

THE WORLD LEADER IN FUME EXTRACTION TECHNOLOGY

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AD GRS iQ



# BOFA International Ltd The World Leader in Fume Extraction Technology

For more than twenty five years BOFA International has been designing and manufacturing fume extraction solutions for a variety of industrial applications and is regarded as 'The World Leader' in fume extraction & filtration.

Our understanding of the fume extraction requirements associated with laser coding, marking, cutting and engraving applications has enabled us to develop product solutions for a variety of associated sectors including food and beverage, pharmaceuticals, promotions and education.

ASER



## Filter Technology

Many years of designing and manufacturing fume extraction and filtration systems for a variety of industries has given BOFA the experience and expertise to ensure that our product solutions are the best available on the market. Our understanding of industrial processes and applications are reflected in the design and manufacturing procedures applied to our range of patented filters.





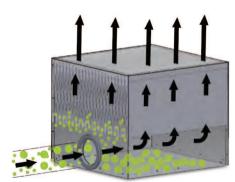
## DeepPleat and DeepPleat DUO filter technology

The unique product features of the DeepPleat and DeepPleat DUO ensure that particulate capture is optimised and that the life of the main filter is extended and the overall cost of ownership reduced.

The DeepPleat concept is designed around RFA (reverse flow air) operation. As the contaminated air enters the filter chamber the velocity is dramatically reduced, allowing the larger particulate to fall to the bottom and therefore clear of the filter media. The smaller, lighter particulate are then retained within the filter pleats. This allows a greater majority of the larger particulate to fall away from the filter surface into the drop-out chamber within the filter enclosure giving a far greater efficiency and much longer filter life.

The BOFA DeepPleat DUO pre-filter incorporates a massive drop-out chamber within the filter, having a large volume area. Above the drop-out chamber but still within the housing there is a sealed deep pleat layer of F8 media giving a sizeable surface area.

A specially moulded grommet style gasket situated within the drop-out chamber makes it easy and safe for operators to undertake the initial installation and replacement of used filters. This safety aspect of the design is an important feature bearing in mind the different and in many cases, harmful contaminants found within a used filter.





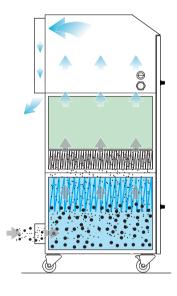
#### http://www.bofa.co.uk/deepPleatFilterTechnology.asp

Take a look at our dynamic animation, which explains exactly why the BOFA DeepPleat DUO is the longest lasting pre filter available on the market, extending the life of your main filter reducing overall cost of ownership.



## Reverse Flow Air technology

Reverse Flow Air technology enhances filter performance and ensures longer filter life. Working in harmony with the DeepPleat DUO filter, RFA allows gravity to pull the larger parts of particulate away from the filters. The particulate then collects at the bottom of the fallout chamber, keeping the main part of the filter free for smaller dust particulate, allowing for a better filtration performance and longer filter life.







#### Advanced Carbon Filter technology

Critical to filter performance and working life is the need to ensure that the contaminated air remains in contact with the carbon bed (specific carbon types are chosen for different applications) for a period of time sufficient to ensure that no contaminants or odours are emitted. This time period is typically referred to as the dwell time. Our product designs consider the balance between air flow rates and the type, depth and surface area of the carbon used to ensure suitability for the contaminants associated with the application and to ensure that appropriate dwell times are achieved.

There is also the risk that filter performance may be compromised due to conditions known as bypass and or tunnelling. End users will typically associate such problems with premature carbon saturation, where in fact both problems more typically relate to poor design or manufacturing techniques, resulting in insufficient capture of contaminants and the discharge of odours into the workplace. The manufacturing and test procedures developed by BOFA ensure that the risk of such problems have been eliminated giving end users the confidence that our filters will give trouble free operation throughout their lifetime.



Pre filter media viewed with an electron microscope at 500 times magnification



HEPA filter media



Activated carbon



### Smart Filter technology

The new Smart Filter technology works with the iQ Intelligent Operating System to give assured filter performance.

SFT incorporating proven RFID Technology. Each filter has a uniquely coded non-removable label allowing the iQ Operating System to establish authenticity and suitability.

#### The use of proprietary filters provides the assurance of:

- Protection against counterfeiting
- Legislative compliance
- Reduced operating costs
- Superior filter performance:
- Protection of production operatives
- Protection of the process equipment
- Protection of the final product
- Reduced downtime and waste
- Improved productivity, less rework
- Reduced run costs and maintenance



# iQ Operating System Patented Technology

**The new and revolutionary iQ Operating System** performs at two distinct levels. Where operators benefit from the ease of operation and clarity of real time information, the system also provides a cache of analytical data enabling users to download performance and operating parameters for evaluation purposes.

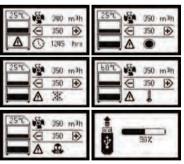
The introduction of the new iQ operating system addressed a number of key concerns. In most industrial applications and especially where production is 24/7 the term "downtime" is the dreaded enemy of the production manager and his team. Any viable solution which helps maintain and maybe even enhance productivity through reduced maintenance would be welcomed news to all.

The iQ operating system incorporates a method for monitoring the status of both the pre filter and combined (main) filter. Pre blockage warnings provide operators with ample time to prepare for a change and uniquely when a filter change is needed the system is able to indicate exactly which filter requires change, thus significantly reducing the uncertainly and time taken to undertake a filter replacement.

The iQ also provides the facility to download operation data which can either be locally or remotely (via the internet) evaluated. In many cases the number of costly and time consuming service call outs may be reduced or even eliminated all together.

#### **FEATURE HIGHLIGHTS:**

- Black on White LCD display
- Clear and simple real time features
- Independent filter condition monitoring
- · Real time airflow reading and set point
- Run hours displayed / Real time log
- Temperature monitoring
- Extraction running indicator
- Hose blocked warnings
- System interfacing
- Cool-Clean air option
- Remote diagnostics via USB connection
- "Black Box" event log
- Remote configuration
- Performance evaluation and presentation graphs





#### The iQ Intelligent Operating System



#### AD Oracle iQ



#### http://www.bofa.co.uk/iqOperationSystem.asp



Take a look at our new animation, which explains exactly why the BOFA iQ Operating System provides unrivalled control and data management for your fume extraction unit.

#### CLEAR AND PRECISE INFORMATION

The iQ utilises internationally recognisable symbols, making it easy to use, anywhere in the world.

DISPLAY SCREEN - The Black on White high contrast LCD screen displays a series of visual real-time performance and operational values in a clear and simple format.

AIRFLOW READING / SET POINT - Enables the installer to set the air flow rate to a known target value. The iQ will then automatically increase or decrease the fan speed to maintain this target airflow throughout the life of the filters.

The display value can be adjusted by the end user and viewed in either M³/h or CFM.

RUN HOURS - A visual counter displays the actual run hours of the motor ensuring meaningful data analysis can be undertaken.

EXTRACTION RUNNING - The fan icon will rotate when the motor is running, indicating that the unit is operating correctly.

TEMPERATURE MONITORING - The visual display indicates the temperature within the motor housing. The display value can be adjusted by the end user and viewed in either degrees Centigrade or Fahrenheit values.

#### INDEPENDENT FILTER CONDITION MONITORING

The iQ uniquely incorporates multi-sensing technology to evaluate filter performance and status.

PRE-FILTER CONDITION MONITORING - A representative status 'box' icon of the pre filter is displayed. The icon fills in parallel with the filter becoming blocked, giving the operator a real time indication on the status of the pre filter.

COMBINED (MAIN) FILTER CONDITION MONITORING - A representative status 'box' icon of the main filter is displayed. The icon fills in parallel with the filter becoming blocked, giving the operator a real time indication on the status of the main filter.

#### WARNINGS & ALARM CONDITIONS

The iQ provides a series of visual, audible and electrical outputs to ensure that all events are clearly communicated and that timely and appropriate intervention can be undertaken to maximise production uptime.

FILTER STATUS INDICATOR (PRE WARNING) - The 75% warning indicates that the filter is partially blocked and will shortly need to be replaced.

An audible warning will sound and the representative filter status 'box' on the display will confirm which filter is affected. A signal output can be sent to the host.

FILTER STATUS INDICATOR (WARNING) - The 100% warning indicates that the filter is blocked and needs to be replaced.

An audible warning will sound and the representative filter status 'box' on the display will confirm which filter is affected. A signal output can be sent to the host.

HOSE PARTIAL BLOCKED (WARNING) - The hose partially blocked icon appears when a partial blockage occurs within the installation pipe work.

A signal output can be sent to the host machine.

HOSE BLOCKED WARNING - The hose blocked icon appears when a blockage occurs within the installation pipe work.

A signal output can be sent to the host machine.

FILTER FIRE CONTAINMENT - In the extremely rare event that a filter fire should occur the unit will automatically cut off the airflow to suppress and contain the fire.

#### REMOTE DIAGNOSTICS VIA USB CONNECTION

The run hours based event log provides easy access to a series of key performance metrics, enabling simple performance analysis and fast identification of likely fault and corrective action to minimise down time.

"BLACK BOX" EVENT LOG - In the event of a catastrophic failure the activity log and set up parameters can be retrieved via the USB connection. Data can then be used to support a reinstall and failure investigation.

REMOTE CONFIGURATION - Factory set values can be adjusted to end user specifications.

PERFORMANCE EVALUATION - Operating data can be downloaded via the USB connection to support evaluation and reporting. The data is automatically imported into a spreadsheet from which graphs can be created.

#### OPTIONS

A number of factory configured options are available.

DOOR OPEN ALARM (OPTIONAL) - If the extractor door is not closed correctly the door open icon will be displayed and an audible alarm will sound. A signal output can be sent to the host machine.

COOL-CLEAN AIR (OPTIONAL) - Add on integrated fan system providing filtered and cooled air.

SYSTEM INTERFACING (OPTIONAL) - The unit can be configured to interface with the host machine or master control system enabling remote commands such as Stop, Start, and Over-run to be activated.





















The introduction of low cost laser systems has led to the development of an entry level fume extraction solution in order to maintain safe operator working conditions and product quality.

The AD Access combines economic ownership with performance to match the small laser user. A three stage filter condition indicator is included as a standard feature, together with three stage filtration: pre filter, HEPA and chemical section.

#### STANDARD FEATURES:

- Filter condition indicator
- DeepPleat pre filter
- Advanced Carbon Filter technology
- Long life, low cost replacement filters
- Low noise levels
- Small footprint

#### **OPTIONAL FEATURES:**

- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal





For light duty, laser marking, coding and engraving industries.



PART NUMBERS						
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Hose Kit
AD Access	230V	L1842A	A2001	A2002	A2003	A1020007
Stainless Steel	Stainless Steel 115V L1841A					
AD Access	230V	L1852A				
Powder Coated	115V	L1851A				

REPLACEMENT FILTERS			
Model	DeepPleat Pre Filter	Combined HEPA / Gas Filter	
AD Access	A1030153	A1030154	

TECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	512 x 320 x 310mm	20.1 x 12.6 x 12.2"
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel
Airflow / Pressure	180m³/hr / 30mbar	106cfm / 30mbar
Electrical Data	230v 1ph 50/60Hz Full load current: 0.9 amps / 135 watts	115v 50/60Hz Full load current: 1.2 amps / 135 watts
Noise Level	< 56dB*	< 56dB*
Weight	21kg	46.3lbs
Approvals	CE	UL

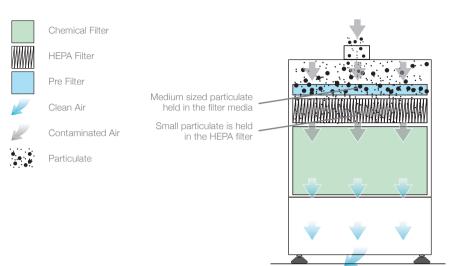
<sup>\*</sup> At typical operating speed.

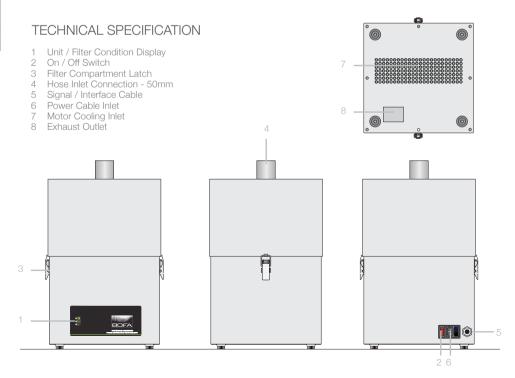
DEEPPLEAT PRE FILTER SPECIFICATIONS	
Surface Media Area	2.74m <sup>2</sup> approx
Filter Media	Glass Fibre
Filter Media Construction	50mm Maxi Fold Construction with Webbing Spacers
Filter Efficiency	F8 (92% @ 0.8 microns)

	COMBINED FILTER SPECIFICATIONS		
	HEPA Filter Media	Glass Fibre	
	HEPA Media Construction	Maxi Fold Construction with Webbing Spacers	
	Filter Efficiency	99.997% @ 0.3 microns	
Treated Activated Carbon		7 Kgs approx	
	Filter Housing	Zintec Mild Steel	











BOFA's AD 250 fume extraction and filtration system has been designed to provide a cost effective solution for light duty applications. This compact and extremely quiet system is ideal for use in schools, sign making workshops, small scale industrial environments and light laser coding applications.

#### STANDARD FEATURES:

- Blower with high airflow
- Low cost replacement filters
- Filter condition indicator
- Low noise levels
- DeepPleat pre filter
- Advanced Carbon Filter technology

#### **OPTIONAL FEATURES:**

- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal













PART NUMBERS						
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Hose Kit* - 50mm
AD 250	230V	L0452A	A2001	A2002	A2003	A1020007
Stainless Steel	115V	L0451A				
AD 250	250 230V L0442A					
Powder Coated	115V	L0441A				

REPLACEMENT FILTERS			
Model	DeepPleat Pre Filter	Combined HEPA / Gas Filter	
AD 250	A1030056	A1030055	

TECHNICAL DATA				
	115V			
Dimensions (HxWxD)	570 x 380 x 380 mm	22.4 x 14.9 x 14.9"		
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel		
Airflow / Pressure	180m³/hr / 30mbar	106cfm / 30mbar		
Electrical Data	230v 1ph 50/60Hz Full load current: 0.9 amps / 135 watts	115v 60/50Hz Full load current: 1.2 amps / 135 watts		
Noise Level	< 55dBA*	< 55dBA*		
Weight 40kg		88lbs		
Approvals	CE	UL		

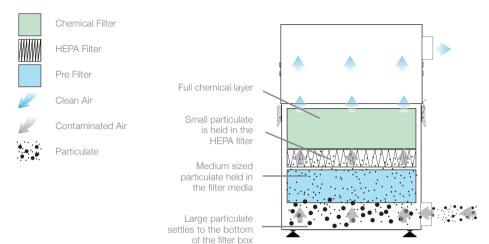
<sup>\*</sup> At typical operating speed

DEEPPLEAT PRE FILTER SPECIFICATIONS		
Surface Media Area 6m² approx		
Filter Media	Glass Fibre	
Filter Media Construction	100mm Maxi Fold construction with Webbing Spacers	
Filter Housing	Cardboard	
Filter Efficiency	F8 (95% @ 0.9 microns)	

COMBINED FILTER SPECIFICATIONS	
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Gasket	Neoprene with Adhesive Backing
Filter Efficiency	99.997% @ 0.3 microns
Treated Activated Carbon	8.5kgs
Filter Housing	Zintec Mild Steel

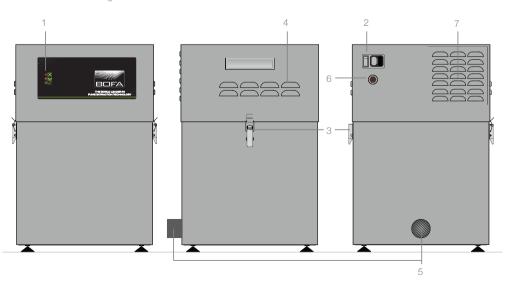






- 1 Unit/Filter Condition Display
- 2 On/Off Switch Power Inlet
- 3 Filter Compartment Latch
- 4 Motor Cooling In & Out

- 5 Hose Inlet Connection 50mm
- 6 Signal / Interface Cable
- 7 Exhaust Outlet





BOFA's AD 350 fume extraction and filtration system has been designed to provide a cost effective solution for light duty applications. This compact and extremely quiet system is ideal for use in schools, sign making workshops, small scale industrial environments and light laser coding applications.

#### STANDARD FEATURES:

- Blower with high airflow and pressure
- Low cost replacement filters
- Filter condition indicator
- Low noise levels
- Digital flow control system
- DeepPleat pre filter
- Advanced Carbon Filter technology

#### **OPTIONAL FEATURES:**

- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal

For light duty on laser marking, coding and engraving.











PART NUMBERS					
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring
AD 350 Powder Coated	90V - 257V	L0542A	A2001	A2002	A2003

REPLACEMENT FILTERS				
Model	DeepPleat Pre Filter	Combined HEPA / Gas Filter		
AD 350	A1030056	A1030055		

TECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	590 x 375 x 375 mm	23.2 x 14.8 x 14.8"
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel
Airflow / Pressure	380m³/hr / 96mbar	223cfm / 96mbar
Electrical Data	115-230v 1ph 50/60Hz Full load current: 12.5	amps / 1.1kw
Noise Level	< 60dBA*	< 60dBA*
Weight	40kg	88lbs
Approvals CE		CE

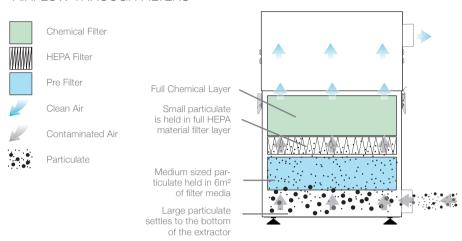
<sup>\*</sup> At typical operating speed.

DEEPPLEAT PRE FILTER SPECIFICATIONS	
Surface Media Area 6m² approx	
Filter Media Glass Fibre  Filter Media Construction 100mm DeepPleat construction with Webbir Spacers	

COMBINED FILTER	SPECIFICATIONS
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Filter Efficiency	99.997% @ 0.3 microns
Treated Activated Carbon	9kgs
Filter Housing	Zintec Mild Steel

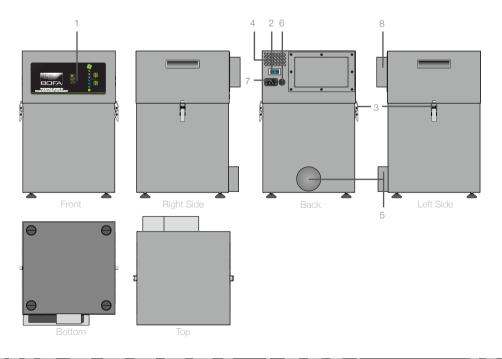






- 1 Unit/Filter Condition Display
- 2 On/Off Switch
- 3 Filter Compartment Latch
- 4 Motor Cooling In and Out

- 5 Hose Inlet Connection 100mm
- 6 Signal / Interface Cable
- 7 Power Cable Inlet
- 8 Exhaust Outlet





The AD Nano fume extraction and filtration system has been designed to provide cost effective solutions for light to medium duty applications. These compact systems are ideal for small scale industrial environments and light laser coding applications, whilst the Reverse Flow filter technology enhances filter performance and ensures longer filter life.

#### STANDARD FEATURES:

- Reverse flow
- 'Easi-Seal' filter location
- Long life, low cost replacement filters
- DeepPleat DUO pre filter
- Advanced Carbon Filter technology
- Small footprint
- Low noise level

#### **OPTIONAL FEATURES:**

- VOC gas sensors (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal





The compact system designed for small scale industrial sites and light laser coding applications.









Featuring Reverse Flow Air Filter technology

PART NUMBERS							
	Model	Voltage	Part No.		Filter change / System failure signal	VOC Monitoring	Hose Kit
	AD Nano	230V	L2952A	A2001	A2002	A2003	A1020007
	Powder Coated	115V	L2951A				

REPLACEMENT FILTERS		
Model	DeepPleat DUO Pre Filter	Combined filter
AD Nano	A1030190	A1030191

TECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	743 x 360 x 400mm	29.2 x 14.2 x 15.7"
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel
Airflow / Pressure	170m <sup>3</sup> /hr / 30mbar	100cfm / 30mbar
Electrical Data	230v 50/60Hz Full load current: 0.9 amps / 135w	115v 50/60Hz Full load current: 1.2 amps / 135w
Noise Level	< 56dBA*	< 56dBA*
Weight	40kg	88Lbs
Approvals CE CE		CE

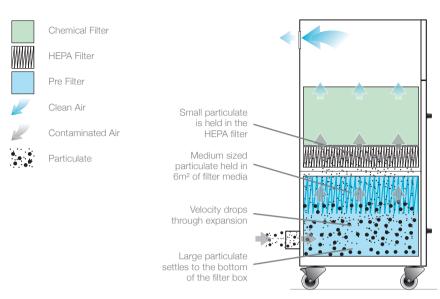
<sup>\*</sup> At typical operating speed.

DEEPPLEAT DUO PRE FILTER SPECIFICATIONS		
Surface Media Area	6m <sup>2</sup> approx	
Filter Media	Glass Fibre	
Filter Media Construction	150mm Maxi Fold construction with Webbing Spacers	
Housing	Zintec mild steel	
Filter Efficiency	F8 (92% @ 0.8 microns)	

COMBINED FILTER	OMBINED FILTER SPECIFICATIONS	
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	50mm Maxi Fold construction with Webbing Spacers	
Filter Efficiency	99.997% @ 0.3 microns	
Treated Activated Carbon	6.75kgs	
Filter Housing	Zintec Mild Steel	

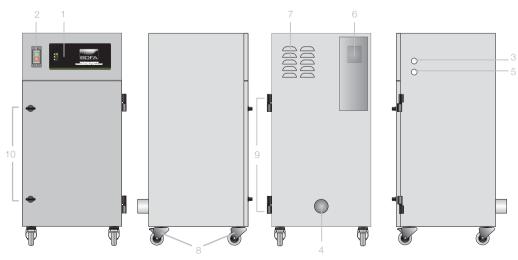






- 1 Filter Condition Display
- 2 On / Off Switch
- 3 Signal / Interface Cable
- 4 Hose Inlet Connection 50mm
- 5 Power Cable Inlet

- 6 Exhaust Outlet
- 7 Motor Cooling Inlet / Outlet
- 8 Castors
- 9 Door Hinge
- 10 Door Latch





The AD Nano+ fume extraction and filtration system has been designed as a cost effective solution for light to medium duty applications and is the ideal choice for installations where floor space is limited.

Suitable for light laser coding applications, the AD Nano+ incorporates many of the features found on our larger systems. The use of an Auto-Voltage Sensing Turbine means that the unit can be used anywhere in the world. Reverse Flow, Patented DeepPleat DUO and ACF filter technologies ensure optimised performance and filter life.

#### STANDARD FEATURES:

- Auto sensing voltage (90-257v) for global use
- Automatic flow control
- Reverse flow
- 'Easi-Seal' filter location
- · Long life filters with low replacement cost
- DeepPleat DUO pre filter
- Advanced Carbon Filter technology
- Small footprint
- Low noise level

#### **OPTIONAL FEATURES:**

- VOC gas sensors (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal





The compact system designed for small scale industrial sites and light laser coding applications.









Featuring Reverse Flow Air Filter technology

UNIT PART NUME	UNIT PART NUMBERS				
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring
AD Nano+ Powder Coated	90 - 257V	L3042A	A2001	A2002	A2003
AD Nano+ Stainless Steel		L3052A			

	REPLACEMENT FILTERS		
	Model	Pre Filter	Combined filter
	AD Nano+	A1030190	A1030191

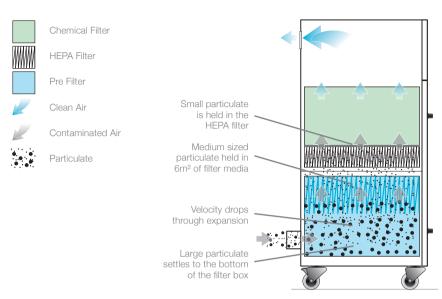
TECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	743 x 360 x 360mm	29.2 x 14.2 x 14.2"
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel
Airflow / Pressure	250m³/hr / 96mbar	148cfm / 96mbar
Electrical Data	90 - 257v 1ph 50/60Hz Full load current: 12.5	amps / 1.1kw
Noise Level	< 60dBA*	< 60dBA*
Weight	45kg	99Lbs
Approvals	CE	CE

<sup>\*</sup> At typical operating speed.

PRE FILTER SPECI	FICATIONS
Surface Media Area	6m <sup>2</sup> approx
Filter Media	Glass Fibre
Filter Media Construction	150mm Maxi Fold construction with Webbing Spacers
Filter Housing	Zintec mild steel
Filter Efficiency	F8 (95% @ 0.9 microns)

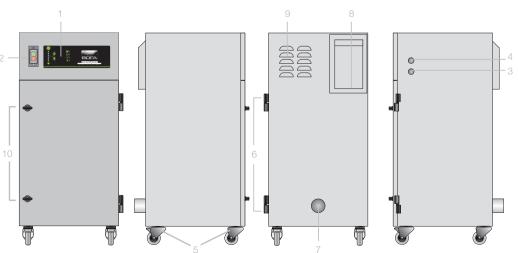
COMBINED FILTER SPECIFICATIONS		
Surface Media Area	2.18m <sup>2</sup> approx	
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	50mm Maxi Fold construction with Webbing Spacers	
Filter Efficiency	99.997% @ 0.3 microns	
Treated Activated Carbon	6.75kgs	
Filter Housing	Zintec Mild Steel	





- Unit / Filter Condition Display -Automatic Flow Control
- 2 On / Off Switch
- 3 Signal / Interface Cable
- 4 Power Cable
- 5 Castors

- 6 Door Hinge
- 7 Hose Inlet Connection 50mm
- 8 Exhaust Outlet
- 9 Motor Cooling Inlet
- 10 Door Latch





Introducing BOFA's most technically advanced laser fume extractor. The AD Oracle SA iQ packs a powerful range of unique features into one compact unit.

The revolutionary Auto-Voltage Sensing Turbine automatically self adjusts to run on any voltage worldwide, whilst the Reverse Flow filter technology enhances filter performance and ensures longer filter life.

Automatic Flow Control allows the user to preset correct flow rates, giving lower noise levels and further protection of both the combined filter and pre filter.

#### STANDARD FEATURES:

- Auto sensing voltage (90-257v) for global use
- Automatic flow control
- Advanced Carbon Filter technology
- Low cost replacement filters
- Reverse flow
- 'Easi-Seal' filter location
- Castors for portability
- Small footprint
- Low noise levels

#### **OPTIONAL FEATURES:**

- Smart Filter Technology
- VOC sensing (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal
- Filter media's

The complete, global solution for high performance laser fume extraction.











PART NUMBERS					
Model	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Hose Kit
AD Oracle SA iQ Stainless Steel	L2374	A2001	A2002	A2003	A1020008
AD Oracle SA iQ Powder Coated	L2364	A2001	A2002	A2003	A1020008

REPLACEMENT FILTERS				
Model	Pre Filter	Combined filter		
AD Oracle SA iQ	A1030093	A1030155		

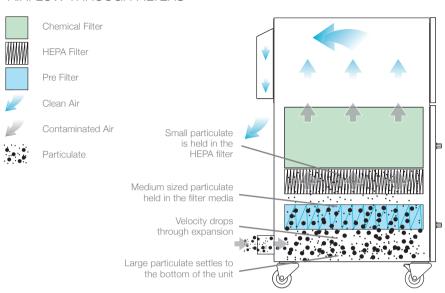
TECHNICAL DATA				
	230V	115V		
Dimensions (HxWxD)	720 x 430 x 430 mm	28.3 x 17 x 17"		
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel		
Airflow / Pressure	380m³/hr / 96mbar	223cfm / 96mbar		
Electrical Data	90 - 257v 1ph 50/60Hz Full load cu	90 - 257v 1ph 50/60Hz Full load current: 12.5 amps / 1.1kw		
Noise Level	< 60dBA*	< 60dBA*		
Weight	54kg	119lbs		
Approvals	CE	CE		

PRE FILTER SPECIFICATIONS		
Surface Media Area	0.6m <sup>2</sup> approx	
Filter Media Glass Fibre		
Filter Media Construction Folded Pleat		
Filter Housing Cardboard		
Filter Efficiency F7 (96% @ 2 microns)		

COMBINED FILTER SPECIFICATIONS		
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers	
Filter Efficiency	99.997% @ 0.3 microns	
Treated Activated Carbon	15kgs	
Filter Housing	Zintec Mild Steel	

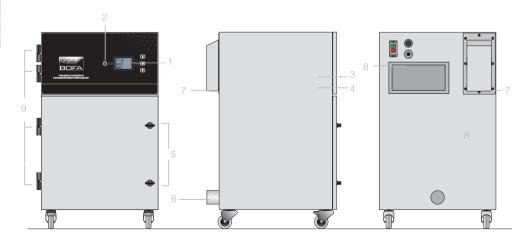






- 1 iQ Display 2 On / Off Switch
- 3 Power Cable
- 4 Signal / Interface Cable
- 5 Door Latch

- 6 Hose Inlet Connection 50mm
- 7 Exhaust Outlet
- 8 Motor Cooling Inlet
- 9 Door Hinge





Introducing BOFA's most technically advanced laser fume extractor. The AD Oracle iQ packs a powerful range of unique features into one compact unit.

The revolutionary Auto-Voltage Sensing Turbine automatically self adjusts to run on any voltage worldwide, whilst the Reverse Flow filter technology enhances filter performance and ensures longer filter life.

Automatic Flow Control allows the user to preset correct flow rates, giving lower noise levels and further protection of both the combined filter and the DeepPleat DUO pre filter, which has an impressive 12m<sup>2</sup> of surface area.

#### STANDARD FFATURES:

- iQ Operating System
- Auto sensing voltage (90-257v) for global use
- Automatic flow control
- DeepPleat DUO pre filter
- Advanced Carbon Filter technology
- HEPA and Gas combined filter
- Reverse flow
- 'Fasi-Seal' filter location
- Small footprint
- Low noise levels





laser fume extraction.





#### OPTIONAL FEATURES:

- Smart Filter Technology
- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal
- On-board compressor
- Filter media's



iQ Operating



Featuring DeepPleat DUO filter technology





Featuring Reverse Flow Air Filter technology

The complete, global solution for high performance



technology

PART NUMBERS					
Model	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Hose Kit
AD Oracle iQ Stainless Steel	L1974	A2001	A2002	A2003	A1020008 75-50mm
AD Oracle iQ Powder Coated	L1964	A2001	A2002	A2003	A1020008 75-50mm

REPLACEMENT FILTERS				
Model	DeepPleat DUO Pre Filter	Combined filter		
AD Oracle iQ	A1030156	A1030155		

TECHNICAL DATA				
	230V	115V		
Dimensions (HxWxD)	980 x 430 x 430 mm	38.5 x 17 x 17"		
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel		
Airflow / Pressure	380m³/hr / 96mbar	223cfm / 96mbar		
Electrical Data	90 - 257v 1ph 50/60Hz Full load curr	90 - 257v 1ph 50/60Hz Full load current: 12.5 amps / 1.1kw		
Noise Level	< 60dBA*	< 60dBA*		
Weight	65kg	143lbs		
Approvals	CE	UL		

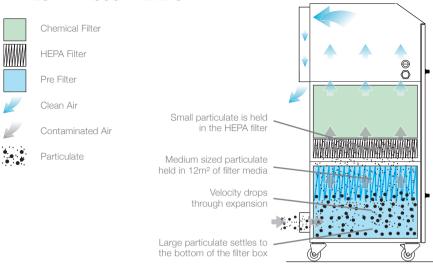
<sup>\*</sup> At typical operating speed.

DEEPPLEAT DUO PRE FILTER SPECIFICATIONS		
Surface Media Area	12m <sup>2</sup> approx	
Filter Media Glass Fibre		
Filter Media Construction	Maxi Pleat with webbing spacer	
Filter Housing	Zintec mild steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

COMBINED FILTER SPECIFICATIONS		
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers	
Filter Efficiency	99.997% @ 0.3 microns	
Treated Activated Carbon	15kgs	
Filter Housing	Zintec Mild Steel	







- 1 iQ Display 2 On / Off Switch 3 Power Cable
- 4 Signal / Interface Cable
- 5 Door Hinge

- 6 Hose Inlet Connection 75mm7 Exhaust Outlet8 Motor Cooling Inlet

- 9 Door Latch





The AD PVC iQ extraction system has been designed to effectively deal with the corrosive nature of the fumes generated when lasering PVC materials.

The latest design specification now offers many of the features associated with our "Best in class" AD Oracle iQ model as standard but in addition all internally exposed surfaces have been coated to resist the corrosive nature of the fume and each unit is fitted with HCL and VOC sensors. which continually monitor the exhaust air of the unit giving added safety assurance.

#### STANDARD FEATURES:

- iQ Operating System
- Auto sensing voltage (90-257v)
- Reverse Flow filter technology
- Automatic flow control
- Turbine with high airflow and pressure
- Acid Resistant coatings
- HCL and VOC gas sensors
- 'Easi-Seal' filter location mechanism
- ACF technology
- Low noise levels

## For the laser marking, coding and engraving of PVC.

The iQ Operating System performs at two distinct levels. Whilst operators benefit from the ease of operation and clarity of real time information, the system also provides a cache of analytical data, enabling users to download performance and operating parameters for evaluation purposes. The iQ system takes performance and safety parameters to a new level and ensures that maintenance downtime and ownership costs are kept to a minimum.

#### **iQ FEATURES:**

- High contrast display
- Real time airflow reading
- Independent filter condition monitoring
- Filter status warnings
- 'Run safe' operation
- Remote diagnostics via USB









Remote stop / start interface

OPTIONAL FEATURES:

Filter change / System fail signal





Featuring Advanced Carbon Filter technology



PART NUMBERS					
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	
AD PVC iQ Stainless Steel	90-257V	L0952A	A2001	A2002	

REPLACEMENT FILTERS AND ACCESSORIES				
Model Pre Filter Chemical Pad Gas Filter Gas Filter HCL Sens				
AD PVC iQ	A1030081	A1030083	A1030082	A1070003

TECHNICAL DATA			
	230V	115V	
Dimensions (HxWxD)	1090 x 570 x 640mm	43 x 22.4 x 25"	
Cabinet Construction	Brushed stainless steel with epoxy coated internal contact parts		
Airflow / Pressure	300m³/hr (176cfm) / 96mbar 270m³/hr (160cfm) / 96mbar		
Electrical Data	90 - 257v 1ph 50/60Hz Full load current: 11 amps / 1.1kw		
Noise Level	< 60dBA*	< 60dBA*	
Weight	95kg	209lbs	

<sup>\*</sup> At typical operating speed.

PRE FILTER SPECIFICATIONS		
Surface Media Area	2m <sup>2</sup> approx	
Filter Media	Polyester	
Filter Media Construction 8 Pocket Bag Filter		
Filter Housing	Corrosion Resistant Coated Stainless Steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

GAS/HEPA FILTER SPECIFICATIONS		
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers	
Treated Activated Carbon	Blend of impregnated activated carbons (21kg)	
Filter Housing	Corrosion Resistant Coated Stainless Steel	
Filter Efficiency	99.997% @ 0.3 microns	

# AIRFLOW THROUGH FILTERS Chemical Filter HEPA Filter Pre Filter Chemical Filter Pad Small particulate is held in the HEPA filter Clean Air Contaminated Air Medium sized particulate held in the filter media Particulate Chemical filter pad

- 1 iQ Display
- 2 Standby Switch
- 3 Signal / Interface Cable
- 4 Power Cable
- 5 Castors
- 6 Door Hinge

- 7 Hose Inlet Connection 75mm
- 8 Exhaust Outlet 75mm
- 9 Motor Cooling Inlet
- 10 Door Latch
- 11 On / Off Switch
- 12 USB Socket









BOFA's AD 500 iQ high end laser 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 now been further enhanced with the inclusion of several new features including BOFA's new iQ Operating System, making the new AD 500 iQ one of the most advanced system available.

The iQ system takes performance and safety parameters to a new level and ensures that maintenance, downtime and ownership costs are kept to a minimum.

#### STANDARD FFATURES:

- iQ Operating System
- High airflow and pressure rates
- Reverse flow filter technology
- DeepPleat DUO pre filter
- Combined HEPA/Gas filter incorporating ACF technology
- Filters with long life and low replacement cost
- 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

#### OPTIONAL FEATURES:

- Smart Filter technology
- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal
- Interfacing with host laser
- On-board compressor
- Optional filter media's

Mid to high end laser fume extraction system for the laser marking, coding and engraving industries.









iQ Operating System



Featuring DeepPleat DUO filter technology



Featuring Advanced Carbon Filter technology



Featuring Reverse Flow Air Filter technology



Smart Filter technology

UNITS - PART NUMBERS						
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	On-board Compressor
AD 500 iQ	230V	L0672	A2001	A2002	A2003	A2007
Stainless Steel	115V	L0671				
AD 500 iQ	230V	L0662				
Powder Coated	115V	L0661				

REPLACEMENT FILTERS - PART NUMBERS			
Model	DeepPleat DUO Pre Filter Combined HEPA/Gas Filter		
AD 500 iQ	A1030222	A1030297	

TECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	1197 x 600 x 790mm	47.1 x 23.6 x 31.1"
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel
Airflow / Pressure	550m <sup>3</sup> /hr / 100mbar	324cfm / 100mbar
Electrical Data	230v 1ph 50/60Hz Full load current: 9.5 amps / 1.1kw	115v 60/50Hz Full load current: 14.8 amps / 1.1kw
Noise Level	< 60dBA*	< 60dBA*
Weight	135kgs	298lbs
Approvals	CE	CE

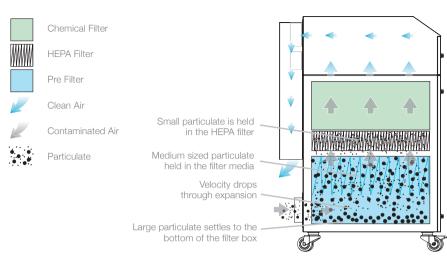
<sup>\*</sup> At typical operating speed.

DEEPPLEAT DUO PRE FILTER SPECIFICATIONS		
Surface Media Area	30m² approx	
Filter Media	Glass Fibre	
Filter Media Maxi Pleat Construction w Construction Webbing Spacers		
Filter Housing	Zintec mild steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

COMBINED HEPA/GAS FILTER SPECIFICATIONS		
Surface Media Area	7.5m <sup>2</sup> approx	
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers	
Filter Housing	Zintec Mild Steel	
Treated Activated Carbon	34kgs	
Filter Efficiency	99.997% @ 0.3 microns	

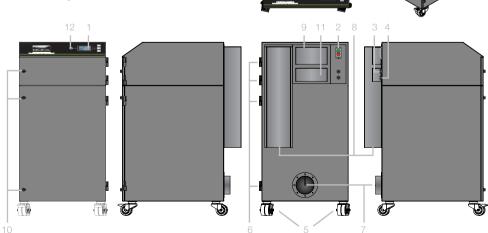








- 1 iQ Display
- 2 On / Off Switch
- 3 Power Cable
- 4 Signal / Interface Cable
- 5 Castors
- 6 Door Hinge
- 7 Hose Inlet Connection 125mm
- 8 Exhaust Outlet
- 9 Motor Cooling Inlet
- 10 Door Latch
- 11 Motor Cooling Outlet
- 12 Standby Button





BOFA's AD 1000 iQ high end laser 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 now been further enhanced with the inclusion of several new features including BOFA's new iQ Operating System, making the new AD 1000 iQ one of the most advanced system available.

The iQ system takes performance and safety parameters to a new level and ensures that maintenance, downtime and ownership costs are kept to a minimum.

#### STANDARD FFATURES:

- iQ Operating System
- High airflow and pressure rates
- Reverse flow filter technology
- DeepPleat DUO pre filter
- Combined HEPA/Gas filter incorporating ACF technology
- Filters with long life and low replacement cost
- Automatic flow control system
- Real time airflow reading
- Independent filter condition monitoring, display and warnings
- High contrast display
- 'Run safe' operation

iQ Operating

#### **OPTIONAL FEATURES:**

- Smart Filter technology
- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal
- Interfacing with host laser
- On-board compressor
- Optional filter media's

High end laser fume extraction system for the laser marking, coding and engraving industries.









Remote diagnostics via USB



Featuring DeepPleat DUO filter technology





Featuring Reverse Flow Air Filter technology



Smart Filter technology

UNITS - PART N	UMBERS					
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	On-board Compressor
AD 1000 iQ	230V	L0772	A2001	A2002	A2003	A2007
Stainless Steel	115V	L0771				
AD 1000 iQ	230V	L0762				
Powder Coated	115V	L0761				

REPLACEMENT FILTERS - PART NUMBERS			
Model	DeepPleat DUO Pre Filter Combined HEPA/Gas Filter		
AD 1000 iQ	A1030222	A1030297	

TECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	1197 x 600 x 790mm	47.1 x 23.6 x 31.1"
Cabinet Construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel
Airflow / Pressure	850m³/hr / 100mbar	500cfm / 100mbar
Electrical Data	230v 1ph 50/60Hz Full load current: 12.8 amps / 2.2kw	115v 60/50Hz Full load current: 19.5 amps / 2.2kw
Noise Level	< 61dBA*	< 61dBA*
Weight	140kgs	309lbs
Approvals	CE	CE

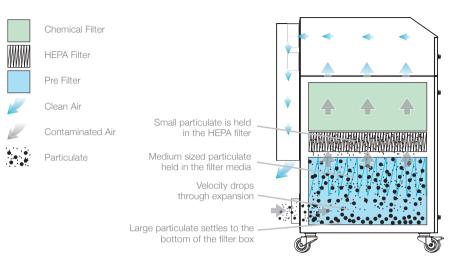
<sup>\*</sup> At typical operating speed.

DEEPPLEAT DUO PRE FILTER SPECIFICATIONS		
Surface Media Area	30m² approx	
Filter Media Glass Fibre		
Filter Media Maxi Pleat Construction wit Construction Webbing Spacers		
Filter Housing	Zintec mild steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

COMBINED HEPA/GAS FILTER SPECIFICATIONS	
Surface Media Area	7.5m <sup>2</sup> approx
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Filter Housing	Zintec Mild Steel
Treated Activated Carbon	34kgs
Filter Efficiency	99.997% @ 0.3 microns

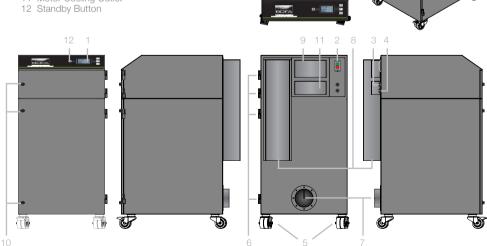








- 1 iQ Display
- 2 On / Off Switch
- 3 Power Cable
- 4 Signal / Interface Cable
- 5 Castors
- 6 Door Hinge
- 7 Hose Inlet Connection 125mm
- 8 Exhaust Outlet
- 9 Motor Cooling Inlet
- 10 Door Latch
- 11 Motor Cooling Outlet





BOFA's AD 1500 iQ high end laser 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 now been further enhanced with the inclusion of several new features including BOFA's new iQ Operating System, making the new AD 1500 iQ one of the most advanced system available.

The iQ system takes performance and safety parameters to a new level and ensures that maintenance, downtime and ownership costs are kept to a minimum.

#### STANDARD FEATURES:

- iQ Operating System
- High airflow and pressure rates
- Reverse flow filter technology
- DeepPleat DUO pre filter
- Combined HEPA/Gas filter incorporating ACF technology
- Filters with long life and low replacement cost
- 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

#### **OPTIONAL FEATURES:**

- Smart Filter technology
- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal
- Interfacing with host laser
- On-board compressor
- Optional filter media's

High end laser fume extraction system for the laser marking, coding and engraving industries.









iQ Operating System



Featuring DeepPleat DUO filter technology



Featuring Advanced Carbon Filter technology



Featuring Reverse Flow Air Filter technology



Smart Filter technology

UNITS - PART NUMBERS						
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	On-board Compressor
AD 1500 iQ Stainless Steel	230V	L0872	A2001	A2002	A2003	A2007
AD 1500 iQ Powder Coated	230V	L0862				

	REPLACEMENT FILTERS - PART NUMBERS		
Model DeepPleat DUO Pre Filter Combined HEPA/Gas Filter		Combined HEPA/Gas Filter	
	AD 1500 iQ	A1030222	A1030297

TECHNICAL DATA	
	230V
Dimensions (HxWxD)	1197 x 600 x 790mm (47.1 x 23.6 x 31.1")
Cabinet Construction	Brushed stainless steel / Powder coated mild steel
Airflow / Pressure	1350m³/hr (795cfm) / 100mbar
Electrical Data	230v 1ph 50/60Hz Full load current: 24 amps / 3.3kw
Noise Level	< 63dBA*
Weight	145kgs (320lbs)
Approvals	CE

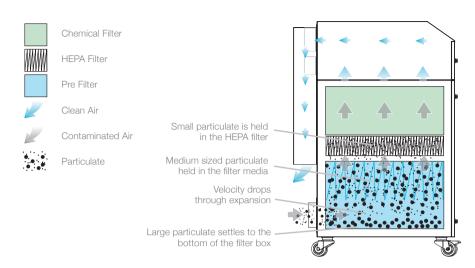
<sup>\*</sup> At typical operating speed.

DEEPPLEAT DUO PRE FILTER SPECIFICATIONS		
Surface Media Area	30m² approx	
Filter Media	Glass Fibre	
Filter Media Construction	Maxi Pleat Construction with Webbing Spacers	
Filter Housing	Zintec mild steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

COMBINED HEPA/GAS FILTER SPECIFICATIONS	
Surface Media Area	7.5m <sup>2</sup> approx
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Filter Housing	Zintec Mild Steel
Treated Activated Carbon	34kgs
Filter Efficiency	99.997% @ 0.3 microns

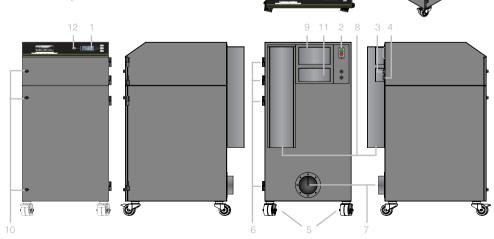








- 1 iQ Display
- 2 On / Off Switch
- 3 Power Cable
- 4 Signal / Interface Cable
- 5 Castors
- 6 Door Hinge
- 7 Hose Inlet Connection 125mm
- 8 Exhaust Outlet
- 9 Motor Cooling Inlet
- 10 Door Latch
- 11 Motor Cooling Outlet
- 12 Standby Button





BOFA's AD2000 iQ laser fume extraction unit combines large filter capacity with high airflows. This combination makes the AD2000 iQ ideal for large laser engravers, laser cutters as well as multiple laser coding installations. This system has now been further enhanced with the introduction of BOFA's new iQ Operating System, combining a range of unique features into one intelligent unit.

The easily accessible twin DeepPleat DUO and ACF filters are accommodated by the dual door system, which allows for maximum space and ease when changing filters. The double DeepPleat DUO filters have been made a standard feature, enabling this unit to be very efficient and cheap on filter replacement.

Unit interfaces such as stop/start and system failure are available as options.

#### STANDARD FFATURES:

- iQ Operating System
- Blower with high airflow
- High contrast display
- Real time airflow reading
- Filter status warnings
- 'Run safe' operation
- 2 x DeepPleat DUO & ACF filters
- Remote diagnostics via USB
- Independent filter condition monitoring
- Long life filters with low replacement costs

#### **OPTIONAL FEATURES:**

- VOC gas sensor (Volatile Organic Compound)
- Interfacing with host laser
- Optional filter media's

High airflow laser fume extraction system for the laser marking, coding and engraving industries.







Featuring DeepPleat DUO filter technology







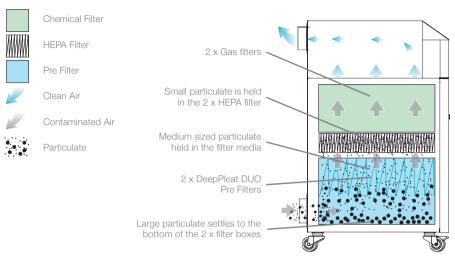
UNIT - PART NUMBERS				
Model	Part No.		Filter change / System failure signal	VOC Monitor
AD 2000 iQ Powder Coated	L5244	A2001	A2002	A2003

REPLACEMENT FILTERS - PART NUMBERS		
Model	Twin Pack DeepPleat DUO Pre Filters	Twin Pack Combined HEPA/Gas Filters
AD 2000 iQ	A1030335	A1030336

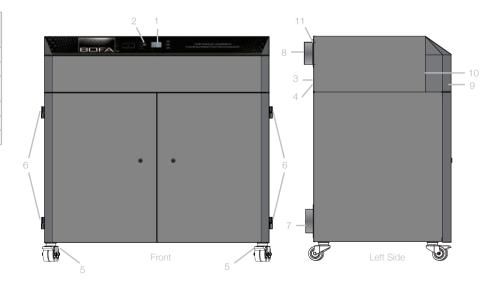
TECHNICAL DATA		
	200 - 440V	
Dimensions (HxWxD)	1320 x 1300 x 750mm (51 x 53 x 29.5")	
Cabinet Construction	Powder coated mild steel	
Airflow / Pressure	2000m³/hr / 96mBar (1177cfm / 396mBar)	
Electrical Data	(UK) 415V / 3Ph / 50Hz / 6.6kw / 8.2A / L1, L2, L3 14A - N 23A (USA) 230V / 3Ph / 60Hz / 6.6kw / 8.2A / L1, L2, L3 24A - N 40A	
Noise Level	< 65 dBA*	
Weight	300kgs (660lbs)	

DEEPPLEAT DUO PRE FILTER SPECIFICATIONS X 2		
Surface Media Area	30m² approx (60m²)	
Filter Media	Glass Fibre	
Filter Media Construction	Maxi Pleat Construction with Webbing Spacers	
Filter Housing	Zintec mild steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

COMBINED HEPA/GAS FILTER SPECIFICATIONS X 2	
Surface Media Area	7.5m <sup>2</sup> approx (15m <sup>2</sup> )
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Filter Housing	Zintec Mild Steel
Treated Activated Carbon	34kgs (68kgs)
Filter Efficiency	99.997% @ 0.3 microns



- 1 iQ Display
- 2 Standby button3 Signal / Interface Cable
- 4 Power Cable
- 5 Castors
- 6 Door Hinge
- 7 Hose Inlet Connection
- 8 Exhaust Outlet
- 9 Removable front panel
- 10 Door Latch
- 11 On / Off Switch









BOFA's AD4000 laser fume extraction unit combines large filter capacity with high airflows. This combination makes the AD4000 ideal for large laser engravers, laser cutters as well as multiple laser coding installations.

Easily accessible filters are accommodated by the uniquely styled gas spring assisted 'Gull Winged' doors, which allow for maximum space and ease when changing filters.

Unit interfaces such as stop/start and system failure are available as options.

#### STANDARD FEATURES:

- Blower with high airflow
- DeepPleat pre filter
- Advanced Carbon Filter technology
- Long life filters with low replacement costs
- Filter condition display
- · Built in silencing
- Unique gas spring assisted 'Gull Winged' door for safe filter replacement
- Automatic flow control system

#### **OPTIONAL FEATURES:**

- VOC gas sensor (Volatile Organic Compound)
- Remote stop / start interface
- Filter change / System fail signal





High airflow laser fume extraction system for the laser marking, coding and engraving industries.



1	PART NUMBERS				
1	Model	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring
	AD 4000 Powder Coated	L2643A	A2001	A2002	A2003

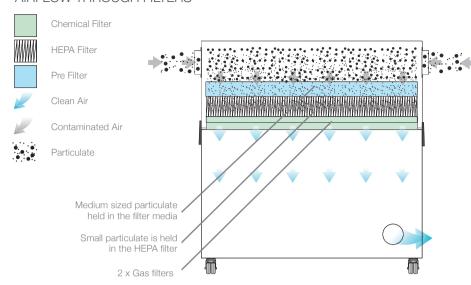
REPLACEMENT FILTERS			
Model	DeepPleat Pre Filter	HEPA Filter	Gas Filter
AD 4000	A1030187	A1030184	A1030188

TECHNICAL DATA			
	207V - 400V	238V - 505V	
Dimensions (HxWxD)	1475 x 1450 x 1500mm	58 x 57 x 59"	
Cabinet Construction	Powder coated mild steel	Powder coated mild steel	
Airflow / Pressure	4000m <sup>3</sup> /hr / 30mbar	2354cfm / 30mbar	
Electrical Data	207V - 253V A / 3Ph / 50Hz / 4kw / 13.5A 360V - 440V Y / 3Ph / 50Hz / 4kw / 7.8A	238V - 290V	
Noise Level	< 65dBA*	< 65dBA*	
Weight	460kgs	1014lbs	
Approvals	CE	CE	

<sup>\*</sup> At typical operating speed

DEEPPLEAT PRE FILTER SPECIFICATIONS		
Surface Media Area	36m² approx	
Filter Media	Glass Fibre	
Filter Media Construction	Folded Pleat	
Filter Housing	Zintec mild steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

GAS/HEPA FILTER SPECIFICATIONS	
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Filter Efficiency	99.997% @ 0.3 microns
Treated Activated Carbon	140kgs
Filter Housing	Zintec Mild Steel

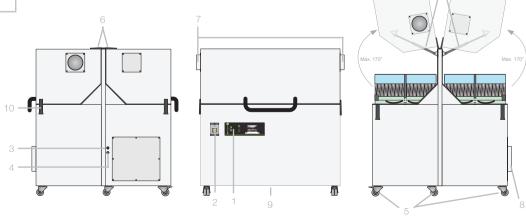


- Unit / Filter Condition Display -Automatic Flow Control
- 2 On / Off Switch
- 3 Signal / Interface Cable
- 4 Power Cable
- 5 Castors

- 6 Door Hinge
- 7 Hose Inlet Connection 150mm
- 8 Exhaust Outlet 250mm
- 9 Motor Cooling Inlet
- 10 Door Latch
- 11 Gas Springs









The Advantage Base 1 Oracle has been designed so that a number of manufacturer's laser engravers can sit on top of the extractor, effectively doubling it up as a work station.

All the Base units in the range have the option of an onboard compressor for a compact installation. BOFA's 'Easi-Seal' filter location makes filter change easy, quick and safe.

The revolutionary Auto-Voltage Sensing Turbine automatically self adjusts to run on any voltage worldwide, whilst the Reverse Flow filter technology enhances filter performance and ensures longer filter life.

Automatic Flow Control allows the user to preset correct flow rates, giving lower noise levels and further protection of both the combined filter and the DeepPleat DUO pre filter.

#### STANDARD FFATURES:

- Auto sensing voltage (90-257v) for global use
- Automatic flow control
- DeepPleat DUO pre filter
- Advanced Carbon Filter technology
- HEPA and Gas combined filter
- Reverse flow
- 'Easi-Seal' filter location
- Small footprint
- Low noise levels

#### **OPTIONAL FEATURES:**

- VOC gas sensors (Volatile Organic Compound)
- Onboard compressor
- Remote stop / start interface
- Filter change / System fail signal

The Laser Companion Advantage extraction system for the laser engraving industries.





Featuring DeepPleat DUO filter technology



Featuring Advanced Carbon Filter technology



Featuring Reverse Flow Air Filter technology



PART NUMBERS						
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Compressor
AD Base 1 Oracle Powder Coated	90 - 257V	L5144	A2001	A2002	A2003	A2007
AD Base 1 Oracle	230V	L5142				
with compressor Powder Coated	115V	L5141				

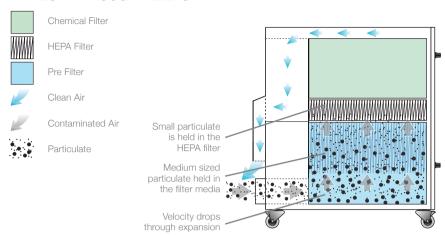
REPLACEMENT FILTERS		
Model	DeepPleat DUO Pre Filter	Combined filter
AD Base 1 Oracle	A1030156	A1030155

TECHNICAL DATA		
90-257V		
Dimensions (HxWxD)	795 x 735 x 740mm (31.3 x 28.9 x 29.1")	
Cabinet Construction	Powder coated mild steel	
Airflow / Pressure	380m³/hr / 96mbar (223cfm / 96mbar)	
Electrical Data	90 - 257v 1ph 50/60Hz Full load current: 12.5 amps / 1.1kw	
Noise Level	< 63dBA*	
Weight 86kg (189lbs)		

<sup>\*</sup> At typical operating speed.

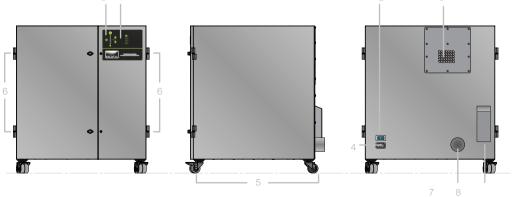
DEEPPLEAT DUO PI SPECIFICATIONS	RE FILTER
Surface Media Area	12m <sup>2</sup> approx
Filter Media	Glass Fibre
Filter Media Construction	Maxi Pleat with webbing spacer
Filter Housing	Zintec mild steel
Filter Efficiency	F8 (95% @ 0.9 microns)

COMBINED FILTER SPECIFICATIONS	
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Filter Housing	Zintec Mild Steel
Treated Activated Carbon	15kgs
Filter Efficiency	99.997% @ 0.3 microns



- Unit / Filter Condition Display -Automatic Flow Control
- 2 On / Off Switch
- 3 Standby button
- 4 Power Cable Inlet

- 5 Castors
- 6 Door Hinge
- 7 Hose Inlet Connection 75mm
- 8 Exhaust Outlet
- 9 Motor Cooling Inlet









The Advantage Base 2 Oracle has been designed so that a number of manufacturer's laser engravers can sit on top of the extractor, effectively doubling it up as a work station.

All the Base units in the range have the option of an onboard compressor for a compact installation. BOFA's Easi-Glide filter location mechanism makes filter change easy, quick and safe.

#### STANDARD FEATURES:

- Auto sensing voltage (90-257v) for global use
- Automatic flow control
- DeepPleat DUO pre filter
- Advanced Carbon Filter technology
- HEPA and Gas combined filter
- Reverse flow
- 'Easi-Seal' filter location
- Low noise levels

#### **OPTIONAL FEATURES:**

- VOC gas sensors (Volatile Organic Compound)
- Onboard compressor
- Remote stop / start interface
- Filter change / System fail signal

Featuring Advanced Carbon Filter technology

The Laser Companion Advantage extraction system for the laser engraving industries.







PART NUMBERS						
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Compressor
AD Base 2 Oracle Powder Coated	90 - 257v	L4944	A2001	A2002	A2003	A2007

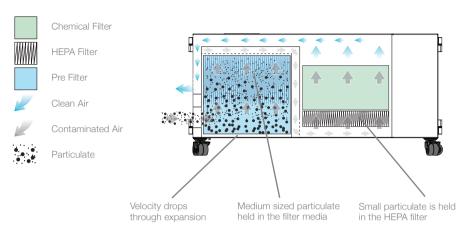
REPLACEMENT FILTERS			
	Model	DeepPleat DUO Pre Filter	Combined filter
	AD Base 2 Oracle	A1030156	A1030155

TECHNICAL DATA	
	90-257V
Dimensions (HxWxD)	550mm x 1060mm x 745mm (21.6 x 41.7 x 29.3")
Cabinet Construction	Powder coated mild steel
Airflow / Pressure	380m <sup>3</sup> /hr / 96mbar (223cfm / 96mbar)
Electrical Data	90 - 257v 1ph 50/60Hz Full load current: 12.5 amps / 1.1kw
Noise Level	< 63dBA*
Weight	97.6kg (215lbs)

<sup>\*</sup> At typical operating speed.

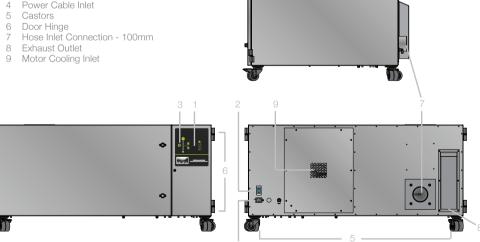
DEEPPLEAT DUO PRE FILTER SPECIFICATIONS		
Surface Media Area	12m <sup>2</sup> approx	
Filter Media	Glass Fibre	
Filter Media Construction	Maxi Pleat with webbing spacer	
Filter Housing	Zintec mild steel	
Filter Efficiency	F8 (95% @ 0.9 microns)	

COMBINED FILTER	SPECIFICATIONS
HEPA Filter Media	Glass Fibre
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers
Filter Housing	Zintec Mild Steel
Treated Activated Carbon	15kgs
Filter Efficiency	99.997% @ 0.3 microns



- Unit / Filter Condition Display Automatic Flow Control
- 2 On / Off Switch
- 3 Standby button
- 4 Power Cable Inlet
- 5 Castors

- 8 Exhaust Outlet
- 9 Motor Cooling Inlet









The Advantage Base 3 has been designed specifically for the Universal Versa laser engraver. The dimensions of the unit allow the Versa laser to fit perfectly onto the extractor, effectively doubling it up as a work station. The unit is also offered with an onboard air compressor to provide the laser with its air assist requirements and comes complete with extraction hose kit and compressor link up on compressor models.

#### STANDARD FEATURES:

- Filter condition indicator
- Low noise levels
- DeepPleat DUO pre filter
- Advanced Carbon Filter technology

#### **OPTIONAL FEATURES:**

- VOC gas sensors (Volatile Organic Compound)
- Onboard compressor
- Remote stop / start interface
- Filter change / System fail signal

A range of extraction systems designed for the laser engraving industry.













Featuring Reverse Flow Air Filter technology

PART NUMBERS						
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Compressor
AD Base 3	230V	L0342A	A2001	A2002	A2003	A2007
Powder Coated	115V	L0341A				

REPLACEMENT FILTERS				
	Model	DeepPleat DUO Pre Filter	Combined Filter	
	AD Base 3	A1030045	A1030050	

TECHNICAL DATA				
	230V	115V		
Dimensions (HxWxD)	770 x 680 x 470mm	30.3 x 26.8 x 18.5"		
Cabinet Construction	Powder coated mild steel	Powder coated mild steel		
Airflow / Pressure	180m³/hr / 30mbar	105cfm / 30mbar		
Electrical Data	230v 1ph 50/60Hz Full load current: 0.9 amps / 0.35kw	115v 60/50Hz Full load current: 1.2 amps / 0.35kw		
Noise Level	< 56dBA*	< 56dBA*		
Weight	65kg	143lbs		
Approvals	CE	CE		

<sup>\*</sup> At typical operating speed.

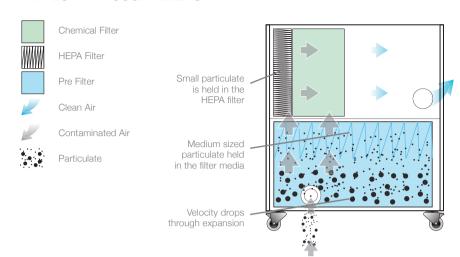
DEEPPLEAT DUO PRE FILTER SPECIFICATIONS			
Surface Media Area	12m <sup>2</sup>		
Filter Media	Glass Fibre		
Filter Media Construction	Maxi Pleat Construction with Webbing Spacers		
Filter Housing	Mild Steel		
Filter Efficiency	F8 (95% @ 0.9 microns)		

COMBINED FILTER SPECIFICATIONS		
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	Maxi Pleat	
Filter Efficiency	99.997% @ 0.3 microns	
Treated Activated Carbon	9kgs	
Filter Housing	Mild Steel	
Surface Media Area	2.75m <sup>2</sup>	

1	
Sura	SureCheck Quality
SUI'E CHECK QUALITY APPROVED	Assurance

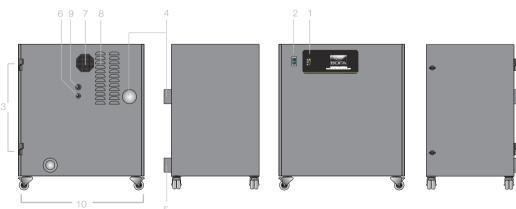
HOSE KIT	
75-75mm kit	
Part No. A1020017	
1.5m 75mm Flexible Hose	_
1.5III 7 GIIIII I I I I I I I I I I I I I I	
2 x Connection Cuffs	
75mm - 75mm Kit	

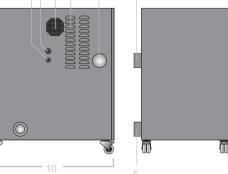




- 1 Unit / Filter Condition Display
- 2 On / Off Switch
- 3 Door Hinge
- 4 Extracted Air Outlet
- 5 Hose Inlet Connection 75mm

- 6 Power Cable
- 7 Motor Cooling Inlet
- 8 Motor Cooling Outlet 9 Compressed Air Outlet
- 10 Castors





# Ac Inline Filters 300/600

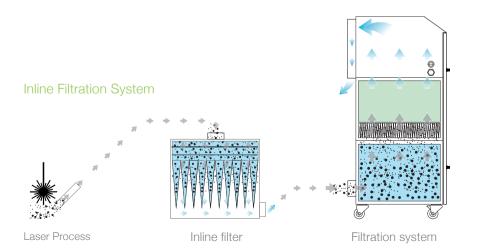
The BOFA inline pre filters have been designed specifically for applications that generate high amounts of dust or particulate.

The filter unit is positioned alongside the main BOFA fume filtration system to increase the overall filter capacity and extend the life of the main filters.

A range of application dependent filter types and configurations are available on request.

#### STANDARD FEATURES:

- Extended filter life
- Large filtration area
- Choice of F6 bag or F8 pleated filters



## For applications that generate high amounts of dust and particulate



Inline Filter 300

UNIT PART NUMBERS		REPLACEMENT FILTER PART NUMBERS	
Model	Part No.	F6 Pre Filter	F8 Pre Filter
ILF 300 with a 5 pocket F6 filter. Stainless Steel	A1030069	A1030132 (5 Pocket)	A1030290 (5 Pocket)
ILF 600 with a 10 pocket F6 filter. Stainless Steel	A1030073	A1030151 (10 Pocket)	A1030255 (10 Pocket)

TECHNICAL DATA - INLINE FILTER 300		
Dimensions (HxWxD)	753 x 630 x 310 mm	29.6 x 26.7 x 12.2"
Cabinet Construction	Stainless Steel	Stainless Steel
Weight	25kg	55lbs
Exhaust Outlet	125mm	4.9"

TECHNICAL DATA - INLINE FILTER 600		
Dimensions (HxWxD)	753 x 630 x 610 mm	29.6 x 26.7 x 24"
Cabinet Construction	Stainless Steel	Stainless Steel
Weight	40kg	88lbs
Exhaust Outlet	125mm	4.9"

<sup>\*</sup> At typical operating speed.

F6 PRE FILTER SPECIFICATIONS		
Filter Media Construction Bag Filter		
Filter Efficiency	F6 (82% @ 1 microns)	

F8 PRE FILTER SPECIFICATIONS			
Filter Media Construction		Pleated Filter	
Filter Efficiency		F8 (97% @ 1 microns)	







Pre Filter



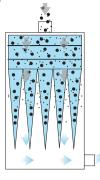
Clean Air

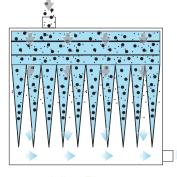


Contaminated Air



Particulate





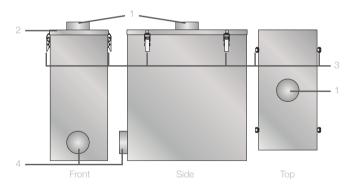
Inline Filter 300

Inline Filter 600

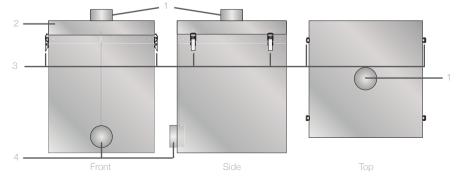
#### TECHNICAL SPECIFICATION

- 1 Inlet 125mm
- 2 Lid
- 3 Filter Compartment Hinges
- 4 Exhaust Outlet 125mm

#### ILF 300



#### ILF 600





Most people are aware of cyclone separators thanks to Sir James Dyson and his vacuum cleaners.

Cyclone separators are very efficient at capturing particles of 20micron and larger, i.e. visible to the naked eye.

Unfortunately laser marking generates a range of particle sizes from 0.1 micron upwards so standard cyclone separators are not suitable.

BOFA International commissioned Southampton University, using CFD (Computational Fluid Dynamics) techniques, to develop a cyclone to operate more efficiently at these lower particle sizes.

The cyclone separator is installed between the laser extraction point and the extraction unit. The airflow generated by the extraction unit powers the cyclone.

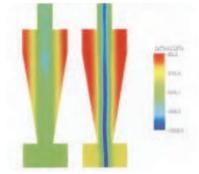
In-line cyclone for heavy particulate, to extend your filter life and extraction performance. Cyclonic chamber Shut off valve to allow for pot to be emptied Particulate collects at the bottom of the replaceable capture pot

AD Oracle iQ with the AD Cyclone

PART NUMBERS	
Model	Part No.
AD C5 Cyclone with shut off valve Stainless Steel	A1080112

TECHNICAL DATA		
Dimensions (HxWxD)	800 x 300 x 140mm	
Construction	Stainless steel	
Powered by	AD Oracle extraction unit	
Weight	7kg / 15.4lbs	







Clean Air



Contaminated Air



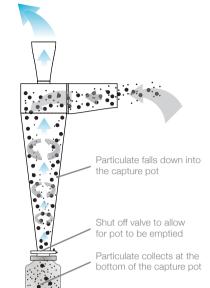
Particulate

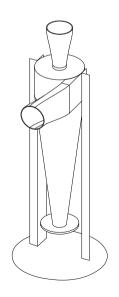


The centrifugal force separates the dust and particulate from the air

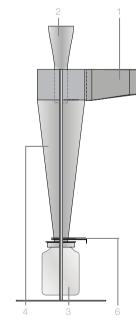
which drops down into

the capture pot below

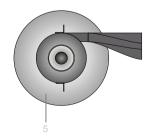








- 1 Air inlet connection 75mm
- 2 Air outlet connection 75mm
- 3 Capture pot
- 4 Cyclone chamber
- 5 Base
- 6 Optional shut off valve









The AD PulseJET has been designed to be used in conjunction with various BOFA extraction units up to a maximum air flow of 1200m³hr. The unit is used to extend filter life in applications where large amounts of particulate are generated that would otherwise quickly block the standard pre filters. A 6 litre compressed air receiver is pressurised to 5 bar either by an on board compressor option or factory air. The unit will then pulse a jet of air into a cylindrical filter clearing the filter surface of particulate. This particulate is then collected in a drop out tray in the base of the unit.

#### STANDARD FEATURES:

- Unique air pulse dispersal head, ensuring even impaction on the whole contaminated surface of the filter pleats.
- Easy filter removal.
- Easy tray removal.
- UL approved pressure vessel and safety related equipment.
- Simple operation.
- Unique collection tray seal to prevent particulate build up in lower filter chamber.
- Build in compressor should customer not have their own oil free air supply.
- Rugged construction.
- Built to exacting standards that meet all international regulations.

Inline filter for the Advantage range of extractors. Designed to extend filter life for processes where large amounts of particulate are generated.



PART NUMB	PART NUMBERS					
Model	Voltage	Part No.	24V Stop / Start	Filter change / System failure signal	VOC Monitoring	Compressor
AD PulseJET Stainless Steel	230V	L4152A	A2001	A2002	A2003	A2006
AD PulseJET Powder Coated	115V	L4151A	A2001	A2002	A2003	A2006

REPLACEMENT FILTERS		
	Model	Cylindrical Pre Filter
	AD PulseJET	A1030267

TECHNICAL DATA	ECHNICAL DATA		
	230V	115V	
Dimensions (HxWxD)	916 x 630 x 450 mm	36 x 24.8 x 21.2 "	
Cabinet Construction	Brushed stainless steel	Brushed stainless steel	
Max Airflow	1200m³/hr	706cfm	
Electrical Data	230v 1ph 50/60Hz Full load current: 1.2amps / 0.3kw	115v 60/50Hz Full load current: 2.1amps / 0.27kw	
Noise Level	< 55dBA*	< 55dBA*	
Weight	70kg	155lbs	
Approvals	CE	CE	

<sup>\*</sup> At typical operating speed.

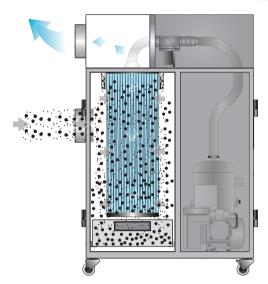
PRE FILTER SPECIFICATIONS	
Surface Media Area 3.2m <sup>2</sup>	
Filter Media	PTFE
Filter Media Construction	Cartridge
Filter Efficiency	H10 (99% @ 01 microns)





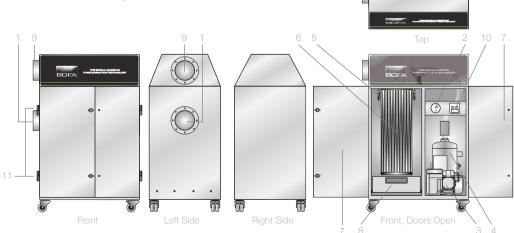


Contaminated Air Particulate



- 1 Air Inlet Connection 125mm

- Pressure Gauge
  Compressor
  Resiviour
  Filter Housing Cam Latch
  Cylindrical Filter
- 7 Door
- 8 Collection Tray 9 Exhaust Outlet Connection 125mm
- 10 Timer
- 11 Door Hinge





## Self Extinguishing Inline Pre Filter

In the very rare event that a burning ember or spark is drawn into the fume extraction unit it may be possible that the filters will ignite. Whilst any resultant fire would typically be retained within the fume extraction unit, the damage to the extractor would be significant and in extreme circumstances the risk may extend beyond just the extraction unit. For processes where such risks have been identified it may be prudent to introduce additional protection in the form of an in line firebox.

### Operation

The extinguisher activating coil will discharge the powder if the temperature on its surface exceeds 63° C.

The extinguisher unit can also be used to switch a 230vac (13A) supply, for example; the extraction unit.



Featuring DeepPleat DUO filter technology

## How the fire extinguisher works

The fire extinguisher discharge mechanism consists of a patented design consisting of special plastic hose that is coiled around the inside of the filter box lid, which dispenses the fire retardant in the event of a fire, protecting the fume extractor and other close equipement.

### The Coil

The purpose of this specially designed coil is to deploy the fire retardant at the point at which the flame melts the pipe.

Once the fire extinguisher has been discharged a pressure switch will disable contactor used to switch the 230vac (13A) supply.

### The temperature sensor

As a secondary measure the filter unit has a temperature sensor that is



Inline self extinguishing pre filter.



positioned in the air flow path.

This sensor can be customer set to measure the temperature of the air flow in case a fire develops back up line from the filter face itself.

For example if a fire were to develop

in the pipe work leading to the filter unit the temperature sensor would sense this and disable the contactor. This contactor could be used to disable the supply to the extraction unit (max 230V / 13A).

PART NUMBERS - UNIT			
	Model	Part No.	Hose Kit
	FireBOX 100 Stainless Steel	A1030296	Metal hose only, Please contact BOFA for more information.

PART NUMBERS - REPLACEMENT FILTER	
Model	DeepPleat DUO Pre Filter
FireBOX 100	A1030156

TECHNICAL DATA		
	CE	US
Dimensions (HxWxD)	640 x 440 x 540mm	25.2 x 17.3 x 21.3"
Cabinet Construction	Brushed stainless steel	Brushed stainless steel
Airflow / Pressure	Upto 500m³/hr / 100mbar	Upto 294cfm / 100mbar
Electrical Data	230v 1ph 50/60Hz Max load current: 13 amps	115v 50/60Hz Max load current: 13 amps
Weight	26kg	57lbs

DEEPPLEAT DUO PRE FILTER SPECIFICATIONS	
Surface Media Area	12m² approx
Filter Media	Glass Fibre
Filter Media Construction	Maxi Pleat with webbing spacer
Filter Housing	Zintec Mild Steel
Filter Efficiency	F8 (95% @ 0.9 microns)



Pre Filter



Clean Air



Contaminated Air



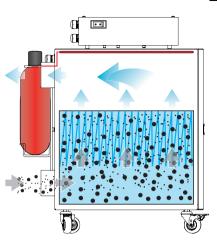
Particulate



Fire Extinguisher

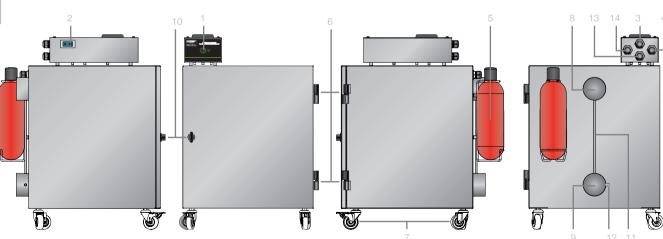


Coil pipe to dispense fire retardant



- Alarm Light
   On / Off Switch
   Power to Fume Extractor
- 4 Power Cable
- 5 Fire Extinguisher

- 6 Door Hinge
- 7 Castors
- 8 Outlet
- 9 Inlet 10 Door Latch
- 11 Vacuum sensing tube12 Temperature Sensor13 Temperature Sensor Inlet14 Fire Extinguisher Control Inlet









The AD GRS iQ is a fume and dust extraction system designed for the jewellery industry that recovers and collects precious metals. The metal particles are collected in an easy to remove tray. This unit has BOFA's new iQ Operating System, combining a range of unique features into one compact unit.

The iQ Operating System performs at two distinct levels. Whilst operators benefit from the ease of operation and clarity of real time information, the system also provides a cache of analytical data, enabling users to download performance and operating parameters for evaluation purposes.

The iQ system takes performance and safety parameters to a new level and ensures that maintenance downtime and ownership costs are kept to a minimum.

Automatic Flow Control allows the user to preset correct flow rates, for lower noise levels and further protection of both the combined and pre filters.

#### STANDARD FEATURES:

- Reverse Flow filter technology
- Automatic Flow Control
- Auto sensing voltage (90-257v) - For global use
- High contrast display
- Real time airflow reading
- Independent filter condition monitoring
- Filter status warnings
- 'Run safe' operation

- Remote diagnostics via USB
- Small footprint
- Removable collection tray
- High pressure turbine
- DeepPleat pre filter

#### **OPTIONAL FEATURES:**

- VOC gas sensor (Volatile Organic Compound)
- Interfacing

The complete solution for the extraction, filtration and recovery of precious metals.







Featuring DeepPleat filter technology



Featuring Advanced Carbon Filter technology



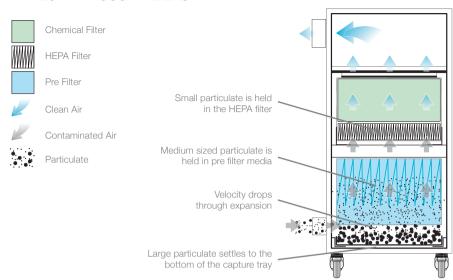
PART NUMBERS		
Model	Voltage	Part No.
AD GRS iQ Powder Coated	90-230V	L5044

	REPLACEMENT FILTERS		
	Model	DeepPleat Pre Filter	Combined filter
	AD GRS iQ	A1030306	A1030191

ECHNICAL DATA		
	230V	115V
Dimensions (HxWxD)	695 x 379 x 417 mm	27.4 x 14.9 x 16.4"
Cabinet Construction	Powder coated mild steel	Powder coated mild steel
Airflow / Pressure	250m³/hr / 96mbar	147cfm / 96mbar
Electrical Data	90 - 257v 1ph 50/60Hz Full load current: 10 amps / 1.1kw	
Noise Level	< 68dBA*	< 68dBA*
Weight	38kgs	84lbs
Approvals	CE	CE

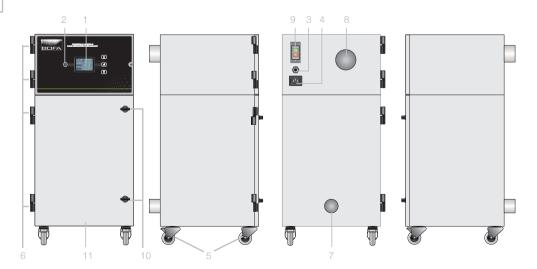
DEEPPLEAT PRE FII SPECIFICATIONS	LTER
Filter Media	Cellulose
Filter Media Construction	Pleated
Filter Housing	Cardboard
Filter Efficiency	F7

COMBINED FILTER SPECIFICATIONS		
HEPA Filter Media	Glass Fibre	
HEPA Media Construction	Maxi Pleat Construction with Webbing Spacers	
Filter Housing	Zintec Mild Steel	
Treated Activated Carbon	9kgs	
Filter Efficiency	99.997% @ 0.3 microns	



- 1 iQ Display2 Standby Button
- 3 Signal / Interface Cable
- 4 Power Cable Inlet
- 5 Castors
- 6 Door Hinge

- 7 Hose Inlet Connection 50mm
- 8 Exhaust Outlet
- 9 On / Off Switch
- 10 Door Latch
- 11 Internal Collection Tray





















THE WORLD LEADER IN FUME EXTRACTION TECHNOLOGY



BARCELONA INSTRUMENTS

Rosselló, 20 - 08029 BARCELONA Tel.: 93 280 29 89 - Fax: 93 280 41 13



THE WORLD LEADER IN **FUME EXTRACTION TECHNOLOGY** 





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