



# DPX fume extraction systems

Cleans the air – maximises performance

Fume and particulate extraction for laser coding equipment – captures fume at the source



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## DPX fume extraction system for laser marking systems

Clear the air around your laser coder with the DPX fume extraction system to maintain high laser code quality, reduce process costs and protect the health of your staff and the environment.

We offer a wide variety of extraction systems to suit your specific laser projects, from standard carton or PET coding to special systems for PVC and high odour applications.

The DPX uses a two stage filtration process for maximum and cost-effective fume extraction. By using a DPX you can make sure that your work force, equipment and the environment helps to protect from potentially harmful fumes at all times.

## A diverse range of applications

Its close integration with the laser coder keeps lenses and production equipment clean – ensuring code quality is maintained.



Flexible hose integration options to capture laser generated fumes at the source



Patented long-life Labyrinth™ filter for full extraction efficiency



Special extraction for PVC and high odour applications



IP46 rating and IP56 option for efficient performance even in challenging wash-down environments



### Greener Credentials

In contrast to other extraction systems that discharge exhaust air the DPX fume extraction filters particles that could otherwise escape into the environment and cause pollution. The high capacity filters also include a chemical layer to remove potentially toxic gases.

DPX also ensures:

- Low energy consumption through variable speed motors and automatic flow control
- Compliance with international regulations governing health and safety at work
- Low noise level through fan silencer

# For production at full capacity

## Continued high code quality

One of the main reasons to choose laser coding technology for your product is high code quality. However, fumes and laser generated particles could compromise the consistent quality of the codes. The DPX extraction system helps ensure continued code quality by efficiently cleaning the air around your laser system.

## Cleans air at the source

Our DPX range of fume extractors can be closely integrated with your laser coder to extract the particles and fumes directly at the source. The extraction system prevents build-up of residues on the laser lens so the laser can continue working at full capacity.



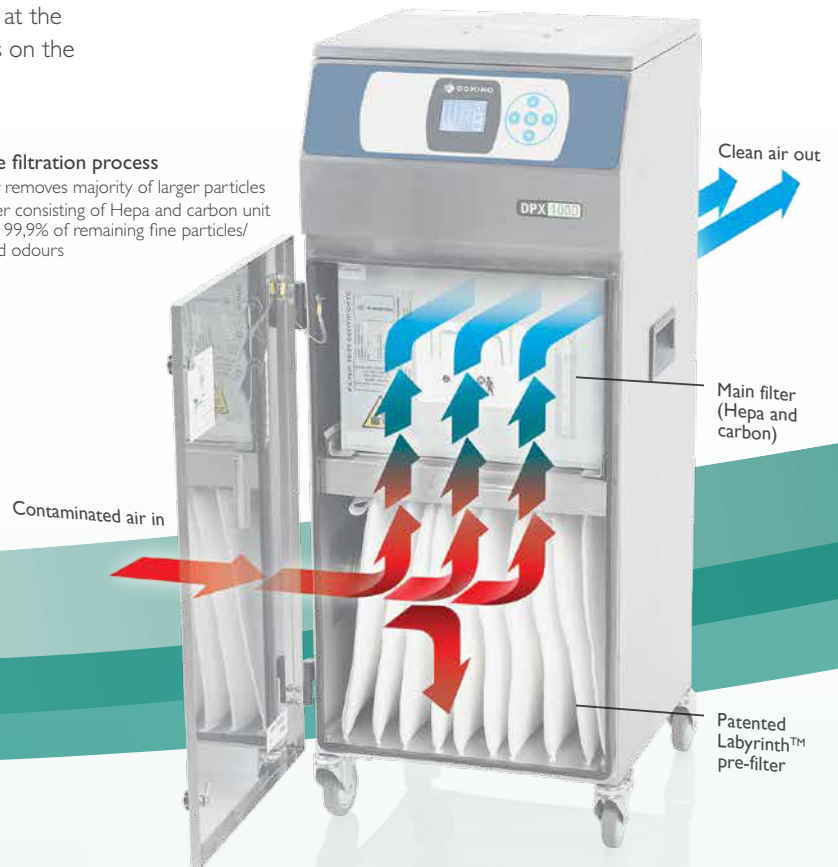
DPX fume extraction ensures continued high laser code quality

## Protects your equipment

Through its efficient two stage filtration process with patented filter technology the DPX helps to reduce the risk of product contamination and rejects. It also reduces the likelihood of machine failure due to dust or particle formation inside your production equipment.

### Two stage filtration process

- pre-filter removes majority of larger particles
- main filter consisting of Hepa and carbon unit removes 99.9% of remaining fine particles/gases and odours



# For a clean and safe environment

## Protects your staff

Production staff working with lasers need to be able to work in a healthy and safe environment, which in turn leads to a comfortable and efficient workplace. Our DPX extractors help protect your staff from dust and odours by capturing potentially harmful emissions at the point of generation. Gas and particulate sensors monitor exhaust air quality to help you comply with external emission regulations governing health and safety at work.

## Protects the environment

The contaminated air is filtered twice before the cleaned and purified air is released back into the environment. The main HEPA filter removes 99.9% of all particles above 0.3 microns which have not yet been caught by the pre-filters. Sensors in the extraction unit check the purified air before it is returned to the atmosphere – contributing to your green footprint.

# For production efficiency and long lasting performance

## Predictive maintenance

For many operators changing extraction filters is an easily forgettable task. Who has time to think about something that is not typically noticed on a weekly or monthly basis?

The DPX extraction system takes the guesswork out of filter maintenance with the help of an intelligent monitoring system which includes an icon based display and audible/visual alarms. Corrective measures can be planned and introduced in the most effective way so unplanned downtimes can be avoided and both staff and resources can be employed more effectively.

## Self-sufficient

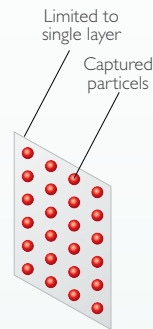
Our intelligent **FlowControl** system guarantees consistent air speed and continuous high extraction performance even when the filters fill up.

Once extraction rate is set **FlowControl** automatically adjusts air speed and maintains consistent extraction performance – keeping manual intervention to a minimum.

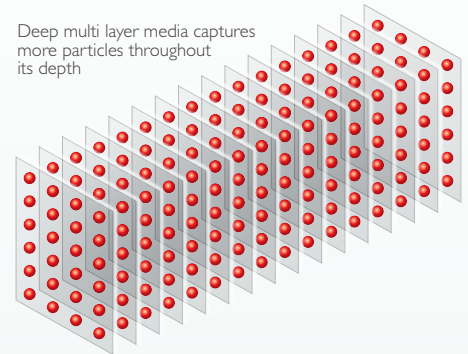
## Highly reliable and long life-span

All extraction systems have a welded stainless steel design for corrosion resistance and robust construction for years of trouble-free operation. Brushless motors ensure a quiet and long lasting performance for maximum machine availability.

Patented Labyrinth™ filter –  
20 times more efficient than  
common filters



Standard paper filter



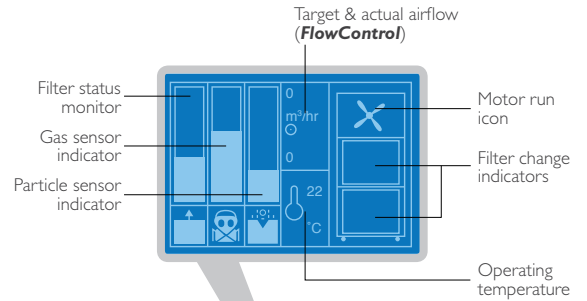
Cross section of patented Labyrinth™ filter media

Our patented Labyrinth™ filter uses up to ten times more filter surface than others. It can capture 20 times more particles than other filters. In addition equalisation plates for even distribution of airflow and particles have been introduced resulting in very long filter life. This in turn means that you have to change the filters less frequently making the DPX the most cost effective filtering solution for your laser application.

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# A quick tour around a DPX

Plug and play installation, monitoring functions and quick filter changes ensure that your DPX is very easily maintained



For production efficiency and predictable maintenance

- Automatic starts/stops fume extraction when the laser is activated/deactivated
- **FlowControl** system guarantees consistent air speed and continuous high extraction performance
- Visual and audible indicators make monitoring simple

For a clean and safe environment

- Hepa filter removes 99,9% of all particles above 0,3 microns
- Gas and particulate sensors monitor exhaust air quality
- Utmost security for both human health and the environment

For long lasting performance and less frequent filter changes

- Patented high capacity Labyrinth™ pre-filter can capture 20 times more particles than other filters
- Equalisation plates for even distribution of airflow and particles ensure a very long Hepa filter life
- Filters are easily accessed and quick to change



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## Technical Specification:

	DPX500	DPX1000	DPX1500	DPX2000
<b>Indicators</b>	Visual and audible when filter unit is full, ruptured or if extractor is operated without a filter unit fitted			
<b>Air Monitoring</b>	Continuous monitoring of exhaust for gases and particulate contaminants			
<b>Air Flow</b>	Control Automatic self-adjustment of blower to maintain optimum extraction rate as filters become blocked			
<b>Laser Interface</b>	Signals the laser to report an alarm condition if one occurs in the fume extraction system. Automatically starts/stops fume extraction when the laser is activated/deactivated			
<b>Production Rates</b>	Below 200 codes per minute	200 to 500 codes per minute	Above 500 codes per minute	All PVC coding applications
<b>Substrates</b>	All substrates including paper, carton board, glass and plastics (except PVC) PVC			PVC
<b>Flowrate (max)</b>	166m <sup>3</sup> /hr (98cfm)	320m <sup>3</sup> /hr (188cfm)	600m <sup>3</sup> /hr (353cfm)	320m <sup>3</sup> /hr (188cfm)
<b>Vacuum (max)</b>	1633mm WG (64.5 IWG)	1143mm WG (45 IWG)	1067mm WG (42 IWG)	1143mm WG (45 IWG)
<b>Voltage / Watts 120VAC</b>	0.45 kVA, 50/60 Hz	1.10 kVA, 50/60 Hz	2.20 kVA, 50/60 Hz	1.10 kVA, 50/60 Hz
<b>Frequency 230VAC</b>	0.45 kVA, 50/60 Hz	1.20 kVA, 50/60 Hz	2.40 kVA, 50/60 Hz	1.20 kVA, 50/60 Hz
<b>Main Power 3 wire/1ph</b>	5m (16.4ft)	5m (16.4ft)	5m (16.4ft)	4.6m (15ft)
<b>Sound Rating</b>	61 dBA	52 dBA	65 dBA	52 dBA
<b>Operating temperature</b>	5–45°C	5–45°C	5–45°C	5–45°C
<b>IP Rating</b>	IP46 (IP56 option)	IP46 (IP56 option)	IP46 (IP56 option)	IP46 (IP56 option)
<b>Operating humidity</b>	10–90% non-condensing	10–90% non-condensing	10–90% non-condensing	10–90% non-condensing
<b>Cabinet Size</b>				
Height	885mm (34.8")	1065mm (41.9")	1145mm (45.1")	1181mm (46.5")
Width	430mm (17")	430mm (17")	520mm (20.5")	430mm (17")
Depth	487mm (19.2")	515mm (20.3")	666mm (26.2")	515mm (20.3")
<b>Cabinet Weight</b>	50Kg (110 lbs)	55 Kg (122lbs)	80Kg (176lbs)	77 Kg (170 lbs)
<b>Cabinet Material</b>	Stainless steel (430)	Stainless steel (430)	Stainless steel (430)	Stainless steel (316)
<b>Hose ID x L</b>	50mm x 6m (2" x 20 ft)	50mm x 6m (2" x 20 ft)	63mm x 6 m (2.5" x 20 ft)	50mm x 6 m (2" x 20 ft)
<b>Optional Accessories</b>	–	Second head kit Hose extension	Second head kit Hose extension	Second head kit Hose extension
<b>Air Flow Schematics</b>				

Not to scale. For illustrative purposes only.

