The Airtower

Versatile Welding Fume Extraction

Extraction. Filtration. Persistence.

The Airtower revolutionizes welding fume extraction.

Plug and play

Single-point extraction of welding fumes is neither practical nor efficient when executing mobile welding work on large and complex parts. In contrast to classic production hall extraction systems, the Airtower does not require any pipework. Simply put it where you need it. Connect the power and compressed air. Done.

Layered ventilation

Contaminated indoor air is extracted at the top of the device, filtered and blown back into the room near the floor without causing drafts. The layered ventilation principle is considered the ideal recirculation method as it takes advantage of the heat generated during welding. It provides fresh air in the breathing zone and minimizes heating costs by reducing the amount of required outside air.

How it works

Stage 1: The exhausted air passes through a multi-stage cyclone pre-cleaner for spark arresting and coarse particle separation. It is then purified by filter cartridges during the first filter stage. Triggered by a differential pressure signal, these cartridges are cleaned on a fully automatic basis by means of a compressed air pulse in order to ensure the trouble-free, continuous operation of the system. Separated dust and coarse particles are collected in a specially designed two-part dust collection drawer, easy to remove and empty.

Stage 2: The second filter stage features a class F9 police filter.

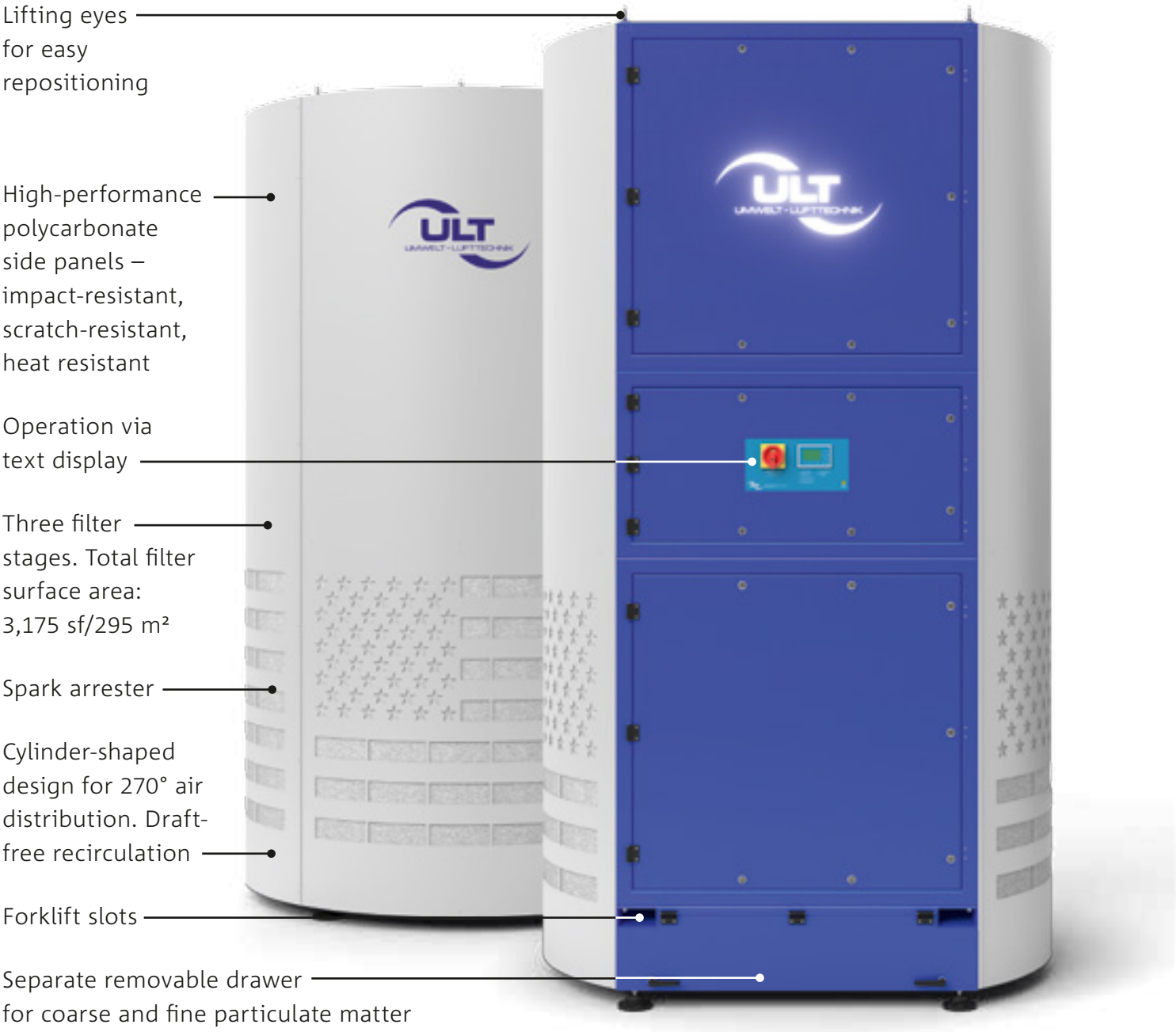
Stage 3: Class G4 filters in the air outlet grilles support the equal distribution of the recirculated air and protect the device from an ingress of dust when not in use. The cleaned air now leaves through the three large outlet openings at the bottom of the filter tower at low speed and without causing a draft. The tower's cylinder-shaped design optimizes the flow of fresh air to workers in the vicinity, ensures low-noise operation, and enables it to blend attractively into the production environment.

Design

The high-performance polycarbonate side panels symbolize the system's uncompromising lightweight construction and make it resistant to impact, scratches, and heat. The control system is integrated into the device. A control console with text display on the front panel ensures ease of operation.

Installation

The Airtower is delivered on a "plug and play" basis and can be repositioned as needed at any time thanks to its forklift slots and lifting eyes.

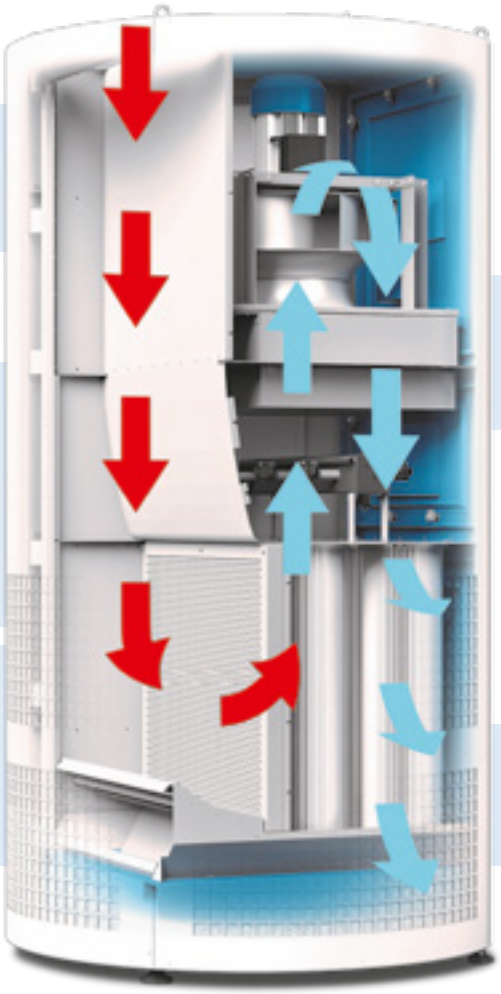


» **Layered ventilation** using the recirculation model
» Significant **heating cost saving**
» **Redistribution of heat** from hall ceiling to the working area
» 270° draft-free, filtered **clean air** in the breathing zone
» **Low-noise** operation

Welding fume extraction at top of device

Multi-stage cyclone pre-cleaner for spark arresting and the separation of coarse particles

Main filter with a filtration level of > 99.9 % and fully automatic cleaning.



Police filter for air quality monitoring

Draft-free air outlet and 270° air distribution

Benefits

- Significant heating cost savings
- Less than 1.5 kW power consumption per 35,300 cft/1,000 m³ of cleaned air
- High-performance devices in four different versions
- Low operating costs thanks to fully automatic cleaning of the filter cartridges
- Installation and commissioning service
- No complex pipework or installation necessary

Optional features

- W3-approved design
- Activated carbon pads for gas treatment and odor reduction
- Usable as indoor air temperature control device with reversible heat pump for heating or cooling
- Usable as indoor air conditioning device with water chillers for outdoor installation
- Customer-specific design with height-adjustable intake
- Indoor air quality sensor
- Variable-frequency drive
- Residual dust monitoring
- Remote control

Technical data

Device type	FT–5.000	FT–10.000	FT–15.000	FT–20.000
Motor	5.5 kW, 400 V, 50 Hz	7.5 kW, 400 V, 50 Hz	11 kW, 400 V, 50 Hz	15 kW, 400 V, 50 Hz
Max. air flow rate	2,943 cfm / 5,000 m³/h	5,886 cfm / 10,000 m³/h	8,829 cfm / 15,000 m³/h	11,772 cfm / 20,000 m³/h
Max. neg. pressure	1,800 Pa			
Approx. cleaning capacity	88,300 cft / 2,500 m³	141,300 cft / 4,000 m³	176,600 cft / 5,000 m³	233,100 cft / 6,600 m³
Dust container	26.4 gal / 100 l	26.4 gal / 100 l	52.8 gal / 200 l	52.8 gal / 200 l
Sound pressure level	< 70 dB (A)	< 75 dB (A)	< 70 dB (A)	< 75 dB (A)

1st filter stage – main filter

Filter surface area	861 sf / 80 m²	1,593 sf / 148 m²	2,390 sf / 222 m²	2,390 sf / 222 m²
Number of filters	4	4	6	6
Filter material	IFA usage category “M”			
Filtration efficiency	> 99.9 %			
Filter cleaning	Jet pulse			
Compressed air connection	NW 0.3’’/7.6 mm, 4 to 6 bar			
CEE plug IEC 60309	32 A	32 A	32 A	63 A

2nd filter stage – particulate filter

Filter class (EN779)	F9			
Filter surface area	420 sf / 39 m²	420 sf / 39 m²	700 sf / 65 m²	700 sf / 65 m²

3rd filter stage – regenerative synthetic fiber pads

Filter class (EN779)	G4			
Filter surface area	43 sf / 4 m²	65 sf / 6 m²	86 sf / 8 m²	86 sf / 8 m²

Dimensions and weight

Width of filter unit	64’’ / 1,619 mm	64’’ / 1,619 mm	81’’ / 2,066 mm	81’’ / 2,066 mm
Depth of filter unit	66’’ / 1,675 mm	66’’ / 1,675 mm	69’’ / 1,756 mm	69’’ / 1,756 mm
Height of filter unit	114‘‘ / 2,885 mm	143’’ / 3,643 mm	143’’ / 3,643 mm	143’’ / 3,643 mm
Weight	2,183 lbs / 990 kg	2,822 lbs / 1,280 kg	3,263 lbs / 1,480 kg	3,505 lbs / 1,590 kg

Housing

Air intake	From top
Air outlet	Three air outlets at the bottom (left, right, rear)
Side panels	High-performance polycarbonate (RAL 9006: white aluminum)
Front panel colour	RAL 5010: blue

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ULT is certified according to ISO 9001:2008. The plants are designed meeting international standards such as EC or UL.

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.

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Made in Germany

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