



**Nederman**

# Mobile Dust and Fume Extractors

Healthier work environment and higher productivity  
with optimized filter technology and efficient products



# Optimized filter technology for high efficiency extraction

## Benefits associated with proper dust and fume extraction

- Cleaner air
- Sustainability and reduced emissions
- Healthier and safer work environment
- Energy savings
- Reduced operating and maintenance costs
- Compliance with laws and regulations

Many industrial processes generate contamination to the air or in the facilities in form of fumes, dust and particles. Airborne contaminants can be hazardous to the human health and it's important to make sure they are extracted at the source before reaching the breathing zone. Not only workers are at risk in unsafe environments, the production equipment, as well as the end products, are negatively affected from the lack of adequate safety measures.

### Importance of fume and dust control

Fumes, dust and particles are generated in many different ways. Typical sources are weld fume or dust from cutting, grinding, sanding or handling of powders. Nederman offers everything from single products to complete systems. No matter what your process looks like we can recommend a complete solution from our extensive solution specific product portfolio, helping you to take control over your factory air.

### Mobile fume and dust extractors

When mobility, flexibility and a compact footprint is key, a mobile solution is often the best way to avoid contaminant exposure. Nederman FilterBox and FilterCart range of mobile fume and dust extraction units are easy to move around your factory to wherever the extraction is needed. FilterBox and FilterCart have user-friendly design based on proven technology with disposable or cleanable filters for long life between filter changes. Their versatility in terms of capacity, features and filter types enable them to perform optimal in most applications.

Nederman has a full range of filter media to fulfill the demands of almost any dust or fume application:

Spunbond Polyester (PET) - Cleanable for FilterBox M and FilterBox A

Nanofiber - Disposable for FilterCart+ and cleanable for FilterBox A+

ePTFE - Cleanable for FilterBox A++

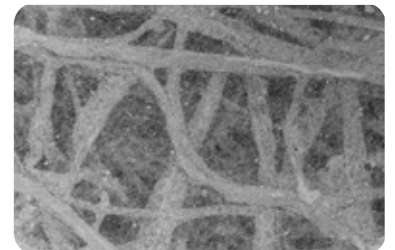
### Nanofiber Technology - ideal for weld fume

At Nederman, workers health and safety is our primary concern.

International health organizations recognize the importance of preventing health risks associated with fumes and smoke generated during welding processes by minimizing worker exposure to hazardous metal particulate that can be present in welding fume.

Nederman nanofiber filter media is ideally suited for the effective capture of fumes generated during welding processes and is used not only in larger filters but is now available also in mobile products like FilterCart+ (disposable filters) and FilterBox+ (cleanable filters).

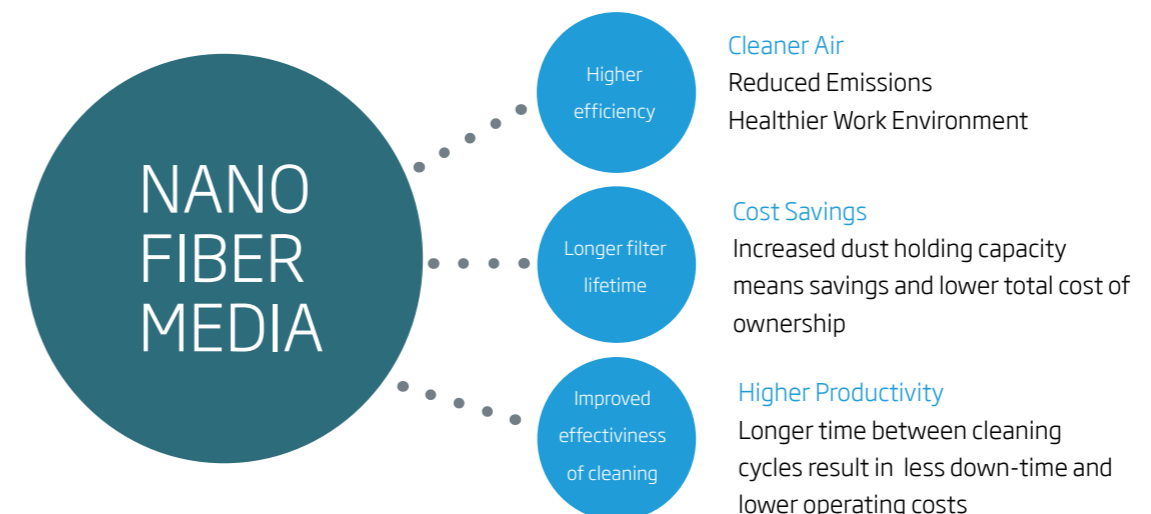
Nanofiber technology is a thin layer of synthetic fibers that is deposited on the surface of a proprietary filter base sheet. This fine layer is extremely efficient in capturing sub-micron particles which are respirable for humans and depending on the process, may also include carcinogens such as hexavalent chrome. As the Nanofiber captures the small particles on the surface before they can penetrate and become clogged in the base layer, the ability to clean the filter is significantly improved.



Nederman Nanofiber (600x)



Nanofiber Media Cross-Section (600x)





# The right solution for your needs



## FILTER-CART



- Disposable filters (non-cleaning)
- For intermittent to light duty use
- NANOFIBER media 30 m<sup>2</sup>
- 1050 m<sup>3</sup> per hour capacity
- W3 approved version available
- Active Carbon version available

The FilterCart products is a series of light-weight, portable and easy to manoeuvre dust and fume extractors available in three main versions, all fitted with non-cleanable filter cartridges, an Original extraction arm and with the possibility to add a HEPA 13 filter. The new NANOFIBER filter with optimised area and media offers up to 30% longer filter life compared to previous versions of FilterCart.

FilterCart+ is delivered with a disposable 30 m<sup>3</sup> NANOFIBER high efficiency filter making it the ideal choice for light duty or medium duty intermittent use such as maintenance and repair welding or dust applications where 1000 m<sup>3</sup> per hour or less is required.

- Delivered with a 2 or 3 m Original extraction arm for easy and reliable hood positioning. The arm is already fitted to the unit enabling a fast and easy setup.
- Extraction hood Original with - or without LED spotlight for improved light conditions.
- Recommended applications:
  - Welding: Suitable for TIG or MIG/MAG up to 200A typically up to 5 hours a week
  - Dust: Non-combustible dust or powders
- Accessories: Spark protection, HEPA 13 filter, 7,5 m<sup>2</sup>.

FilterCart+ W3 is designed specifically for welding and is delivered with a 30 m<sup>3</sup> NANOFIBER high efficiency filter and is approved for welding fumes category W3 according to EN 15012-2.

- Delivered with a 2 or 3 m Original extraction arm, which is already fitted to the unit.
- Metal extraction hood with integrated LED spotlight for improved light conditions.
- Warning signal when the filter is full
- Recommended applications:
  - Welding: Suitable for TIG or MIG/MAG up to 200A including high alloy welding.
- Accessories: Spark protection, HEPA 13 filter, 7,5 m<sup>2</sup>.

## FILTER-BOX



- Cleanable filters
- For light to heavy duty production use
- PET, NANOFIBER or ePTFE media
- FilterBox 10 capacity: 1000 m<sup>3</sup>/hour
- FilterBox 12 capacity: 1200 m<sup>3</sup>/hour
- W3 approved

The FilterBox dust and fume extractors are fitted with the most advanced cleaning system on the market for superior filter performance and lifetime, making them highly suitable for production use. The complete range includes numerous variants depending on capacity, features and filter type needed.

FilterBox is the ideal choice for almost any dust or fume application including TIG, MIG/MAG, FCAW or MMA welding or extraction of non-combustible dust or powders including fibrous, light abrasive, sticky or hygroscopic applications. FilterBox is available in the following versions where 10 indicates a 1000m<sup>3</sup>/hour capacity and 12 indicates a 1200 m<sup>3</sup>/hour capacity.

FilterBox 10/12M with Manually cleaned Polyester (PET) filter, 13m<sup>3</sup>

FilterBox 10/12A with Automatically cleaned Polyester (PET) filter, 13m<sup>3</sup>

FilterBox 10/12A+ with Automatically cleaned NANOFIBER (pneumatic cleaning only) high efficiency filter, 17m<sup>3</sup>

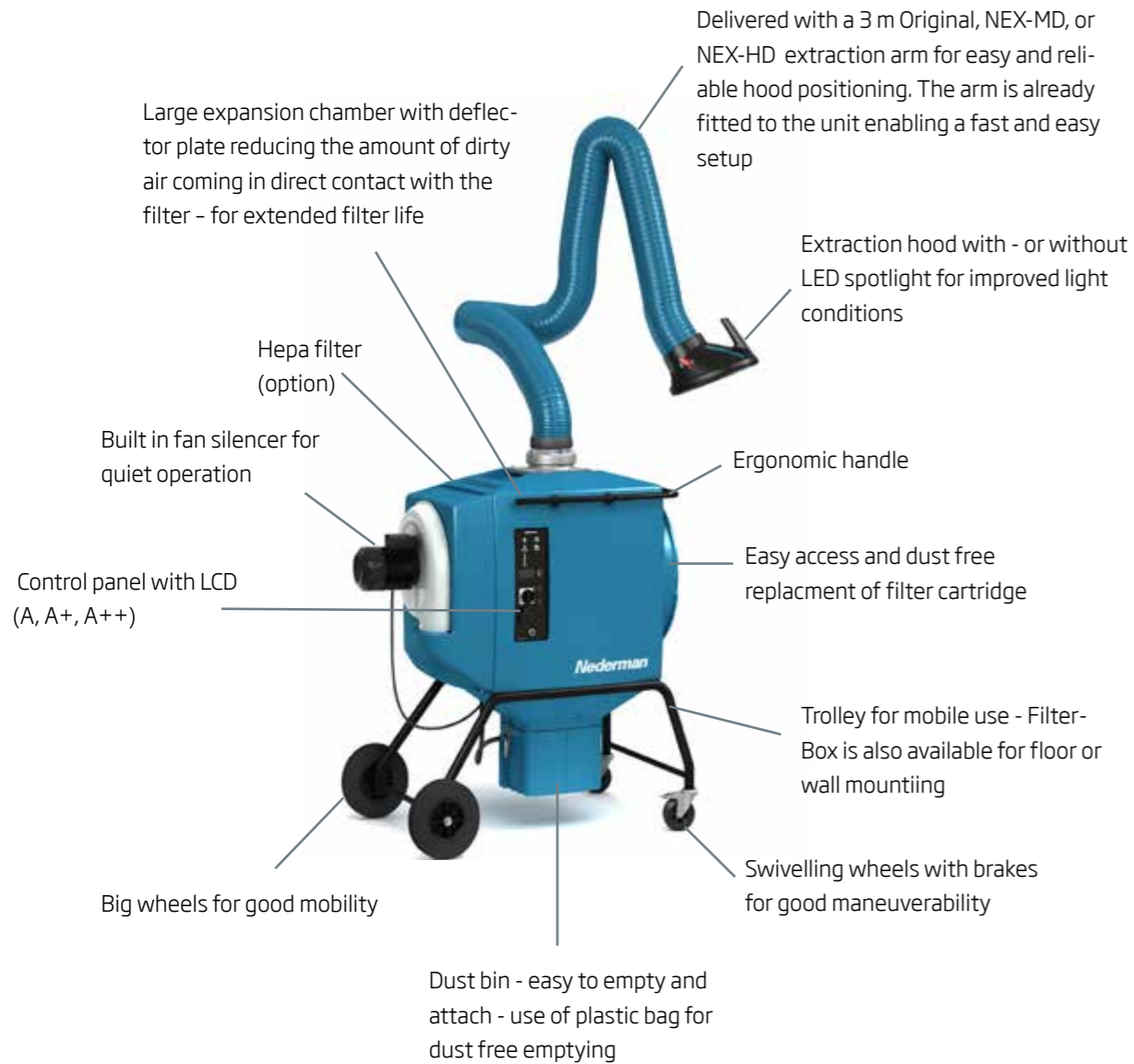
FilterBox 10/12A++ with Automatically cleaned ePTFE high efficiency filter, 13m<sup>3</sup>

FilterBox is equipped with an advanced filter cleaning system that ensures deeper filter cleaning, resulting in longer filter life. For dust applications, the unit is cleaned mechanically. For weld fumes a combination of mechanical and compressed air cleaning is used, or compressed air only for the NANOFIBER filter. Manual versions are cleaned with a crank and automatically cleaned versions have a motorized filter cleaning system. An automatic damper prevents dust from leaking out while cleaning.

Thanks to the larger filter area and the fact that the NANOFIBER media is surface loading, welders can work for up to 10 x longer before being interrupted by the automatic cleaning cycle, leading to increased productivity. In combination with the larger filter area of 17m<sup>2</sup>, with significantly longer filter life compared to a standard spunbond polyester filter, the NANOFIBER filter presents the most optimal and cost-efficient filter choice for welding applications.

See Application Guide on following pages for further details.

# FilterBox product features



- Automatic fan start and stop options available with welding sensor clamp (A, A+, A++ models), in-line voltage, or compressed air tool start (A++)
- Visual and audible filter alarm warning
- Approved for welding fumes category W3 according to EN 15012-2
- Available as a mobile unit on wheels or attached to a floor stand
- Spark protection for the hood (accessory)
- HEPA H13 or H14 filter 10 m<sup>2</sup> for additional protection from harmful particles (accessory)

Did you know you can UPGRADE your old FilterCart or FilterBox to our newest NANOFIBER or ePTFE media?



The new NANOFIBER cartridges for FilterCart+ are backwards compatible so you can get the same performance as our newest product simply by buying a new filter cartridge. All FilterBox can be upgraded with our new high efficiency ePTFE cartridge and all FilterBoxes with pneumatical cleaning can be upgraded with the new NANOFIBER cartridges.

## FilterBox

APPLICATION

|    |   | M | A | A+ | A++ |
|----|---|---|---|----|-----|
| 10 | Welding: TIG  | ● | ● | ●  | ●   |
|    | Welding: GMAW (MIG/MAG) <200A (excluding High Alloy)                  | ● | ● | ●  | ●   |
|    | Dust: Light abrasive, fibrous or fine up to 1000 m <sup>3</sup> /hour | ● | ● | ●  | ●   |
|    | Dust: Sticky or hygroscopic dust up to 1000 m <sup>3</sup> /hour      | ● | ● | ●  | ●   |
| 12 | Powder: Up to 1000 m <sup>3</sup> /hour                               | ● | ● | ●  | ●   |
|    | Welding: GMAW (MIG/MAG), up to 350A or High Alloy GMAW                | ● | ● | ●  | ●   |
|    | Welding: FCAW   | ● | ● | ●  | ●   |
|    | Welding: MMA / Stick Welding, <200A (excluding High Alloy)            | ● | ● | ●  | ●   |
| 12 | Welding: MMA / Stick Welding, up to 350A or High Alloy MMA            | ● | ● | ●  | ●   |
|    | Dust: Light abrasive, fibrous or fine up to 1200 m <sup>3</sup> /hour | ● | ● | ●  | ●   |
|    | Dust: Sticky or hygroscopic dust up to 1200 m <sup>3</sup> /hour      | ● | ● | ●  | ●   |
| 12 | Powder: Up to 1200 m <sup>3</sup> /hour                               | ● | ● | ●  | ●   |

FEATURES AND OPTIONS OVERVIEW

| Filter Material  | PET<br>Filter PW-FB-13 | PET<br>Filter PW-FB-13 | NANO<br>Filter NANO-FB-17 | ePTFE<br>Filter PTFE-FB-13 |
|--|------------------------|------------------------|---------------------------|----------------------------|
| Filter Area  | 13m <sup>2</sup>       | 13m <sup>2</sup>       | 17m <sup>2</sup>          | 13m <sup>2</sup>           |
| Filter Efficiency  | 99%                    | 99%                    | 99,9%                     | 99,9%                      |
| Filter Cleaning mode   | Manual                 | ✓                      |                           |                            |
|  | Automatic              |                        | ✓                         | ✓                          |
| Filter Cleaning method   | Pneumatic              | ✓                      | ✓                         | ✓                          |
|  | Mechanical             | ✓                      | ✓                         | ✓                          |
| High efficiency filter (Recommended for all High alloy welding)                              |                        |                        | ✓                         | ✓                          |
| Long-life filter: Lowest Total Cost of Ownership for welding applications                    |                        |                        | ✓                         |                            |
| Automatic fan start via a connected electrical or compressed air tool                        |                        |                        |                           | ✓                          |
| Light with switch + Fan switch on hood   | -                      | Option                 | Option                    | ✓                          |
| Light with switch on hood  | Option                 | Option                 | Option                    | -                          |
| Welding Sensor Clamp   | -                      | Accessory              | Accessory                 | Accessory                  |
| HEPA H13 filter 10 m <sup>2</sup> 99,75% efficiency (Recommended for all High Alloy welding) | Accessory              | Accessory              | Accessory                 | Accessory                  |
| HEPA H14 filter 10 m <sup>2</sup> 99,9% efficiency (Recommended for all High Alloy welding)  | Accessory              | Accessory              | Accessory                 | Accessory                  |

FilterBox is not for use in environments where combustible dust or gases are present, and it is not for use in filtering combustible dust or gases. For welding applications, compressed air cleaning is required.

The following items are available as replacement cartridges:

- PET Standard filter cartridge Filter PW-FB-13. Compatible with all FilterBoxes.
- NANO High efficiency filter cartridge Filter NANO-FB-17. Compatible with all FilterBoxes with pneumatic cleaning (can be retrofitted).
- ePTFE High efficiency filter cartridge Filter PTFE-FB-13. Compatible with all FilterBoxes.
- PTFE Antistatic high efficiency filter cartridge PWAHE15. Contact Nederman for further information on compatibility and applications.

- Suitable for occasional to frequent use
- Suitable for frequent and regular use

Protecting people, planet and production



**Nederman**

## The Clean Air Company

### Our promise - contributing to a sustainable future

Clean air is a cornerstone of sustainable production. Our customers want to boost profitability by making their operations as efficient as possible. They want to meet high environmental standards and keep employees safe from fumes and dust. Nederman can help them on all counts. That's how we create value.

### The Clean Air Company - Vision 2025

Nederman celebrated its 75th anniversary in 2019. From the very beginning, the business idea was clean air. Today, the environment and sustainability are more relevant than ever and the demands are increasing to contribute actively to more efficient production and reduced emissions in industry. The next generation of solutions for clean industrial airflows is under development. Nederman is at the forefront of this development.