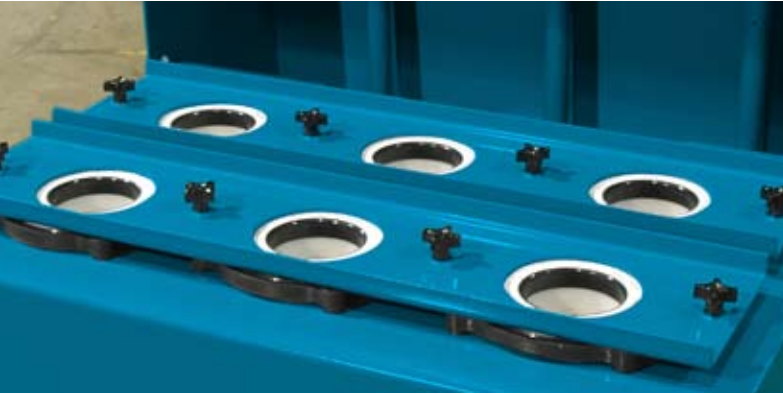


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# *Nederman*



**SiloSafe  
Cartridge Filter**

# The SiloSafe (1,500 CFM)

*A pulse-jet filter specifically suited for use on silos that are pneumatically filled by road tankers.*



## **Applications:**

*Silo Venting • Cement batching and distribution facilities*

## **Features**

- Long, corrosion free service from powder coating
- Strong 7 gauge fully-welded steel construction.
- Suitable for use with ATEX certified vessels handling potentially explosive dust. Design reduced explosion pressure = 0.75bar. (Test Pred = 1.35bar).
- Low profile and top-removal cartridges
- Enhanced cleaning, higher efficiency and longer cartridge life with Nederman's patented Unclean cartridges
- Only 6 cartridges to replace. Replacing cartridges is less than half the price of some comparable filters
- Enough filter area (258 ft<sup>2</sup>) to handle virtually all materials delivered pneumatically to silos

# Specifications

**Product Type:** cased, reverse jet cleaned cartridge filter, with base mounting flange for silo venting applications, with natural or fan assisted ventilation.

**General construction:** hot rolled mild steel, 7 gauge thick, fully welded fabrication, powder coated. Principal fittings: surface is protected by paint system properly for the environment corrosivity category C4 according to EN ISO 12944-2. For use with potentially explosive dust: design  
Reduced Explosion Pressure (Pred) = 0.75 bar (tested to Pred = 1.35 bar).

**Filter cartridges:** thermal bonded pleated polyester tubular cartridges incorporating *Uniclean* enhanced cleaning insert.

Individual cartridge filter area: 43 ft<sup>2</sup>  
Standard media: CA100 polyester. (others available)  
Total no. of cartridges: 6  
Total filter area: 258 ft<sup>2</sup>

**Reverse jet cleaning:** single 2.3 gallon steel compressed air reservoir.

Max. working pressure: 102 psi  
Test pressure: 189 psi

Normal cleaning pressure for cartridges: 80 psi.  
Compressed air consumption (typical): 2.1 ft<sup>3</sup> per pulse.

For standard 10 sec. interval between pulses, this is equivalent to (3.9 cfm@NTP) for continuous operation over typical duty cycle.

**Cleaning valves:** combination 1" diaphragm / solenoid valves, 24v DC.  
Number of cleaning valves: 3 Each valve services 2 cartridges.

**Reverse jet timer:** (typically) 6-way printed circuit board housed in IP65 enclosure.  
Short circuit protection: 1 amp circuit board fuse.

**Fan (SiloSafe 24-fan):** high efficiency backward curved radial fan with 3 hp, 3 phase induction motor.

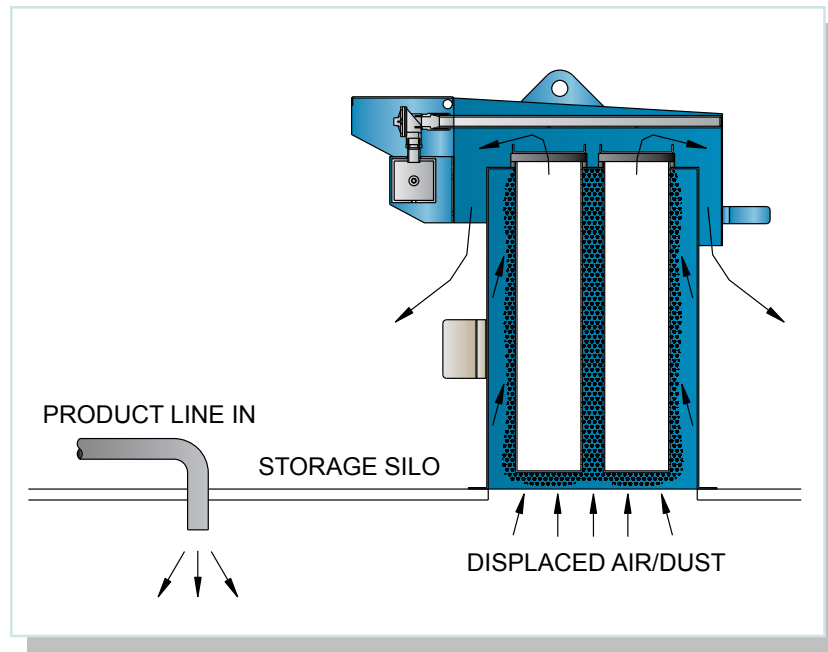
**Electrical Supply:** SiloSafe 24: 110 or 220V Single Phase 50 or 60 Hz.  
SiloSafe 24-fan: add 230/460 3-phase supply for 3 hp fan.

**Unit weight:** SiloSafe 24: 275 lbs. approximately.  
SiloSafe 24-fan: 355 lbs. approximately

# How the Silosafe Works

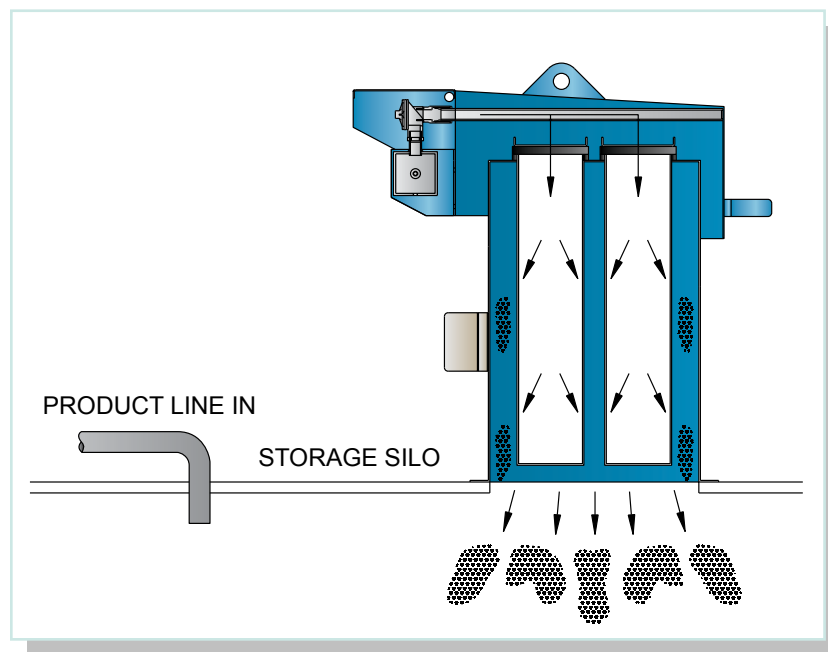
## ...during normal operation

1. The dust laden air travels into the silo through the product line in.
2. The displaced air/dust travels through the cartridges in the Silosafe 24 vent.
3. As the Silosafe 24 vent filters the out flowing air, the dust collects on the outside of the cartridges.
4. Clean air is then exhausted from the Silosafe 24 vent.



## ...while cleaning

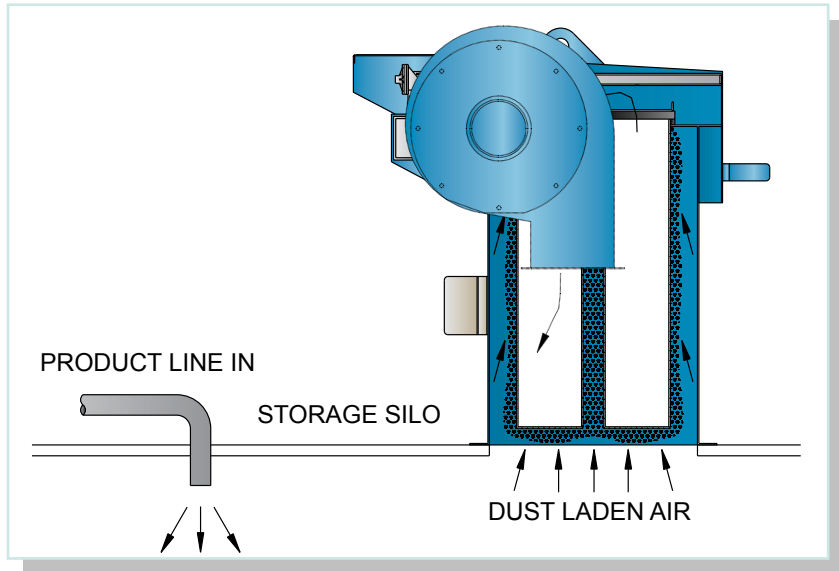
1. The Silosafe 24 utilizes a compressed air cleaning system.
2. A compressed air line must be connected to one end of the compressed air manifold.
3. At regular intervals, a solenoid valve opens to allow compressed air from the compressed air manifold into the jet tube. The jet tubes are aligned above each cartridge.
4. The downward blast blows the dust off the cartridges (from the inside out) where it settles back into the silo.



# How the SiloSafe Fan Assist Works

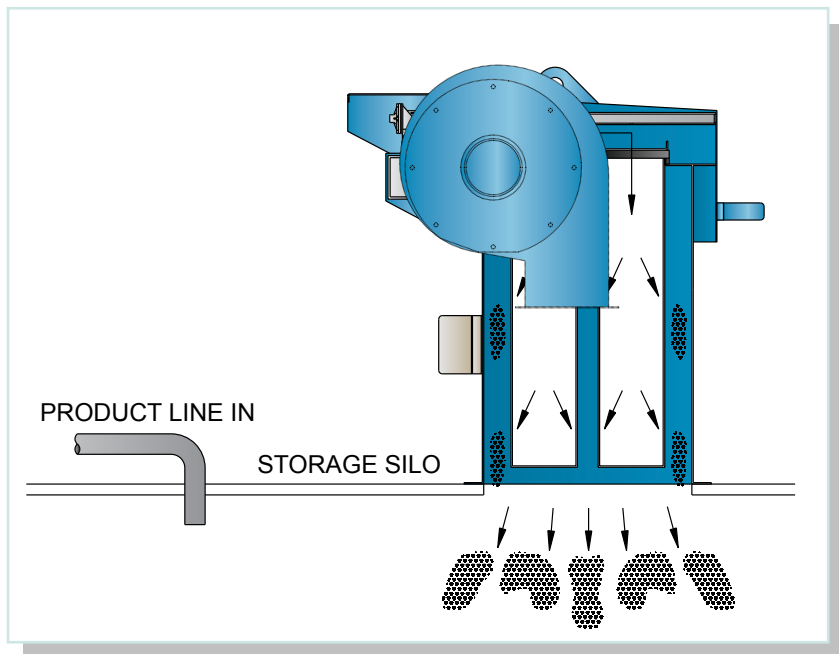
## ...during normal operation

1. The dust laden air travel into the silo through the product line in.
2. The fan (shown in dots) pulls the dust laden air through the cartridges of the Silosafe 24 Fan.
3. As the Silosafe 24 Fan filters the out flowing air, the dust collects on the outside of the cartridges.
4. Clean air is then exhausted from the Silosafe 24 Fan.

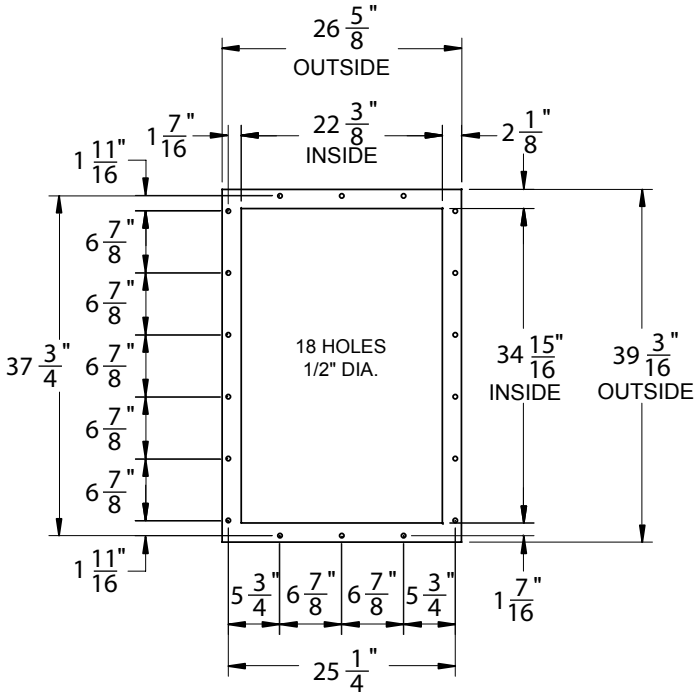


## ...while cleaning

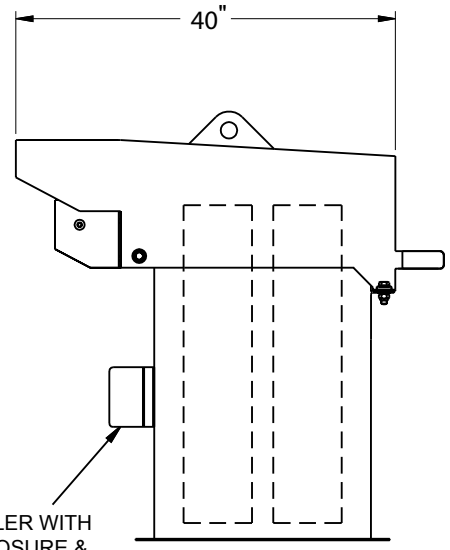
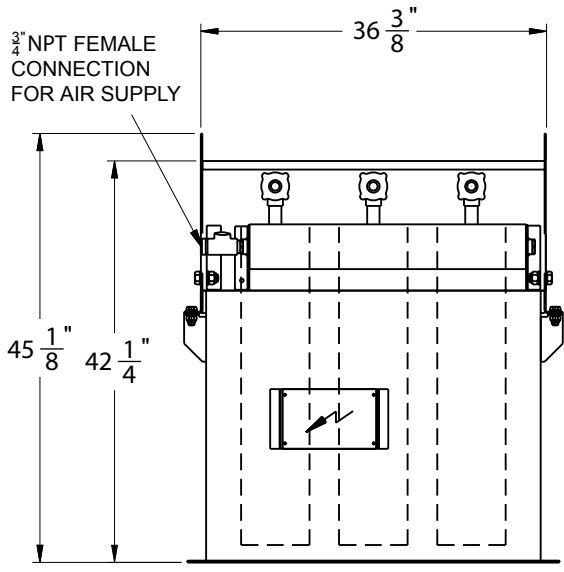
1. The Silosafe 24 Fan utilizes a compressed air cleaning system.
2. A compressed air line must be connected to one end of the compressed air manifold.
3. Once the fan is turned off, a solenoid valve opens to allow compressed air from the compressed air manifold into the jet tube. The jet tubes are aligned above each cartridge.
4. The downward blast blows the dust off the cartridges (from the inside out) where it settles back into the silo.



# Vent

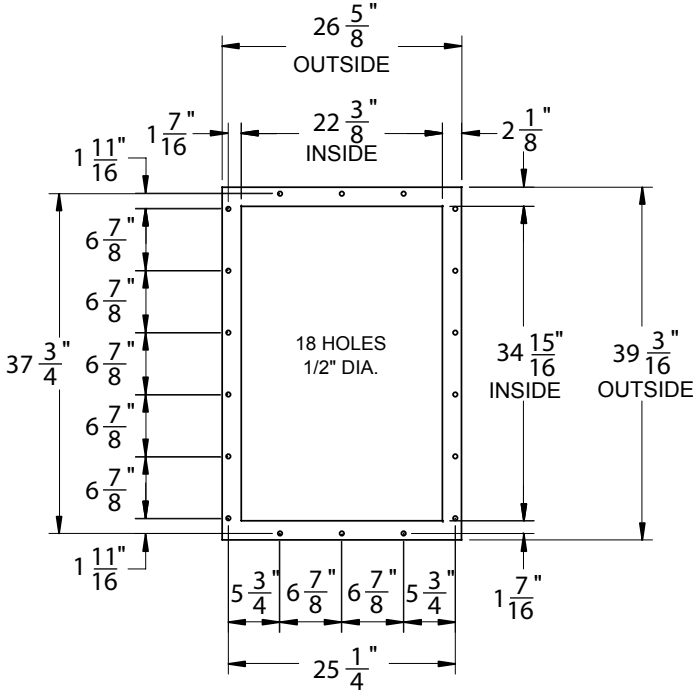


FILTER MATING FLANGE DETAILS

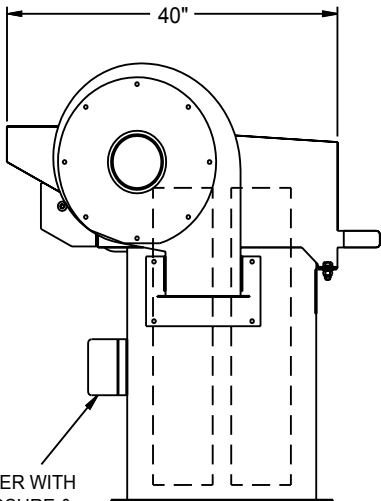
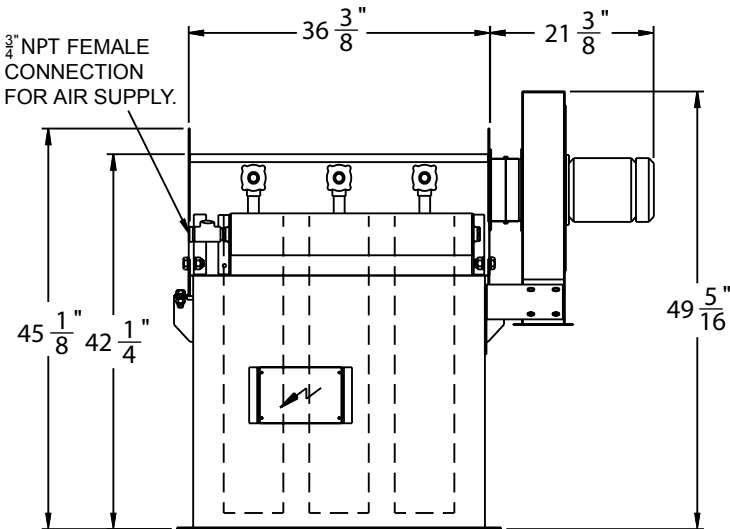


CONTROLLER WITH IP65 ENCLOSURE & LOCAL ISOLATOR, REQUIRING 110V OR 220V SUPPLY

# Fan



FILTER MATING FLANGE DETAILS



CONTROLLER WITH IP65 ENCLOSURE & LOCAL ISOLATOR, REQUIRING 110V OR 220V SUPPLY



# Bringing superior conditions to the workplace and the environment

For more than 60 years Nederman has developed, manufactured and marketed products and system solutions to reduce the strain on the environment and improve working conditions in numerous industries.

Our products and systems have been ground-breaking in industries such as Machining, Metal Fabrication, Automotive, Composite Manufacturing, Food, Paper, Chemical, Pharmaceutical and many others.

Today companies all over the world are using equipment from Nederman.



**Nederman LLC**  
102 Transit Ave  
Thomasville NC, 27360  
800-533-5286

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