



A Donaldson Company

A WORLD LEADER IN FUME  
EXTRACTION TECHNOLOGY

## AD 500 iQ FUME EXTRACTOR

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### Affordable high-performance laser fume extraction system for applications in the laser marking, coding and engraving industries.

BOFA's AD 500 iQ mid to high-end laser fume extraction system combines extremely large filter capacity with high airflow and pressure rates, making it the ideal choice for heavy-duty applications that generate large amounts of particulate and gaseous organic compounds.

Performance has been further enhanced with the inclusion of several features including BOFA's acclaimed Intelligent Operating System (iQ).

The iQ system takes performance and safety parameters to a new level and helps keep maintenance, downtime and ownership costs to a minimum.

### Key features

- Intelligent Operating System (iQ)
- High airflow and pressure rates
- Reverse flow air filter technology
- DeepPleat DUO pre-filter
- Combined HEPA/gas filter incorporating ACF technology
- Automatic flow control system
- Real-time airflow reading
- Independent filter condition monitoring, display and warnings
- High contrast display
- 'Run safe' operation
- Remote diagnostics via USB
- Filters with long life and low replacement cost
- Optional VOC (volatile organic compound) gas sensor
- Optional interfacing with host laser
- Optional remote stop/start interface
- Optional filter change/system fail signal
- Optional on-board compressor
- Optional filter medias



Intelligent  
Operating  
System (iQ)



DeepPleat  
DUO pre-  
filter



HEPA  
filter



Advanced  
carbon  
filter (ACF)  
technology



Automatic flow  
control (AFC)  
technology



Reverse flow  
air (RFA)  
technology



Multi-voltage  
sensing unit  
(MVS)



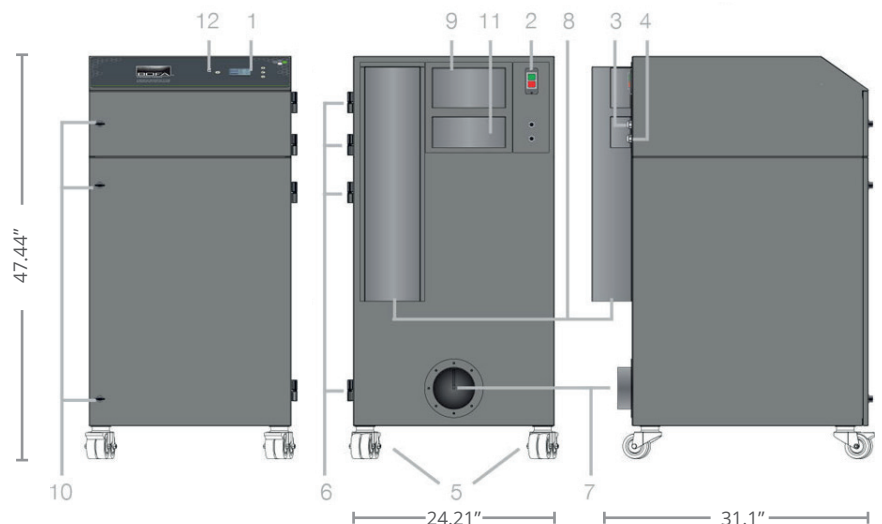
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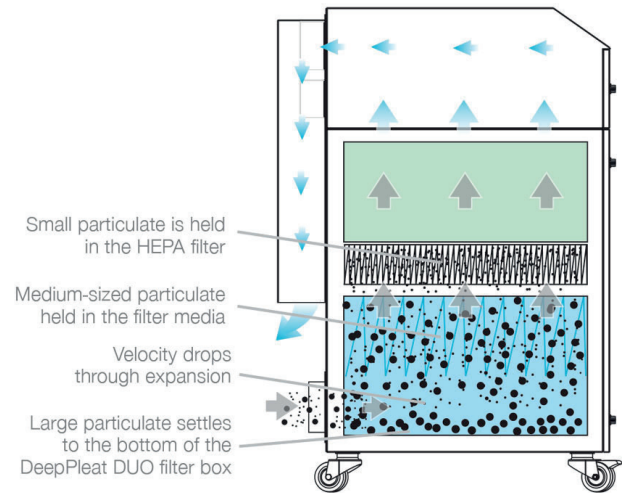
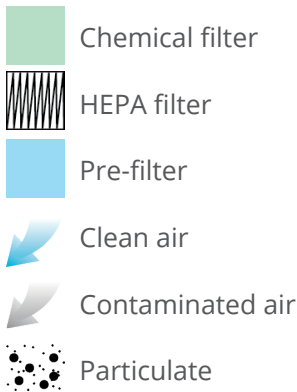
Patented  
technology

### Technical specification

1. iQ display
2. On/off switch
3. Power cable
4. Signal / interface cable
5. Castors
6. Door hinge
7. Hose inlet connection - 125mm
8. Exhaust outlet
9. Motor cooling inlet
10. Door latch
11. Motor cooling outlet
12. Standby button



## Airflow through filters



## Pre-filter specifications (DeepPleat DUO)

Surface media area	approx 322.8 ft <sup>2</sup>
Filter media	Borosilicate
Filter media construction	Maxi pleat construction with glue bead spacers
Filter housing	Zintec mild steel
Filter efficiency	95% @ 0.3 microns
Inlet size	125mm (0.41ft)
Dropout chamber size	58 litres
Filter media pleat size	200mm (0.65 ft)

## Combined HEPA/gas filter specifications

HEPA filter media	Borosilicate
Surface media area	80.7 ft <sup>2</sup>
HEPA media construction	Maxi pleat construction with glue bead spacers
Gas filter	Treated activated carbon
Filter housing	Zintec mild steel
Treated activated carbon	74.8 lbs)
Filter efficiency	99.995% @ 0.3 microns

## Part numbers

Model	AD 500 iQ - Powder-coated
Part number	1U10810511-1419
Including 24v stop / start and filter change signal	1U4660810511-1419
Optional VOC	1UA1070028
Single hose kits	1USHK-5-(3,4,5,6)
Optional exhaust spigot 125mm* replaces exhaust box vent	1UA1060029
<b>Replacement filters</b>	
Pre-filter (DeepPleat DUO)	1UA1030222
Combined HEPA/gas filter	1UA1030297

## Technical data

Dimensions (HxWxD)	47.44 x 24.21 x 31.10"
Cabinet construction	Brushed stainless steel/ Powder-coated mild steel
Airflow/pressure	324cfm / 100mbar
Electrical data	115v 60/50Hz Full load current: 14.8 amps / 1.1kw
Noise level	< 60 dBA (at typical operating speed)
Weight (standard extractor with filters)	292lbs (+/- 5%)
Approvals	UKCA, CE and cUL, UL*

\* Tested to UL and cUL standards, but testing may be provided by alternate nationally recognized test laboratories. Certain product configurations may affect the UL certification. Please speak to your sales representative.

Contact BOFA at [donaldsonbofa.com/contact/](http://donaldsonbofa.com/contact/)

Datasheet correct at time of publishing.

Where applicable, the carbon used in BOFA units is capable of removing a wide range of VOCs, however it is the responsibility of the user to ensure the carbon is suitable for their application. For specific applications, please contact us for details.

**Important notice:** Many factors beyond the control of BOFA can affect the use and performance of BOFA products in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the products to determine whether the product is fit for the particular purpose and suitable for the user's application. All products, product specifications, availability and data are subject to change without notice, and may vary by region or country.

Think before you print! Please consider the environment before printing this document.



Approvals: REACH and RoHS.  
See individual product technical data for specific accreditations

