

Laser Marking Solutions

Videojet Xtract<sup>™</sup> Laser Fume Extraction



Fume extraction is an important element of any laser marking installation, helping to remove the smoke and particulate debris generated during the marking process

#### Fume extraction helps your operations by:

- Improving uptime by keeping your laser lens clean
- Helping maintain safe operator working conditions
- Helping ensure product code quality by keeping production lines clean

Videojet offers a range of fume extraction systems and filters to meet your production line needs.

# Throughout this brochure you will see icons next to products to show their key features



#### Award-winning Operating System

Our patent-protected and award-winning Operating System performs at two distinct levels: operators benefit from the ease of operation and clarity of real-time information, and the system provides a cache of analytical data, enabling users to download performance and operating parameters for evaluation purposes.



#### **HEPA** filter

Videojet uses mini pleat design HEPA (high efficiency particulate air) filters which are tested and certified to a minimum efficiency of 99.997% down to 0.3 microns and 95% as small as 0.1 micron. This feature enables even spacing for full filter coverage between each pleat and alleviates the possibility of airflow vibration or collapse.



#### **DeepPleat DUO pre-filter**

Our patent-protected DeepPleat DUO pre-filter technology is designed to maximize filter life. It incorporates a large capacity drop-out chamber within the filter. Above this chamber is an impressive surface area to deal with high volumes and variety of particulate, ensuring optimized performance and filter life, under normal operating conditions.



#### **DeepPleat pre-filter**

The DeepPleat pre-filter consists of a pleated filter of 100mm depth or greater, allowing for increased surface area within a smaller area. This means our filters last a long time and do not take up a large footprint.



#### **AFC: Automatic flow control**

AFC allows the operator to preset the optimum airflow rates for the specific application, subsequently maintaining the airflow. This can help generate lower noise levels and ensures further protection of HEPA filters.



#### **RFA:** Reverse flow air technology

The RFA technology feature causes a fall in velocity and air direction change. Larger particulate falls out of the airstream into the filter's drop-out chamber. With less particulate entering the filter media, the filter life is increased, enhancing filter capture performance and ensure longer life.



#### ACF: Advanced carbon filter

ACF has been engineered to capture and remove hazardous fumes that can be emitted by laser systems. Contaminated air must remain in contact with the carbon bed for a period of time sufficient to ensure that no contaminants or odors are emitted ('dwell time'). Our filters have been developed to capture contaminants and odors, eliminating the risk of bypass and / or tunnelling.



#### MVS: Multi voltage sensing unit

Our MVS units automatically sense local voltage and automatically operate between 90 - 257 V, for global use.



#### **PATENTED** technology

The intellectual property in our product range is unique, and protected under patent, copyright, design copyright, registered design and trademark laws.

### Product features comparison

The Videojet Xtract<sup>™</sup> range of fume extractors has been engineered to meet your application requirements, maintain a safe and odor-free environment, and keep your production area clean. Our goal is to help ensure that our lasers deliver high-quality marking on all your products.

	Videojet Xtract™ Lite	Videojet Xtract™ Pro	Videojet Xtract™ PVC	Videojet Xtract™ Max
Filter condition indicator	V	V	V	V
High airflow & pressure rates		V	V	V
Long life, low cost replacement filters	V	V	V	V
Easi-seal filter location		V	V	V
Auto sensing voltage (90 - 257 V) for global use		V	V	
Automatic flow control system		V	V	V
Award-winning Operating System		V	V	V
Lockable castors		V	V	V
Acid resistant coating			V	
HEPA filter technology	V	V	V	V
CE	V	V	V	V
UL	V	V	V	V
cUL	V	V	V	V
Brushless motor	V	V	V	V
Remote stop / start interface	V	V	V	V
Filter change / system fail signal	V	V	V	~

Overvie	ew			
	Videojet Xtract™ Lite	Videojet Xtract™ Pro	Videojet Xtract™ PVC	Videojet Xtract™ Max
Voltage	240 V or 115 V	100 - 240 V AC, 50 / 60 Hz (autorange)	100 - 240 V AC, 50 / 60 Hz (autorange)	240 V or 115 V
Replacement filters	DeepPleat pre-filter Combined HEPA / gas filter	DeepPleat DUO pre-filter Combined filter	Pre-filter Chemical pad filter Combined HEPA / gas filter HCL sensor	DeepPleat DUO pre-filter Combined HEPA / gas filter

#### Continuous mode

Dimensions (HxWxD)	20.1" (512mm) x 12.6" (320mm) x 12.2" (310mm)	38.5" (980mm) x 17" (430mm) x 17" (430mm)	43" (1090mm) x 22.4" (570mm) x 25" (640mm)	47.1" (1197mm) x 23.6" (600mm) x 31.1" (790mm)
Cabinet construction	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel / Powder coated mild steel	Brushed stainless steel with epoxy coated internal contact parts	Brushed stainless steel / Powder coated mild steel
Airflow / pressure	106cfm (180m³ / hr) / 30mbar	223cfm (380m³ / hr) / 96mbar	230 V: 205cfm (350m³/ hr) / 96mbar 115 V: 188cfm (320m³/ hr) / 96mbar	500cfm (850m³ / hr) / 100mbar
Electrical data	115 V 50 / 60 Hz Full load current: 1.2 amps / 135 watts (EU 240 V 1ph 50 / 60 Hz Full load current: 0.9 amps / 135 watts)	90 - 257 V 1ph 50 / 60 Hz Full load current: 12.5 amps / 1.1 kW	90 - 257 V 1ph 50 / 60 Hz Full load current: 12.5 amps / 1.1 kW	115 V 60 / 50 Hz Full load current: 19.5 amps / 2.2 kW (EU 240 V 1ph 50 / 60 Hz Full load current: 12.8 amps / 2.2 kW)
Noise level	< 56 dB*	< 60 dBA*	< 60 dBA*	< 63 dBA*
Weight	21kg (46.3lbs)	65kg (143lbs)	95kg (209lbs)	140kg (309lbs)
Approvals	CE, UL / NRTL, FCC, RoHS	CE, UL / NRTL, FCC, RoHS	CE, UL / NRTL, FCC, RoHS	CE, UL / NRTL, FCC, RoHS

#### Filter specifications

	DeepPleat pre-filter specification	DeepPleat DUO pre-filter specification	Pre-filter specification	DeepPleat DUO Pre-filter specifications	
Surface media area	1.74m <sup>2</sup> approx	12m <sup>2</sup> approx	2m² approx	30m² approx	
Filter media	Glass fiber	Glass fiber	Polyester	Glass fiber	
Filter media construction	50mm Maxi fold construction with webbing spacers	Maxi Pleat with webbing spacer	8 Pocket bag filter	Maxi fold construction with webbing spacers	
Filter housing	Zintec mild steel	Zintec mild steel	Corrosion resistant coated stainless steel	Zintec mild steel	
Filter efficiency	F8 (95% @ 0.9 microns)	F8 (95% @ 0.9 microns)	F8 (95% @ 0.9 microns)	F8 (95% @ 0.9 microns)	
	Combined filter specifications				
Surface media area	1.74m² approx	3.5m <sup>2</sup> approx	5.4m² approx	7.5m² approx	
HEPA filter media	Glass fiber	Glass fiber	Glass fiber	Glass fiber	
HEPA media construction	Maxi fold construction with webbing spacers	Maxi fold construction with webbing spacers	Maxi pleat construction with webbing spacers	Maxi pleat construction with webbing spacers	
Filter housing	Zintec mild steel	Zintec mild steel	Corrosion resistant coated stainless steel	Zintec mild steel	
Treated activated carbon	7kgs (15.4lbs) approx	15kgs (33lbs) approx	Blend of impregnated activated carbons 21kg (46.3lbs)	34kgs (75lbs)	
Filter efficiency	99.997% @ 0.3 microns	99.997% @ 0.3 microns	99.997% @ 0.3 microns	99.997% @ 0.3 microns	

\* At typical operating speed, operating under normal conditions

### Videojet Xtract<sup>™</sup> Lite

A compact and competitively priced fume extraction system for light duty laser marking, coding and engraving applications.

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

The Videojet Xtract Lite 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: DeepPleat pre-filter, HEPA and chemical section.



#### Airflow through filters





#### Key features

#### **Included as standard**

- Filter condition indicator
- Advanced carbon filter technology (ACF)
- Low noise levels
- Filter change / system fail signal
- Long life, low cost replacement filters
- Small footprint
- Remote stop / start interface

#### Technology





ACF: Advanced carbon filter

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HEPA filter

🖉 Contaminated air

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🖉 Clean air
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Particulate

Pre-filter

### Videojet Xtract<sup>™</sup> Pro

#### The premier choice and best in class solution with unique features in a compact unit.

The high performance Videojet Xtract Pro is our most technically advanced laser fume extractor, combining a powerful range of unique features into one compact unit.

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

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



#### Airflow through filters



- Small particulate is held in the HEPA filter
- Medium sized particulate held in 12m<sup>2</sup> of filter media
- Velocity drops through expansion

Large particulate settles to the bottom of the filter box

#### Key features

#### **Included as standard**

- Filter status warnings
- Advanced carbon filter technology (ACF)
- Reverse flow filter technology
- Auto sensing voltage (90 V 257 V) for global use
- HEPA and gas combined filter
- Real-time airflow reading
- Remote diagnostics via USB
- Automatic flow control
- High-contrast display
- Independent filter condition monitoring
- Run safe operation •

#### Optional

- Interfacing
- **Optional filter medias**
- VOC gas sensor (volatile organic compound)
- On-board compressor

#### Technology



- **AFC:** Automatic flow control
- **RFA: Reverse flow** air technology



MVS: Multi voltage sensing unit



PATENTED technology

### Videojet Xtract<sup>™</sup> PVC

#### The ideal fume extraction solution for laser marking, coding and engraving of PVC materials.

The Videojet Xtract PVC 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" Videojet Xtract Pro model as standard but in addition, all internally exposed surfaces have been coated to resist the corrosive nature of the fumes. Also, each unit is fitted with HCL and VOC sensors, which continually monitor the exhaust air of the unit to provide added safety assurance.



#### Airflow through filters



held in the HEPA filter Medium sized particulate held in the filter media

Chemical filter pad 3

#### Key features

#### Included as standard

- Award-winning Operating System •
- Reverse flow filter technology
- Turbine with high airflow and pressure
- HCL and VOC gas sensors
- Compact design
- Low noise levels
- Real-time airflow reading
- Filter status warnings
- Remote diagnostics via USB
- UL •
- Filter change / system fail signal
- Auto sensing voltage (90 V 257 V) ٠
- Automatic flow control •
- Acid resistant coatings
- Easi-seal filter location mechanism
- ACF technology •
- High-contrast display •
- Independent filter condition monitoring
- Run safe operation
- cUL
- Remote stop / start interface

#### Technology



air technology

ACF: Advanced carbon filter

MVS: Multi voltage sensing unit

PATENTED technology

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Contaminated air

## Videojet Xtract<sup>™</sup> Max

#### High performance laser fume extraction system for heavy duty applications in laser marking, coding and engraving.

The Videojet Xtract Max 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 is enhanced with the inclusion of several features including the patented DeepPleat DUO pre-filter and the acclaimed Operating System. These take performance and safety parameters to a new level to help ensure that maintenance, downtime and ownership costs are kept to a minimum.



#### Airflow through filters



- Small particulate is held in the HEPA filter
- Medium sized particulate held in the filter media
- Velocity drops through expansion
- Large particulate settles to the bottom of the DeepPleat DUO filter box

#### Key features

#### Included as standard

- Award-winning Operating System
- Reverse flow air filter technology •
- Automatic flow control system
- High-contrast display
- **Remote diagnostics via USB** •
- Combined HEPA / gas filter • incorporating ACF technology
- UL •
- Filter change / system fail signal •
- High airflow and pressure rates •
- DeepPleat DUO pre-filter
- Real-time airflow reading
- Run safe operation .
- Independent filter condition • monitoring, display and warnings
- Filters with long life and low • replacement cost
- cUL •
- Remote stop / start interface •
- Interfacing with host laser

#### Technology



flow control



ACF: Advanced carbon filter

PATENTED technology

### Peace of mind comes as standard

Videojet Technologies is a world-leader in the product identification market, providing in-line printing, coding, and marking products, application specific fluids, and product life cycle services.

Our goal is to partner with our customers in the consumer packaged goods, pharmaceutical, and industrial goods industries to improve their productivity, to protect and grow their brands, and to stay ahead of industry trends and regulations. With our customer application experts and technology leadership in Continuous Inkjet (CIJ), Thermal Inkjet (TIJ), Laser Marking, Thermal Transfer Overprinting (TTO), case coding and labeling, and wide array printing, Videojet has more than 400,000 printers installed worldwide. Our customers rely on Videojet products to print on over ten billion products daily. Customer sales, application, service and training support is provided by direct operations with over 4,000 team members in 26 countries worldwide. In addition, Videojet's distribution network includes more than 400 distributors and OEMs, serving 135 countries.



#### Call: (65) 6444 4218 Email marketing.singapore@videojet.com or visit www.videojet.sg

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