Nederman

The S-Series

Simple, Silent and Safe Enclosureless Dust Collector

Simple, Silent & Safe Dust Collection

Nederman is The Clean Air Company and the S-Series is a turn-key dust collection solution for industrial applications including woodworking.

Reliable and Effective Indoor Filtration

The S-Series is an enclosureless, silent, and easy-to-install dust collector designed for wood and sawdust applications such as furniture, cabinetry, flooring, and general manufacturing environments.

It is engineered for safe indoor use in accordance with NFPA combustible dust guidelines and is available in three sizes: S-500, S-750, and S-1000, covering airflow ranges from 1,500 to 5,000 CFM. This makes it a cost-effective and reliable filtration solution for small to medium-sized workshops.

Features:

- Quiet & Simple Operation
- 3-Step Easy Installation
- Compact Design - Small Footprint
- Long Lasting SuperBag FilterTechnology
- Low Energy Consumption
- Shaker Cleaning System Options
- Packaged Solutions Available (Shaker & Starter Included)
- Multiple Waste Collection Options – Bags, Barrels or Bin
- NFPA Compliant

Applications:

- High-Speed Routing
- Sawing & Cutting
- Single-Cell Manufacturing
- After-Filters

Applying the S-Series

S-Series enclosureless dust collector provides an effective and convenient solution for combustible dust applications in woodworking and general manufacturing, within defined NFPA compliance limits.

The S-Series is designed for airflow up to 5,000 CFM (8,500 m³/h) for typical woodworking and manufacturing processes such as cutting, routing, and sawing operations. It is not recommended for applications such as sanding, molding, or abrasive processes with mechanical feed. It must not be used for metal grinding, hot work, or applications that may generate sparks. For safe operation, maintenance procedures including filter cleaning and waste handling should follow applicable NFPA guidelines as well as Nederman recommendations.

Nederman is a global leader in dust collection solutions designed in accordance with NFPA and ATEX standards. Our comprehensive approach to system design, application, installation, and maintenance helps support safe and compliant operation across a wide range of industries.

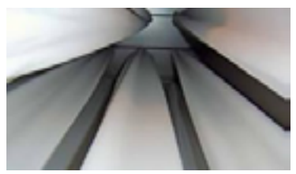
Long-Lasting, Effective, Easy to Use

Designed for longevity and minimizing operational cost. Our highly efficient, quiet running radial fans are designed to transfer high concentrations of wood dust and chips.

- Reduced Maintenance Cost - Built with high performance Superbags reducing your routine bag replacement needs down to 3-5 years with longer bag life depending on the dust particle size.
- Reduced Energy Cost - Built with energy efficient fans utilizing an impeller design that is 20% more efficient than common radial blade fans resulting in lower energy consumption and lower operation costs.
- Reduced Noise Level - High performance fans run 10-15 dB(A) over normal conversation sound levels, 70 – 75 dB(A) @ 10 in.w.g
- Higher Productivity - Lower filter resistance, highly efficient fans and interlocked design allows for greater and more consistent suction.
- Bag Replacement Without Any Tool - Heavy-duty plastic collection bags are connected with Quick-Fit clamps allowing for tool-less removal and installation.

SUPERBAG Filters - The Heart of the System

The Nederman SUPERBAG technology delivers high efficiency, low energy consumption, combustible dust safety and extended life.



- Achieve recommended dust emission levels and improved ambient air
- Low pressure drop requires less energy
- Durable construction with seamless, woven construction
- Reduced risk of fire and explosion with anti-static woven carbon fibers

NFPA Compliant, Safe and Reliable Solution

S-Series dust collectors provide a safe and reliable solution to combustible dust compliance in accordance with the latest NFPA standards when properly applied and maintained. For full NFPA compliance with combustible dust applications including woodworking, owner/operator must install and operate the collector in accordance with the requirement for enclosureless dust collectors as outlined within the following standards.

- **NFPA 660-2025,** Section 3.3.5.4 for an enclosureless dust collector less than 5,000 CFM for wood dust (formerly NFPA 664-2020, Sections 9.3.3.2.6.4 and 9.3.4(7))
- **NFPA 660-2025,** Sections 3.3.5.4 and 9.4.4.5.4 for an enclosureless dust collector less than 5,000 CFM for combustible solids with added requirements (formerly NFPA 654-2020, Sections 3.3.21 and 9.13.1.1.2(4))

The owner/operator is responsible for compliance with all applicable federal, state and local codes. NFPA standards are available at NFPA.org.

Fast, Efficient & Effective

Simplify and Save with Package Solutions

Bring key components together in one package to make installation, ordering easier and more cost-effective.

- Dust collector, shaker, and starter bundled in one package
- More cost-effective compared to individual component purchasing
- Manual shaker and starter pre-mounted on the unit
- Helps reduce installation time compared to separate component setup
- Manual shaker can be upgraded to mechanical or automatic options
- Available for S-750 and S-1000 models

Quick and Easy Installation

The unique collapsible design provides compact shipping and ease of installation. Fan and SuperBags are pre-installed further minimizing installation time and effort. Installation is completed in three simple steps:

1. Set the filter to the desired location.

2. Raise the baghouse roof.

3. Complete the ducting and electrical wiring.

World's Fastest Industrial Ducting

Simple to install for faster installation the clamp together components can be taken apart and reused. It is easy to connect to existing duct work and the components make it fit every system. Also, with adjustable QF fittings it simplifies duct connections, with smooth interior surfaces it helps prevent blockages.

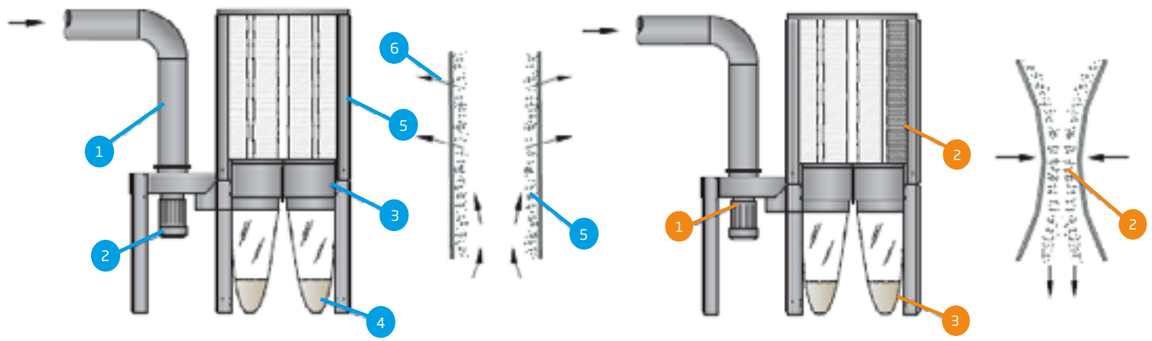
How it Works

During normal operation:

1. Dust laden air from the plant travels down the supply duct
2. Dirty air then enters the COMBIFAB material handling fan
3. Dust then enters the hopper section of the filter
4. As air slows down within the hopper, the heavier dust particles fall down into the inside of the collection bags
5. The remaining dust then travels up into the inside of the filter bag.
6. The air, which originated from the plant, is now clean and passes through the filter bag into the surrounding atmosphere.

While cleaning:

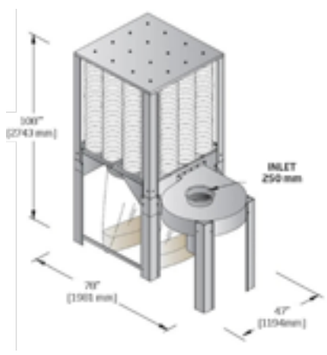
1. The S-Series may only clean "off-line", when the COMBIFAB fan has stopped rotating
2. The S-Series is cleaned by applying physical force to the outside of the filter bag which in effect, shakes them off
3. The dust cake, which hangs on the inside of the filter bag falls into the hopper section and then into the collection bags below



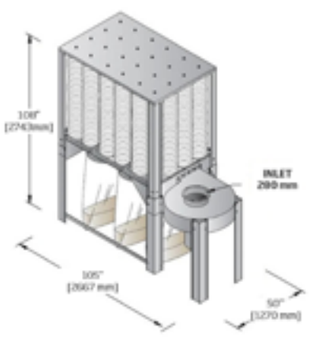
Dust Collection for Your Needs

Technical Specifications

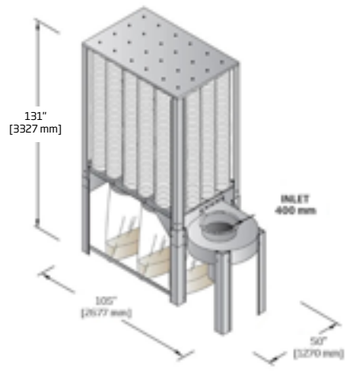
The S-Series filters are available in three different sizes equipped with three different fans with TEFC motors. Filter model is selectedbased upon the amount and type of material being collected and the total extracted air volume required.



S-500



S-750



S-1000

S-Series Model	Pressure Drop	Design Airflow Capacity	Motor Power	Total Filtration Area	Bag Quantity		Number of Waste Discharge Ports & Clamps	Shipping Weight
	in. w.g (Pa)	CFM (m^3/h)	HP	ft^2(m^2)	Superbag Filter Bags	Plastic Waste Bags		lbs. (kg)
S-500	5.0 (1,245)	3,000 (5,097)	5	162 (15)	16	2	2	880 (399)
	7.5 (1,868)	2,000 (3,398)						
	8.0 (1,993)	1,500 (2,549)						
S-750	6.0 (1,495)	4,500 (7,646)	7.5	243 (22.6)	24	3	3	1100 (499)
	8.0 (1,993)	3,500 (5,947)						
	10.0 (2,490)	2,500 (4,248)						
S-1000	7.0 (1,744)	5,000 (8,495)	10	360 (33.45)	24	3	3	1160 (526)
	8.0 (1,993)	4,000 (6,796)						

Additional Notes :

- *Available with optional aluminum impellers*
- *Can be used as an afterfilter without fan*
- *Motors are TEFC and operate at 1760 RPM*
- *Support structure is galvanized steel construction*
- *Supply voltages are available in Single Phase 208V or 230V / 60Hz (S-500 only) , 3 Phase 208-230/460V/60 Hz or 575V/60 Hz*

Waste Disposal Options

The S-Series filters waste disposal is handled with plastic waste bags as standard. As an option, the waste disposal can be handled with total 45 gal (170 L)* capacity barrels and 230 gal (871 L) capacity dump bins.

Bags (standard)

**42 gal (159 L) working volume*

Barrels (optional)

*45 gallons /170 L**

Dump bin (optional on S-750 & S-1000)

230 gallons/ 871 L

Dump Bin Upgrade Saves Production Time.

- Increase capacity by 80% compared to bags
- Simple quick clamp for easy and clean maintenance
- Easy forklift removal for worker safety
- Easy “tilt-to-empty” design for simple waste disposal

Enhanced Cleaning. Safer Maintenance & Lower Costs

S-Shaker Upgrade Now Available

S-Series dust collectors are now available with a shaker filter cleaning option that improves system performance and simplifies maintenance. The shaker mechanism cleans the filters more consistently and effectively than traditional manual cleaning techniques resulting in greater machine suction, extended filter life and improved operational safety.

The shaker kit is available for new equipment or field retrofits on existing equipment and is available with a manual, mechanical or automatic actuator. The shaker option is ideal for heavy loading applications including fine wood or sawdust, plastic or paper dust applications.

How Does it Work?

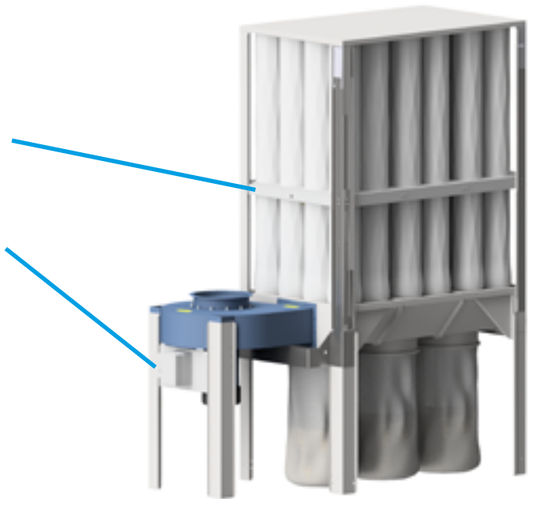
A shaker plate is installed on the dust collector frame with the filter bags threaded through the circular openings.

There are three available actuator control options that initiate the shaker mechanism to clean the bags.

Manual - A handle attached to the shaker plate is manually moved back and forth.

Mechanical - A push-button switch actuates a pneumatic cylinder attached to the shaker plate.

Automatic - Upon fan shut-down, a cleaning sequence is initiated with a pneumatic cylinder attached to the shaker plate.



Shaker Plate

Automatic Controls

Models & Specifications

Model	Part Number	Actuator Style	Pneumatic Cylinder	Voltage (v) @60 Hz	Compressed Air Supply
S-500	89101071	Manual	---	---	---
	89101072	Mechanical	Included	N/A	0.5 SCFM @ 90 psi 3/8" NPT (min)
	89101073	Automatic	Included	208-230/460 V / 3 Phase	0.5 SCFM @ 90 psi 3/8" NPT (min)
	89101074	Automatic	Included	575 V/3 Phase	0.5 SCFM @ 90 psi 3/8" NPT (min)
S-750 / S-1000	89101075	Manual	---	---	---
	89101076	Mechanical	Included	N/A	0.5 SCFM @ 90 psi 3/8" NPT (min)
	89101077	Automatic	Included	208-230/460 V / 3 Phase	0.5 SCFM @ 90 psi 3/8" NPT (min)
	89101079	Automatic	Included	575 V/3 Phase	0.5 SCFM @ 90 psi 3/8" NPT (min)

Notes:

1. Automatic controller is designed to connect standard Nederman starters. Please see wiring schematics for Interlock Connections.

2. Contact Nederman for 575 V power supply options.

3. Compressed air to be dry and oil free (ISO 8573-1: Class 4 for conditioned interior installation, Class 3 for installation with possible risk of frost), Supply pipe should be ½" diameter or larger.

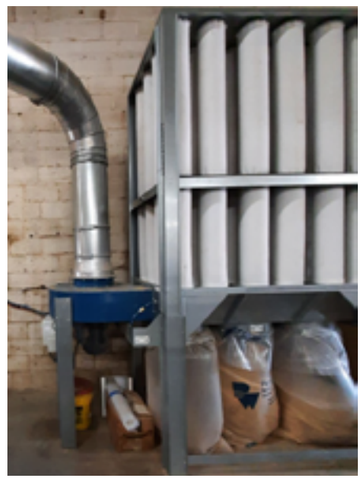
Real World Results

A recent study at a woodworking factory in Charlotte, NC, USA produced these findings after the installation of shaker option:

- Up to 40% reduction in filter pressure drop after filter cleaning
- 8-10% increase in suction power improving dust capture
- Consistent and effective cleaning results
- Less operator attention and cleaner waste bag change-outs

"The extended life of tooling due to improved suction was a major improvement for us."

Engineering Manager in Charlotte, NC, USA
Atlantic Commercial Caseworks



Experience and Competence You Can Trust

With over 10,000 S-Series installations, Nederman is a global leader in dust collection solutions

The Nederman Advantage

As the world's largest provider of industrial air pollution control equipment, Nederman is your total solution provider for controlling woodworking dust. No matter the size, complexity or operational requirement, Nederman assesses each customers' unique needs.

- Proven solution - With thousands of S-Series installations, we have the expertise and experience to solve your dust collection challenges.
- Effective - 99.9% efficient in filtering wood, paper and plastic dust applications with the use of proprietary SuperBag technology.
- Upgradable - Can be updated to take advantage of automatic shaker cleaning options with modular components for turn-key installation on new or existing S-Series units.
- Sustainability - Energy efficient operation, extended filter life and effective recovery of waste material to be reused or recycled.
- Low operational cost - Prolonged filter life, low pressure losses and efficient filter cleaning reduce operating expenses.
- Regulatory compliance - Air quality and combustible dust regulations are becoming increasingly stringent. The S-Series is NFPA compliant for indoor operation.

The global leader in complete dust collection solutions

For over 80 years, Nederman has developed products and solutions to reduce the strain on the environment and protect people from the harmful effects of indoor air pollution including dust, smoke, oil mist and gases. We have extensive experience in creating safe working environments, handling combustible dusts, managing turn-key projects and servicing dust collectors. Our innovative, smart solutions including Insight have further strengthened our ability to deliver clean air to our customers throughout the world.

Worldwide presence

Nederman has a strong global presence in both sales and production. We have our own sales companies and distributors in 50 countries. Manufacturing is performed in 13 countries on five continents. In many countries, we also have a well-established service organization. By offering advanced service with high availability, Nederman helps customers to secure continuous, optimized production.

The Clean Air Company

Nederman is an environmental technology company and a global leader in industrial air filtration dedicated to extracting, transporting and cleaning air to make industrial production more efficient, safe and sustainable. Based on industry leading products, solutions and services in combination with innovative IoT technology, we monitor and optimise performance and validate emissions compliance to protect people, planet and production.

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