

The Nederman Advantage

Your S-Series enclosureless unit has a number of different features:

Ideal for single cell manufacturing, high speed routing, sawing, cutting, or as an after-filter.

Safe, simple setup - Raise the bag section, fasten nuts and bolts, attach ducting, plug it in, and turn it on.

Mobility - Unit comes palletized to move from cell to cell or cells or depalletized for permanent placement.

Attached fan offers quiet operation at 1,750 rpm and emits less than 70 dBA at 10 ft.

Multiple dust collection options for easy disposal including bags, drums, or high capacity dump bins

Patented Nederman Superbag filter bags are 99.9% efficient

Small footprint ~ 7 to 9 ft wide x 4 ft deep

Meets NFPA 654 (2017), Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, 3.3.18 and 7.13.1.1.2 (4) for a system with a maximum air flow-handling capacity of 5,000 cfm and complies with the following verbiage:

3.3.18 - Enclosureless Dust Collector. An AMS (air-material separator) designed and used to remove dust from the transport air where the filter medium is not enclosed or in a container.

7.13.1.1.2* - The requirement of 7.13.1.1.1 (Where an explosion hazard exists, air-material separators with a dirty-side volume of 8 ft³ (0.2 m³) or greater shall be located outside of buildings.) shall not apply to the following:

(4)* Enclosureless AMS meeting all the following criteria shall be permitted to be used:

- (a) The filter medium is not shaken or pressure-pulsed to dislodge dust during operation.
- (b) The AMS is not used to vent or serve metal grinders, hot work processes, or machinery that can produce sparks.
- (c) The AMS is not used to vent or serve sanders, abrasive planers, or similar sanding process
- (d)* Each collector system has a maximum air flow-handling capacity of 5000 cfm (2.36 m³/sec).
- (e)* The fan motor is suitable for Class II, Division 2, or Class III, as appropriate.
- (f) The collected dust is removed daily or at a frequency sufficient to ensure efficient operation and to limit the collected dust to less than 22 lb (10 kg).
- (g) The collector is located at least 20 ft (6.1 m) from any means of egress or area routinely occupied by personnel.
- (h)* Multiple collectors in the same room are separated from each other by at least 20 ft (6.1 m).
- (i)* The minimum ignition energy (MIE) of the collected materials is greater than 500 mJ.
- (j) The fan construction is spark resistant and meets the criteria in 7.12.2.5.
- (k) The filter medium is not located within 35 ft (10.7 m) of any open flame or hot surface capable of igniting a dust cloud of the material it contains.

S-Series Unit Comparison

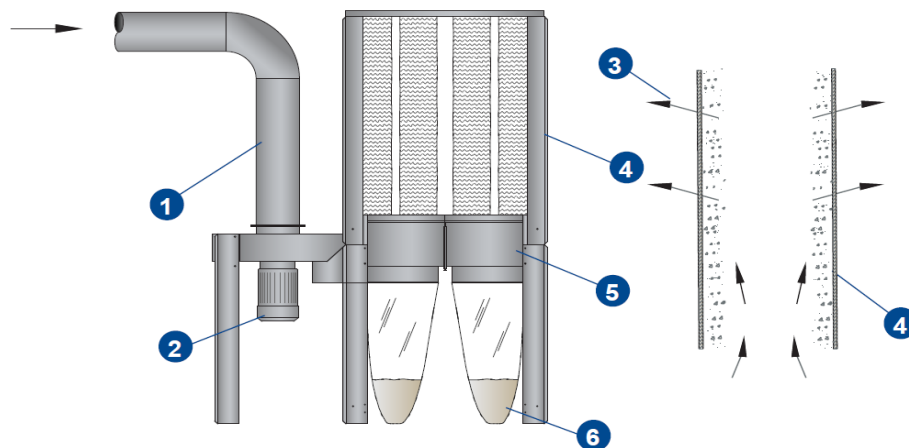
	S-500	S-750	S-1000
CFM range	1,500 CFM @ 8.0" w.g.	2,500 CFM @ 10.0" w.g.	
	2,000 CFM @ 7.5" w.g.	3,500 CFM @ 8.0" w.g.	4,000 CFM @ 8.0" w.g.
	3,000 CFM (MAX) @ 5.0" w.g.	4,500 CFM (MAX) @ 6.0" w.g.	5,000 CFM (MAX) @ 7.0" w.g.
Phase / Voltage	1PH 208-230V	1PH 208-230V	
	3PH 208-230/460V	3PH 208-230/460V	3PH 208-230/460V
	3PH 575V	3PH 575V	3PH 575V
Power (hp)	5.0 (3.75 Kw)	7.4 (5.5 Kw)	10.0 (7.5 Kw)
Fan RPM	1,750	1,750	1,750
Impeller	Steel	Steel or Aluminum	Steel or Aluminum
Fan flange (w/ bolt holes)	250 mm	280 mm	400 mm
Fange flange to QF or RAW OD	8" to 12" \emptyset	8" to 14" \emptyset	10" to 16" \emptyset
# of filter elements	16	24	24
Filter media area (ft ²)	162	243	360
Height	9' - 0"	9' - 0"	10' - 10"
Width	6' - 10"	8' - 9"	8' - 9"
Depth	4' - 2"	4' - 2"	4' - 2"
Collection options	45 gal, 8 mil, clear, plastic bags	45 gal, 8 mil, clear, plastic bags	45 gal, 8 mil, clear, plastic bags
	42 gal drums, sight glass, and handles	42 gal drums, sight glass, and handles	42 gal drums, sight glass, and handles
		230 gal dump bin with safety chain	230 gal dump bin with safety chain
Estimated shipping weight range* (lbs)	880 to 1,500	1,100 to 1,700	1,350 to 2,000

* Based on one (1) unit with collection device and duct transition

How the S-Series Works (Model S-500 with collection bags shown)

During normal operation

1. During normal operation, the dust laden air from the plant travels down the supply duct (1)
2. The dirty air then enters the Nederman material handling fan (2)
3. The dust then enters the hopper section (5) of the filter
4. Air slows down in the hopper and heavier dust particles fall down into the inside of the collection bags (6)
5. The remaining dust then travels up into the inside of the filter bags (4)
6. The air, which originated from the plant, is now clean and passes through the filter bag into the surrounding atmosphere (3)



While cleaning

1. The S Series may only clean "off-line", when the Nederman fan (2) has stopped rotating
2. The S Series is cleaned by applying physical force to the outside of the filter bag (4) which, in effect, shakes the
3. The dust cake, which hangs on the inside of the filter bag, falls into the hopper section and then into the collection bags (6) below

