



TRADE TALKS: **SELECTING THE RIGHT AIR FILTRATION SYSTEM**

INSIGHTS FROM INDUSTRY EXPERTS

P R E S E N T A T I O N



BAR
FEEDING
SYSTEMS



CHIP
MANAGEMENT
SYSTEMS



COOLANT
MANAGEMENT
SYSTEMS



AIR
FILTRATION
SYSTEMS



WORK
HOLDING
SYSTEMS





Overview

The purpose of this presentation is to:

- Help guide you in making an informed decision when selecting the correct air filtration system.
- Educate you on the difference between centrifugal and electrostatic technology.
- Provide you with options to meet just about any application.





Considerations for Choosing an Air Filtration System

What to look for when selecting the right system.



What type of coolant do you have (oil or emulsion)?

1

Take into consideration machining operation along with your operating hours.

2

You will also need to factor in the type of material being machined (iron, aluminum, brass, stainless steel, etc.)

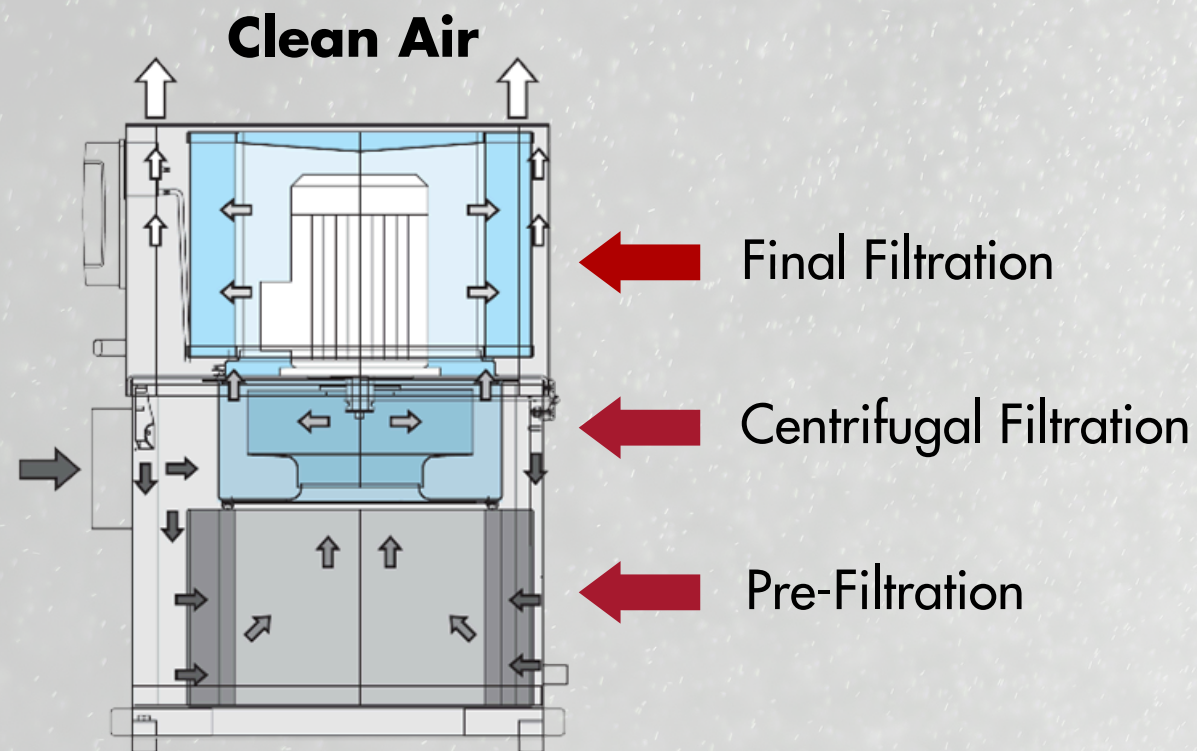
3

Finally, consider the machine tool enclosure volume.

4



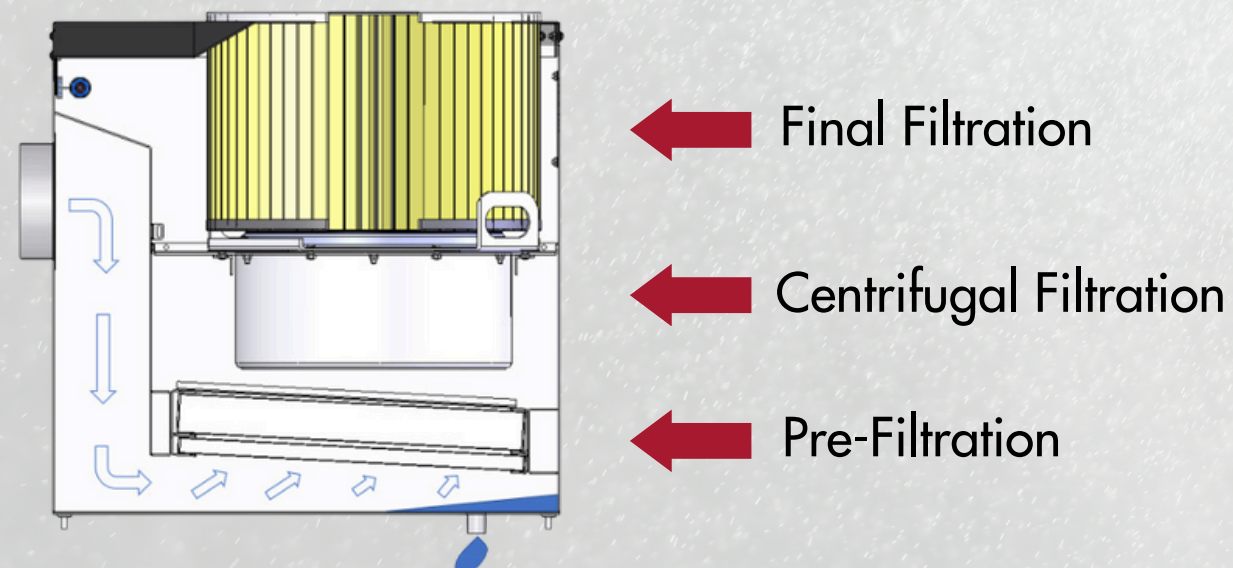
Centrifugal Filtration Principles of Operation



**FOX WS2
Series**

- The air polluted by coolant mist is accelerated by a rotating impeller (turbine, drum or a simple centrifugal fan)
- The coolant mist particles collide and coalesce into larger particles, forming liquid coolant.
- The collected coolant is discharged out of a drain and clean air is returned to the plant.
- Depending on the mist collector and application, additional filtration may take place before and after the initial centrifugal filtration phase.

**FOX HM2
Series**

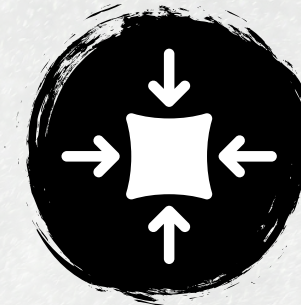




Centrifugal Filtration Advantages



**Simple
operation**



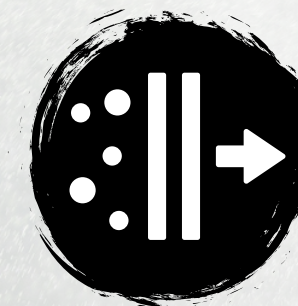
**Compact
design**



**Relatively
light
weight**



**Primarily for
emulsion
applications**



**Additional
filtration steps
for higher
efficiency**



**Low
maintenance**



LNS Centrifugal Models



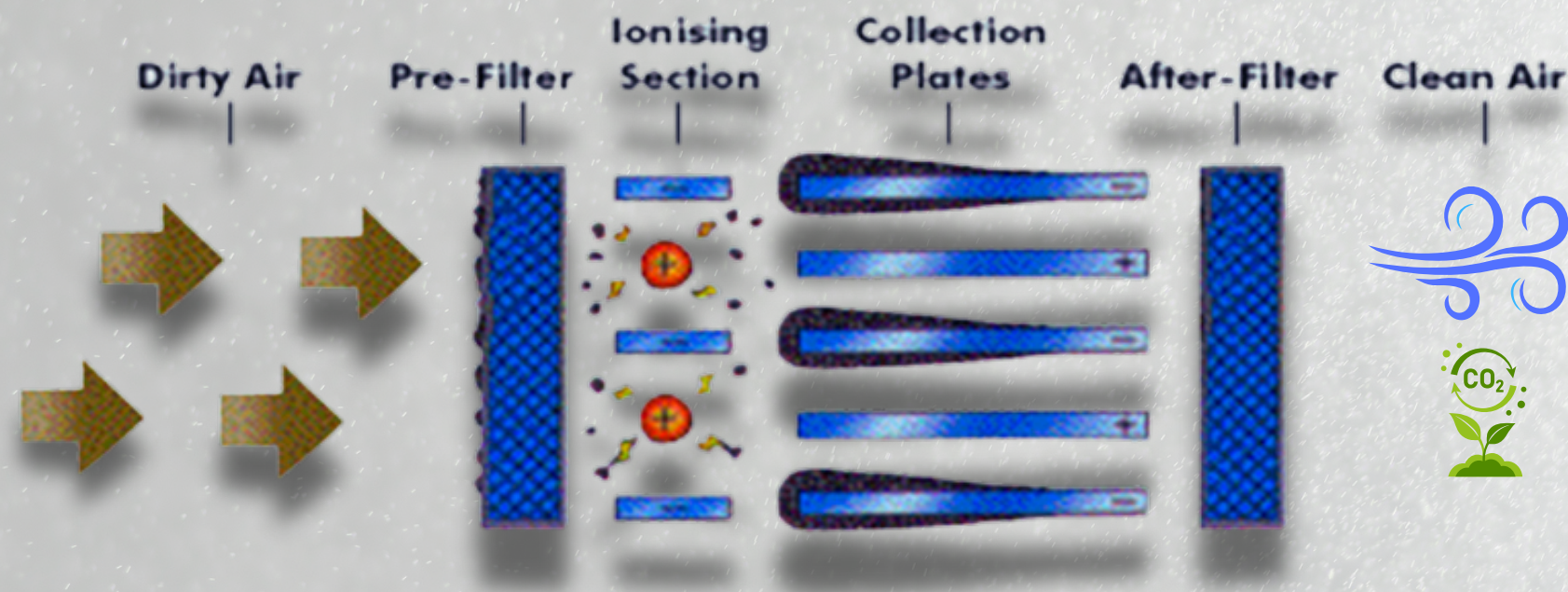
FOX WS2 Series



FOX HM2 Series



Electrostatic Filtration Principles of Operation



- The air polluted by oil mist is pre-filtered by a pre-filter. The Fox HE-1000 contains (2) metallic pre-filters.
- The oil mist particles pass through an electrostatic field and receive an ionized charge. (+)
- Ionized particles pass through the electrostatic cell with alternating charged plates. Oil mist particles are repelled by same-charged plates and attracted to opposite-charged plates, collecting only on the negative plates.
- Clean air passes through the after filter and returns to the plant. Collected oil drains from the mist collector back to the machine tool or a collection bin. 🌍



Electrostatic Filtration Advantages



**Low
pressure
drop**



**Washable
filters and
cell**



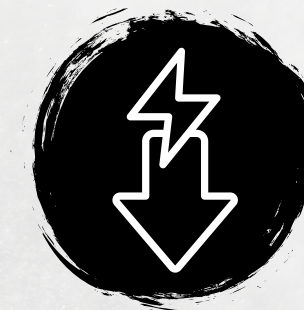
**High
efficiency**



**Constant
flow rate**



**Primarily
for oil
applications**



**Low
electrical
consumption**



LNS Electrostatic Model



FOX HE Series



Why Choose an LNS Air Filtration System

At LNS, we are dedicated to delivering high-quality air filtration systems designed to tackle the most challenging machining processes. Even the cleanest machining environments can harbor invisible air pollutants. Our advanced machines ensure a healthier environment for your employees.



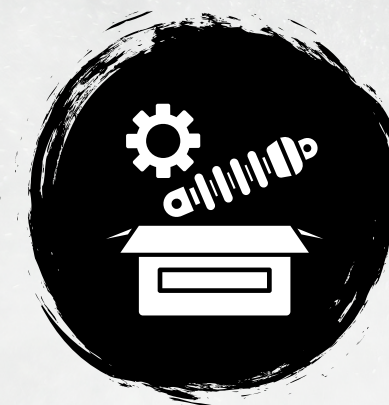
**Meet & exceed
OSHA and
NIOSH
standards**



**Easy to use
and install**



**Field
support &
installation
if needed**



**Full line of
spare parts
available**



Your **One-Stop-Shop** for Machine Tool Solutions



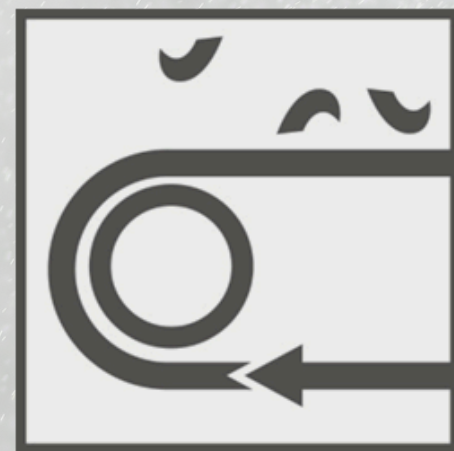
Bar feeding
Systems



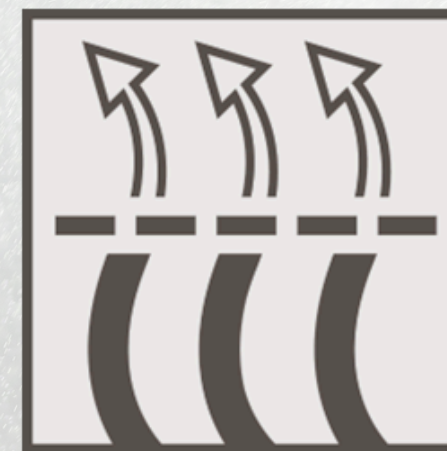
Work Holding
Systems



Coolant management
Systems



Chip management
Systems



Air Filtration
Systems



*Thank
you!*

To Learn More:

*Follow
-US-*

AT



www.lns-northamerica.com



LNS North America



LNS_north_america



@LNSNorthAmerica