



## **Cyclofilter**

Cutting • Grinding • Heavy Moulding • Milling • Polishing  
Rice • Wood • Large Particle Separation

# Cyclofilter

## Features



Suitable for collection of virtually any type of dry dust

**4,500 - 160,000 m<sup>3</sup>/h**

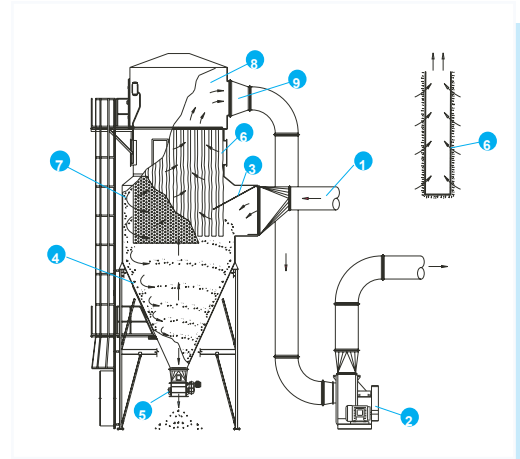
- High efficiency design
- Outdoor placement
- Excellent for high volumes of waste
- Small footprint
- Positive or negative configurations
- Single units up to 160,000 m<sup>3</sup>/h

***Cutting • Grinding • Heavy Moulding • Milling • Polishing  
Rice • Wood • Large Particle Separation***

## How Nederman “Cyclofilter” Works

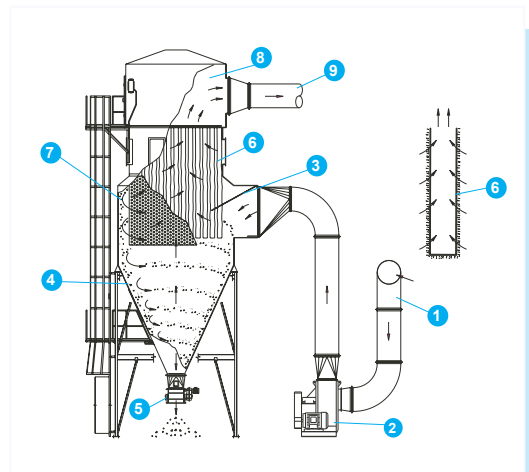
### ...A negative pressure configuration

1. During normal operation, the dust is drawn down the supply duct 1 and into the Nederman Cyclofilter.
2. Upon entering the Nederman Cyclofilter, the air and material are diverted into a spiral motion around the inside perimeter. 4 The centrifugal force applied by the side wall allows the heavier material to fall out of the air stream and out of the material discharge 5 at the bottom of the collector.
3. All of the filter bags 6 are contained within a specially designed perforated cylinder 7 which protects the bags from abrasion. The perforations also allow air through which reduces the upward velocity of the remaining air.
4. The dirty air collects on the outside of each filter bag 6 while the clean air passes through to the middle. A “tube sheet” 7 holds the bags open at the top and allows the clean air to escape into the clean air chamber 8 and into the air outlet. 9 From there, duct work connects the clean air outlet to the main fan 2.



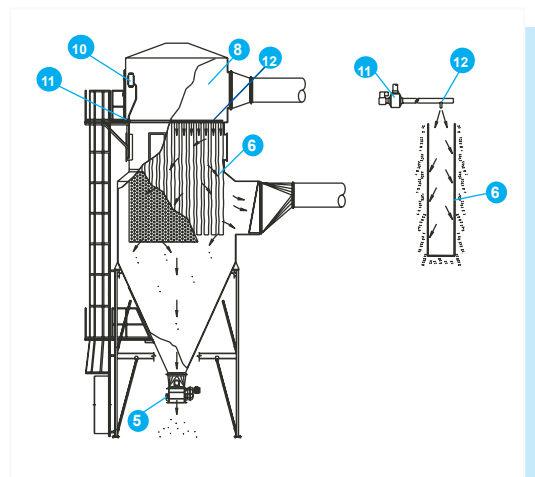
### ...A positive pressure configuration

1. During normal operation, the dust travels down the supply duct 1 and into the material handling fan 2. From there, it is blown up into the inlet of the Nederman Cyclofilter 3.
2. Upon entering the Nederman Cyclofilter, the air and material are diverted into a spiral motion around the inside perimeter. 4 The centrifugal force applied by the side wall allows the heavier material to fall out of the air stream and out of the material discharge 5 at the bottom of the collector.
3. All of the filter bags 6 are contained within a specially designed perforated cylinder 7 which protects the bags from abrasion. The perforations also allow air through which reduces the upward velocity of the remaining air.
4. The dirty air collects on the outside of each filter bag 6 while the clean air passes through to the middle. A “tube sheet” 7 holds the bags open at the top and allows the clean air to escape into the clean air chamber 8 and into the air outlet. 9



### ...while cleaning

1. The Nederman Cyclofilter comes standard with a Delta-P gauge to control the compressed air cleaning. In essence, the filter cleans itself when it needs to!
2. A compressed air line must be connected to the open end of the compressed air manifold 10 located within the clean air chamber 8.
3. When the filter bags 6 begin to get dirty, a pressure sensor detects the increased resistance through the bags. A solenoid valve 11 opens to allow air in from the manifold and into the jet tubes 12. The jet tubes are aligned above each row of filter bags.
4. The downward blast blows the dust off the tubular filter bag 6 from the inside out. The dust then drops into the hopper section where it then exits out the material discharge. 5



# Cyclofilter

## Specifications

MODEL NUMBER	NUMBER OF BAGS	FILTER MEDIA (sq.m.)	Maximum AIR flow (m <sup>3</sup> /h)*	'A' 'B'		'C' 'D'		'E'	'F'	'G' (dia.)	'H'***	'J' (dia.)	WEIGHT (kg.)***
4Y1	22	30	7,500	1,645	7,640	7,500	4,520	485	155	500	1,550	400	850
4Y2	37	50	12,500	2,105	8,560	8,350	5,100	575	220	500	1,550	400	1,070
4Y3	41	74	18,500	2,285	9,490	9,220	5,920	840	280	500	1,550	450	1,400
4Y4	54	97	25,000	2,470	10,130	9,800	6,380	1,090	285	800	2,000	500	1,880
4Y5	82	148	37,500	2,945	10,530	10,100	6,480	1,480	320	800	2,000	550	2,700
4Y6	110	198	50,000	3,430	11,320	11,000	7,190	1,585	400	950	2,200	600	3,460
4Y7	154	277	70,000	4,110	12,140	11,500	7,620	1,750	505	2 x 800	2,200	600	4,600
4Y8	208	375	94,000	4,710	13,280	12,700	8,760	1,950	650	2 x 950	2,600	600	5,630
4Y9	274	494	124,000	5,335	3,710	13,350	9,630	1,130	700	2 x 950	2,600	800	7,600
4Y10	354	638	160,000	5,985	14,280	13,720	9,900	1,320	780	2 x 1,150	3,000	800	8,200

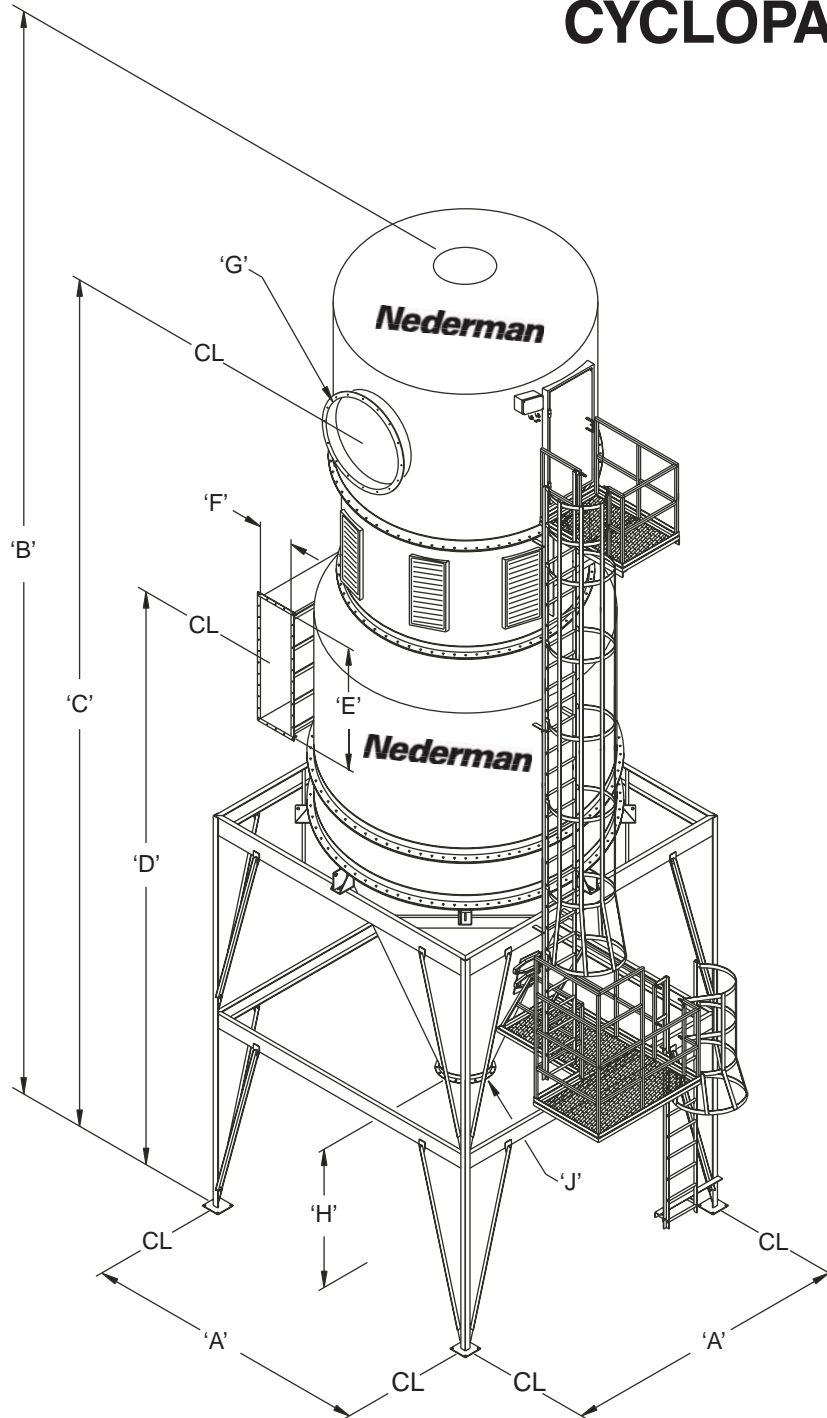
\* Maximum air flow is based on loading 250 m<sup>3</sup>/m<sup>2</sup>/h with short operation time and free flowing dust, typically loading in wood industry is 180-200 m<sup>3</sup>/m<sup>2</sup>/h and rice mill app. 140-160 m<sup>3</sup>/m<sup>2</sup>/h.

\*\* Height (H) adapt by platforms.

\*\*\* - Weight includes filter, airlock, standard structure, access platforms and ladders.  
 - Unplugged weight should be used for transportation purposes only.  
 - Plugged weight based on a process material weight of 195 kg./m<sup>3</sup>.

**Specifications**

**CYCLOPAC**



# Cyclofilter

## Agriculture Applications



## Wood Applications





## FACTS ABOUT NEDERMAN

The Nederman Group is one of the world's leading suppliers of products and solutions within the environmental technology sector, focusing on industrial air filtration and recycling.

Nederman products and solutions contribute to reducing environmental impacts from industrial production and to creating safe and clean working environments whilst boosting production efficiency.

The group's offering covers everything from the design stage through to installation, commissioning and servicing. Nederman has subsidiaries in 29 countries and agents and distributors in over 30 countries.

Nederman is ISO 9001 and 14001 certified. The group develops and produces in its own manufacturing and assembly units in Europe, North America and Asia.

In 2010 Nederman acquired Dantherm Filtration, thereby forming the world's leading group within industrial air filtration.

# **Nederman**

[www.nederman.com](http://www.nederman.com)

### **Nederman S.E.A. Co., Ltd.**

66/1 Moo 11 Bangkruey-Sainoi Road, T. Bangbuathong, A. Bangbuathong, Nonthaburi 11110, Thailand.  
Phone: +66 2715 1300 Fax: +66 2715 1301 Email: [info.th@nederman.com](mailto:info.th@nederman.com)

**Vietnam Representative Office in Ho Chi Minh City:** Phone: +84 835 265 541 Fax: +84 835 265 541 Email: [info.vn@nederman.com](mailto:info.vn@nederman.com)

**Nederman (Malaysia) Sdn. Bhd. (892768-T):** Phone: +603 8940 1192 Fax: +603 8940 1196 Email: [info.my@nederman.com](mailto:info.my@nederman.com)

**Indonesia Representative Office:** Phone: +62 815 1499 7996 Fax: +62 815 1499 7996 Email: [info.id@nederman.com](mailto:info.id@nederman.com)

**Nederman Sales companies in:** Australia, Austria, Belgium, Brazil, Canada, China, Czech Rep. Denmark, France, Germany, Hungary, India, Ireland, Malaysia, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Slovak Republic, Spain, Sweden, Thailand, Turkey, United Kingdom, USA, Vietnam

**Nederman Agents in:** Bulgaria, Cyprus, Egypt, Estonia, Finland, Greece, Holland, Hongkong, Iceland, Iran, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Malaysia, New Zealand, Philippines, Saudi Arabia, Serbia, Singapore, Slovenia, South Africa, Switzerland, Taiwan R.O.C, Thailand, Turkey, United Arab Emirates