	200 l
Sound level	<75 dB (A)***	<75 dB (A)***
Approx. weight	600 kg	700 kg | 850 kg
Color	RAL 7035, RAL 7021	RAL 7035, RAL 7021

1. Filter stage – main filter

Filter area (depending on filter package)	72 m²	108 m²
Number of filter cartridges	4	6
Dust class of cartridge according to DIN EN 60335-2-69	M separation efficienty	M separation efficienty
Filter cleaning system	Intelligent compressed-air pulse cleaning	Intelligent compressed-air pulse cleaning
Compressed air connection	NW 7.2; 4 – 6 bar, oil- and water-free	NW 7.2; 4 – 6 bar, oil- and water-free

2. Filter stage – safety / fine dust filter (optional)

Filter class	ePM1 80 % (F9) / H14	ePM1 80 % (F9) / H14

Dimensions (in mm)

Width	900	1,350
Depth (incl. control cabinet)	1,520	1,520
Height	3,050	3,050
Inlet height	2,630	2,630
Exhaust	820	820

Connections

Air inlet	DN 250	DN 250
Air outlet	DN 400	DN 400

*EC-Turbo, **Operating point, ***Rear side when exhaust air is ducted

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