



Engineered  
Filtration, Inc.



**FUMES  
& DUST  
EXTRACTORS**

**VORTEX**

## VORTEX

Compact, mobile fume extractors suitable for multiple uses.

High efficiency extractor range available in three different models, suitable for the extraction and filtration of fumes and dust created from welding, sanding, grinding, and deburring.

# VORTEX



# WORKING PROCESS

1

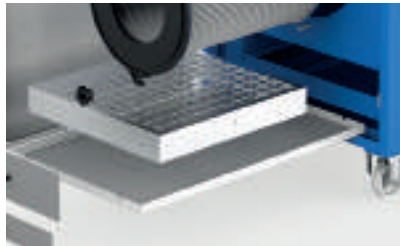
### Air entry:

The air enters a large inlet pre separator chamber where gravity allows the heavier particulate to fall out of suspension. Solids are collected in removable collection tray.

2

### Pre-filter:

Contaminated air passes through special, pre-filtration section with a coarse panel filter to force large solids to drop out.



3

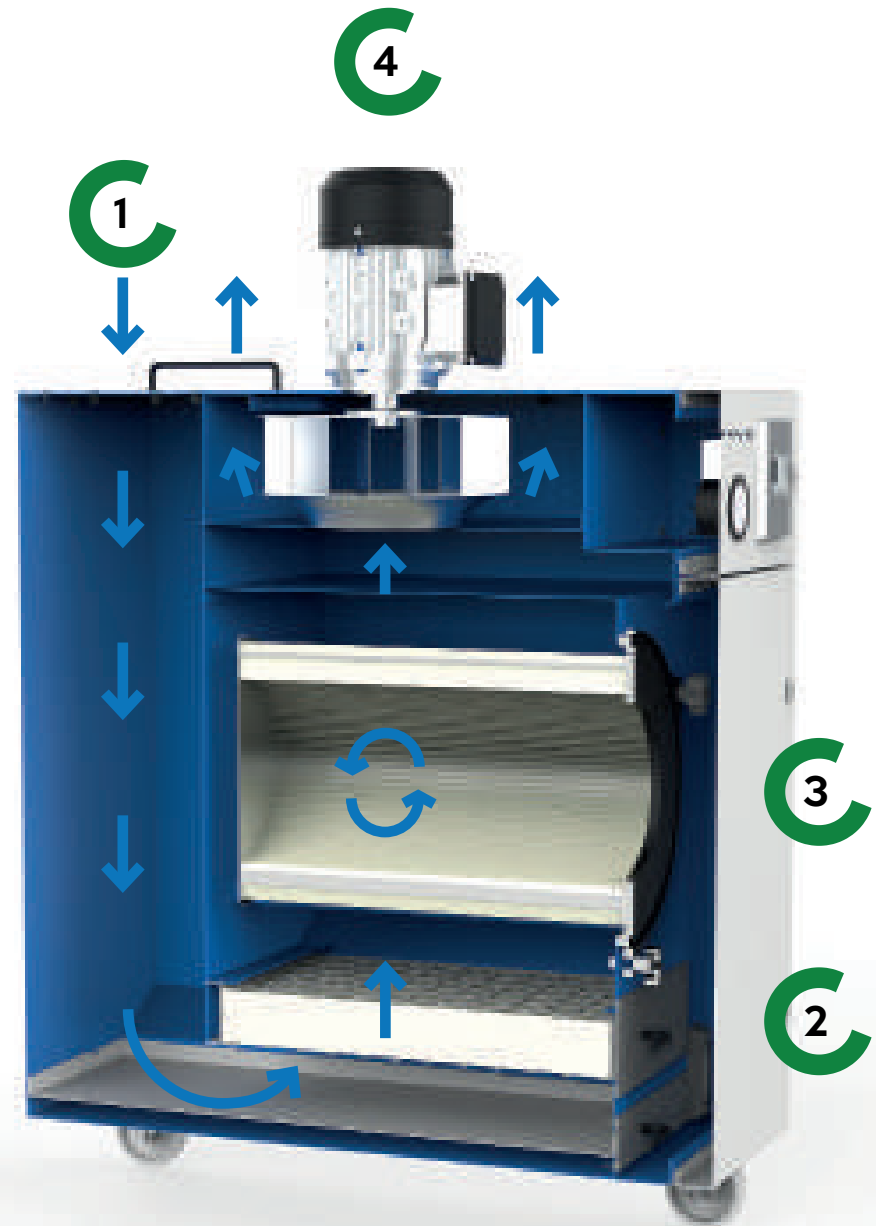
### Main filter:

A folded cartridge filter with a wide filtration surface and high filtration efficiency, able to capture the finest pollutant particles. The cartridge is covered by a coalescent sleeve which serves to prolong its life.

4

### Air exit:

The filtered air is reintroduced into the working environment (absolute HEPA filter, class H13, available upon request).



VORTEX  
**ADVANTAGES**

**Controlled filtration efficiency:**

Smoky can be fitted with up to 5 progressive filter elements which can be monitored by a manometer, to maintain the extractor at maximum filtration efficiency.

**Versatile:**

Different filter elements can be combined to treat smoke and dust without needing to make structural changes to the extractor.

**Blue light**

indicates that the filters are clean

**Red light**

indicates that the filters must be substituted

**SMART LED:**

Smoky is equipped with an intelligent visual system which shows the status of the filter elements.

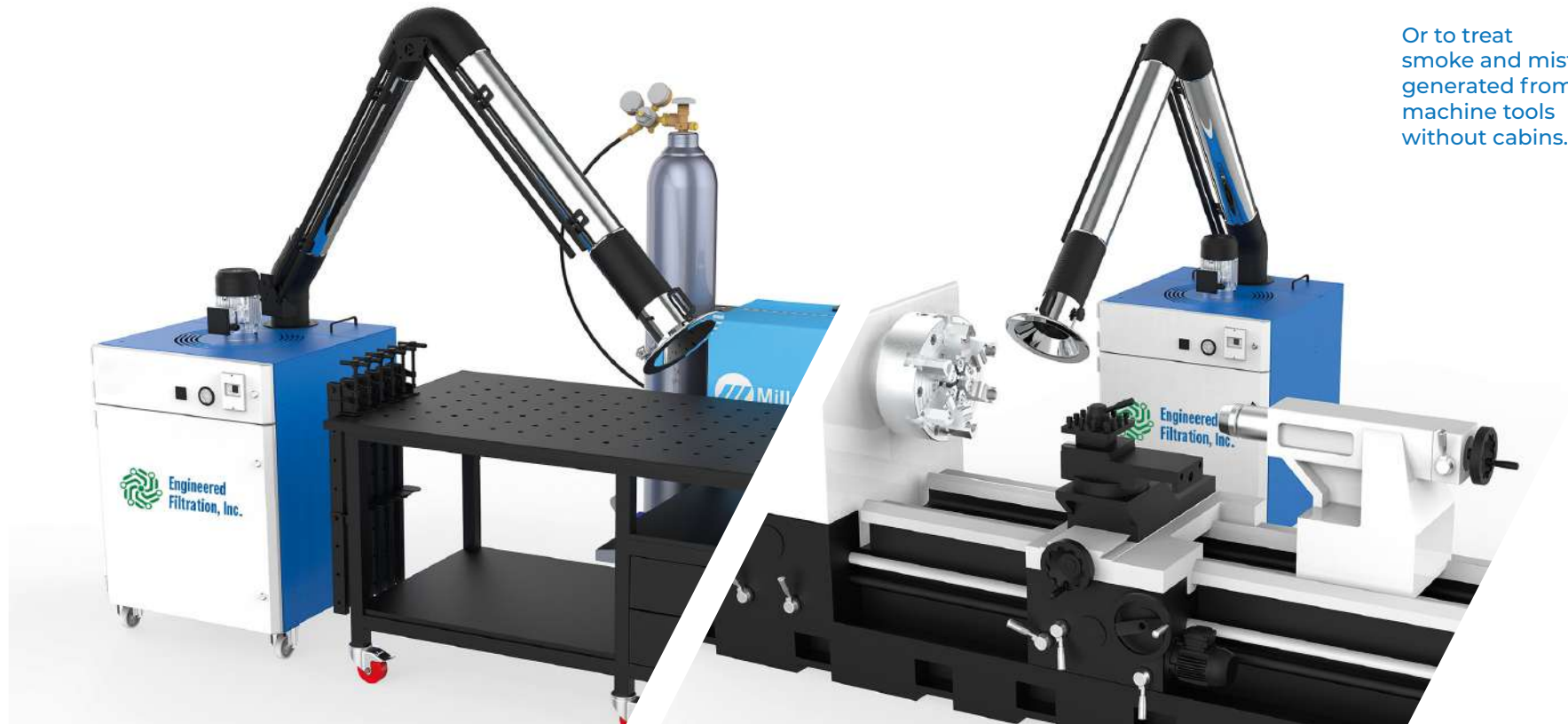
**LED ON:**

The retro-illuminated, blue Engineered Filtration, Inc. logo indicates that the unit is in function.



Vortex can be used to treat smoke and dust deriving from welding and grinding machining processes.

Or to treat smoke and mist generated from machine tools without cabins.



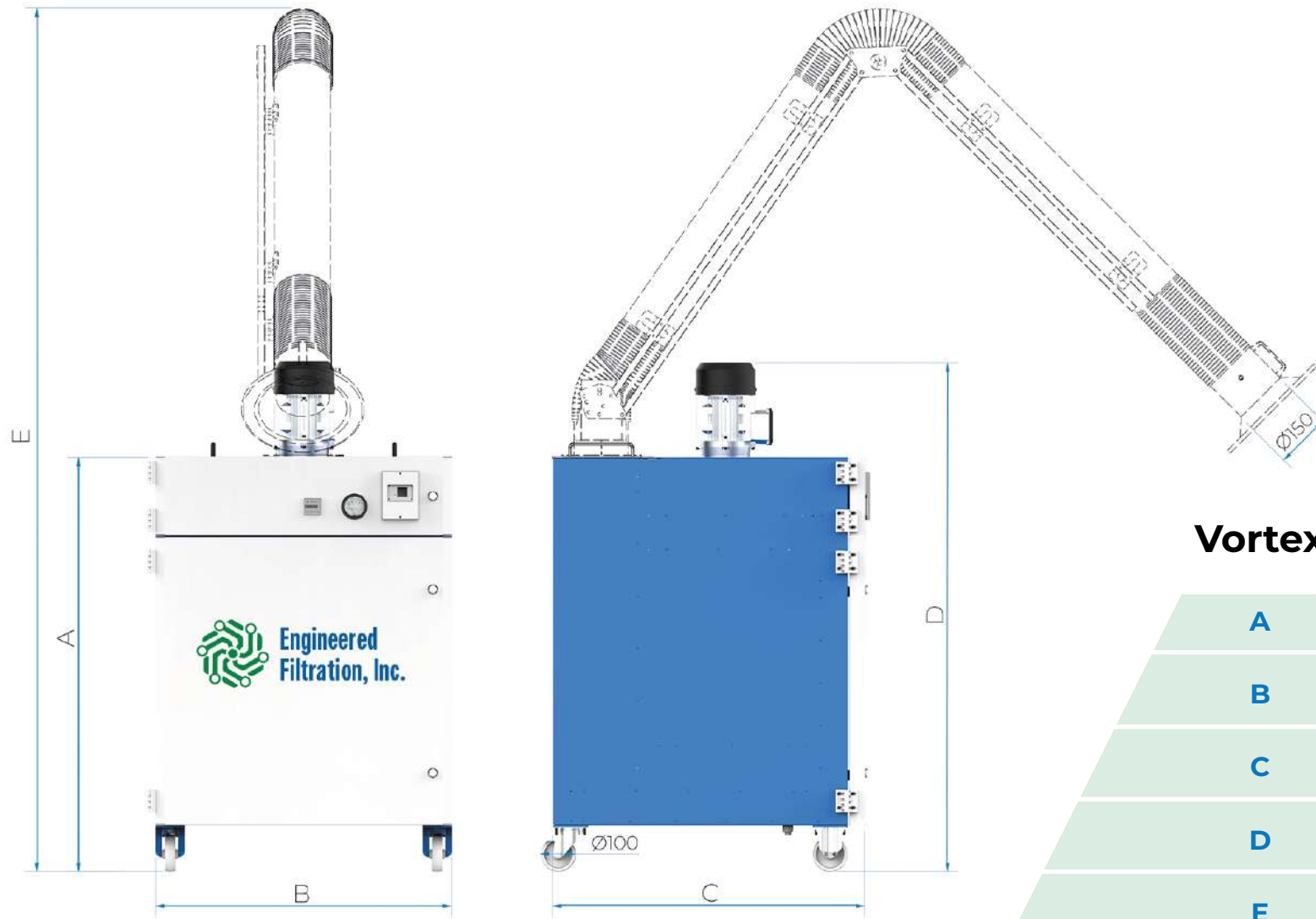
### Practical to use:

Equipped with pivoting wheels to enable transportation between different work stations, and a jointed suction arm to capture the pollutants directly at the source.

### Modular:

Three models with different motor powers and flowrates to suitably match the extractor to the machining application.

VORTEX  
**DIMENSIONS AND TECHNICAL DETAILS**



<b>Vortex</b>	<b>1 (mm/in)</b>	<b>2 / 3 (mm/in)</b>
<b>A</b>	1040/40	1190/46
<b>B</b>	700/27	850/33
<b>C</b>	900/35	900/35
<b>D</b>	1290/50	1460/57
<b>E</b>	2500/98	2700/106



## Vortex

	Flowrate (m <sup>3</sup> /h/cfm)	Pressure (mm H <sub>2</sub> O)	Cartridge (N°)	Filtration surface (m <sup>2</sup> )	Power (kW/HP)	Weight (Kg/lbs)	Noise level (dB) w/out HEPA
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**1**

1,350/795

110

1

8

0.75/1

116/255

72

**2**

1,850/1,089

130

2

16

1.1/1.4

152/335

74

**3**

2,400/1,413

115

2

16

1.5/2

156/343

76



# **Engineered Filtration, Inc.**

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