



# FOX WS 2 OIL / COOLANT MIST COLLECTORS

FOX WS 2 SERIES: 170 • 330 • 700 • 1020 • 1250





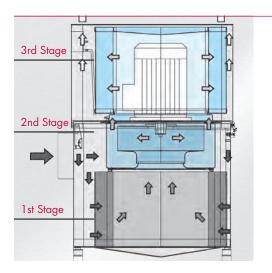
















#### Oil / Coolant Mist Collectors

The FOX WS 2 Series represents a quality solution for the collection of soluble coolant and oil mist.

It is characterized by a sophisticated design, compact dimensions, standard and customizable accessories, and 5 sizes ranging from 170 to 1250 cfm. It is specifically designed for machine tools and developed for the elimination of mist, aerosols, and smoke typical of wet machining operations. The mechanical filters can also be adapted in mixed application (wet/dry) and for EDM machines. The standard configuration provides a high level of air filtration exceeding OSHA and NIOSH guidelines for mist concentration designated for industrial air quality.

## <u>Guaranteed Filtration - Principle of Operation: Three (3) Stages</u>

• 1st Stage - INITIAL PRE-FILTRATION:

Media/Static: Proprietary Multilayered Filtration

Special media, with progressive filtration levels consisting of 3 filtration layers to remove and handle solid particulate and bulk liquid entrainment, begin agglomerating finer mist droplets into larger ones providing a 92% efficiency level. This media configuration has a high capability to accumulate solid particles and provides a slow but efficient draining effect. Clogging is always monitored by a pressure gauge that clearly indicates when the cartridge must be replaced.

2nd Stage - INTERMEDIATE FILTRATION:

Centrifugal / Dynamic: Maintenance-Free

A special impeller ensures continued mist reduction by inertial impaction via centrifugal effect on the mist droplets created in the first stage.

• 3rd Stage - FINAL FILTRATION:

Media/Static: Proprietary High Surface Area Filtration

Extended filtration area, made of a multi-media arrangement to remove remaining mist and provide the guaranteed removal, an average efficiency above 99% (measured according to AFNOR NFX 44-060 standard).

#### Employee Health and Safety

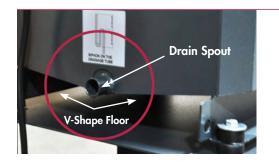
It is unhealthy for employees to inhale the pollution produced by today's machining processes. Even clean machining environments contain air pollutants, including some that are too small to see. The FOX WS 2 series collects airborne oil/coolant mist and purifies the air to a level that far exceeds the OSHA and NIOSH air quality recommendations (5.0 mg/m3 and 0.5 mg/m3, respectively). For example, during one test in a machine shop, the air quality near an LNS FOX WS 2 mist collector was measured at 0.2 mg/m3. Air quality readings were taken multiple times, and the results were consistent. Reducing air pollutants with LNS FOX mist collectors contributes greatly to employees' health, safety, and in turn keeps your production running more efficiently.

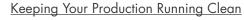
#### Easy Maintenance - Patented System

Maintenance requires less than ten minutes (complete replacement of filters). The result is a considerable saving in time and costs across the life of the unit. Additionally, guaranteed reliability is due to the special impeller and to the high quality of the components, each thoroughly selected and tested. Units are mechanically guaranteed for three (3) years and the internal filter set\* for a minimum of one (1) year or 4,000 hours.

<sup>\*</sup>Process and application specific







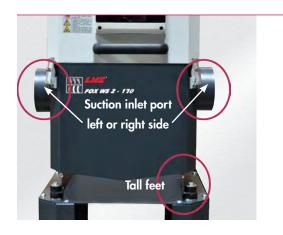
As mist, aerosols, and smoke filter through the filtration stages, excess liquid will be guided to the V-shape mist collector floor bottom. The V-shape floor promotes efficient drainage and accumulated liquid does not come in contact with the prefilter, providing extended pre-filter life. A drain spout is located on the back of the unit to facilitate effective drainage of liquid pooled into the V-shape floor.



## Performance Monitoring

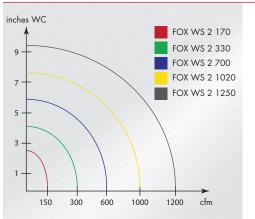
To maximize each filter's life, the WS 2 is designed with two air pressure gauges to provide ease of maintenance. The bottom gauge measures the air pressure at the pre-filter, and the top gauge measures it at the final filter. The gauges clearly show each filter's clogging or pressure difference, so it is simple to determine when to replace each filter. These indicators simplify filter maintenance, so that the unit can run at optimum continuous efficiency. It is recommended that the internal filters\* be replaced once per year or every 4,000 hours of mist collector operation.

<sup>\*</sup> Process and application specific



#### Installation Ease

The suction inlet port is versatile – it can be placed on the left or right side depending on the machine configuration or space allowance. Determining the suction inlet placement can be determined on-site during installation. Units are designed with tall feet for hardware clearance, thereby providing speed and ease of installation.



<u>Airflow</u>	FOX WS 2 170	FOX WS 2 330	FOX WS 2 700	FOX WS 2 1020	FOX WS 2 1250
Airflow* (cfm)	168	330	665	1012	1248
Static Pressure (inches WC)	2.41	3.57	5.70	7.23	9.23
Motor (hp)	0.4	0.6	1.2	2.4	3.5
Amps at 230V	1.5	2	2.9	5.7	8.3
Weight (lb)	62	77	121	165	187
Sound Level (dB(A))	63	65	71	73	75
Suction Inlet Diameter	100 mm (4")	125 mm (5")	150 mm (6")	200 mm (8")	200 mm (8")

Information is subject to change without notice.

- \*FOX WS 2 330, 700, 1020, 1250: with HEPA filter installed, airflow is about 10% less
- All units painted in RAL 7035/7016 (special colors available upon request)
- Electrical motors meet current efficiency standards EISA 2007 / IE2 and available as either: (V/Hz) 230/60, 400/60, 460/60 (special voltages / frequencies available upon request)

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TECHNICAL SPECIFICATIONS

# Additional Filtration Stage

ABSOLUTE Filtration Module

HEPA removal efficiency (Fox 330 through 1250)

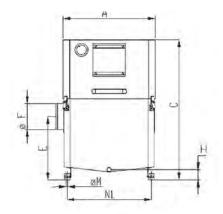
To eliminate dry smoke typical of certain applications where neat oil is utilized. The efficiency level guaranteed is 99.95% MPPS according to EN 1822 (class HEPA H13). Its clogging is monitored with a pressure gauge.

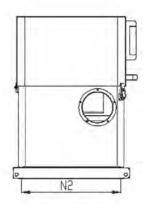
Optional Accessories	
Airflow Regulator	Mounting Stand on Wheels (2'4" tall)
Fire Damper System	Vertical Stand (6' tall)
LNS Turbo Conveyor Bracket Mount	Chip Deflectors / Splash Guards

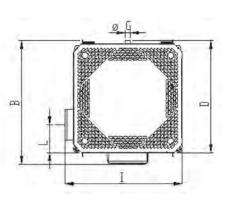
Dimensions (Inches)						
Unit	А	В	С	D	Е	F
FOX WS 2 170	14.88	18.78	22.95	16.73	9.53	3.90
FOX WS 2 330	16.06	20.28	25.67	18.11	10.87	4.88
FOX WS 2 700	20.67	23.62	31.54	21.38	14.25	5.87
FOX WS 2 1020	23.62	26.50	35.75	24.29	15.59	7.80
FOX WS 2 1250	26.10	29.02	39.13	26.77	17.20	7.80

Unit	G	Н	I	L	N1 X N2 X M
FOX WS 2 170	0.98	2.68	16.54	4.02	13.07 x 15.04 x 0.35
FOX WS 2 330	0.98	2.64	17.72	4.72	14.30 x 15.55 x 0.35
FOX WS 2 700	0.98	2.36	22.32	5.31	18.82 x 18.82 x 0.35
FOX WS 2 1020	0.98	2.32	25.20	6.93	21.73 x 21.73 x 0.35
FOX WS 2 1250	0.98	2.32	27.68	7.13	24.21 x 24.21 x 0.35









#### YOUR "ONE-STOP-SHOP" FOR MACHINE-TOOL PERIPHERALS

LNS provides a full range of barfeeders, chip conveyors, coolant management systems, air filtration systems, and workholding systems that is second to none on the market. We are known in the industry for the solid experience we have gained over several decades in an exceptionally wide range of applications, our excellent customer service, and our technical support. This support is ensured by highly qualified technicians who are available throughout North America.



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