



All laboratory work during which gases, fumes and particles are handled in potentially hazardous quantities and concentrations must ensure efficient extraction and filtration. A well-designed and installed extraction system will not only increase safety, performance and efficiency, but will also minimize running costs and noise levels.



Articulated extraction arms are the best and most cost-efficient solution for places where small extraction volumes are required within a limited area. They can also be used when the pollution source is too large to be reasonably enclosed in a cupboard and has distinct points where the pollution might appear.

#### **Maximize capture efficiency**

There are many parameters that affect the articulated extraction arm's capture efficiency. Some of them are cross-draught caused by background ventilation, placement of other equipment, operator position and movement, and arm position. It is not always possible to control all of these parameters.

However, the optimized shape of Nederman's  $FX_2$  joints helps maximize airflow while minimizing pressure drop. The integrated mini hood enlarges the capture zone significantly when working close to the source. If the pollution source is located further away, Nederman offers extended capture hoods for maximum performance.



#### Nederman FX<sub>2</sub> in short

- Effective fume and dust extraction
- Low noise level and high energy efficiency
- Stable positioning with easy maneuverability
- Wide range available
- Aesthetic design
- Complete freedom when planning installation
- Maximum installation flexibility

## People, planet and products

Clean air is a cornerstone of sustainable production. With more than 70 years of experience in extraction and filtration of various air contaminants, Nederman is the global leader in industrial air filtration. Our goal is to protect people, planet and products from harmful effects of industrial processes. By doing that, we contribute to efficient production, environmental benefits and a safer workplace.

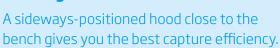
We deliver complete solutions that can easily be adapted to your particular needs. Our services cover everything from initial analysis and planning to installation, training, service and maintenance. We aim to continually develop our offer by adding new products and services, expanding our geographic presence and helping our customers develop their processes for sustainable production.





Scan the QR code to read our whitepaper "Improve Air Quality and Energy Efficiency by Optimizing Capture Efficiency with Nederman Articulated Extraction Arms (AEA)".





# Clean. Energy-efficient. Quiet.



Nederman FX<sub>2</sub> arms are made of lightweight anodized aluminium sections, with two or three adjustable, composite friction joints. Offering strength and durability combined with easy handling, they can be used in many types of environments. They are especially suitable for applications where small, flexible and easy-to-use arms are required.

#### **Unique maneuverability**

Nederman FX $_2$  arms are highly flexible, and simple to position, extend and retract. The two outermost arm joints can rotate 360°. This makes it possible to position the hood exactly where required. Once correctly positioned, the hood can be locked in place using two friction devices in the arm joints.



#### **Optimal efficiency and low noise**

The FX<sub>2</sub> arms were developed using computerized simulations, and the resulting highly improved airflows mean that smaller fans that consume less energy are required. Another user benefit is the reduced noise level. Depending on the airflow, this means a reduction of about 5 dB or more, when compared with similar arms on the market. Complementary Nederman products such as fans, ducting and control units can further increase energy efficiency.

#### **Aesthetic design**

The lean, smooth and aesthetic design allows Nederman  $FX_2$  arms to fit in well in a laboratory environment without compromising its durability and reliability. The swivel design is optimized to ensure a slim profile and clear sight.

Thanks to the long upper arm section, the  $FX_2$  PLUS swivel and accessories can be placed high up or above a false ceiling. It creates a modern design that easily blends in and prevents dust accumulation.





# The FX<sub>2</sub> range

Nederman  $FX_2$  arms present the most complete offering on the market. All arms are supplied with a mounted duct connector to facilitate coupling of external ductwork to the arm. The duct connector is made of rubber and fully

leak-proof. All arms are equipped with a mini hood. No extra extraction nozzle is required when working close to the source.



#### The Original model

A robust and reliable all-round arm for general applications where there is little risk of electrical discharges or attack by aggressive chemicals.

Available in 3 diameters: 50, 75 and 100 mm.



#### The ESD/EX model

The arm is made of conductive materials, eliminating the risk of static electricity and sparks. Designed for use in electronic environments where there is a risk of electrostatic discharges, the ESD/EX can also be used for certain applications in potentially explosive atmospheres.

Available in 3 diameters: 50, 75 and 100 mm.



#### The CHEM model

Profiles in anodized aluminium with a white electrophoretic deposition coating make the arm ideal for fume extraction in aggressive environments where corrosion resistance must be assured.

Available in 2 diameters: 75 and 100 mm.

## Did you know?

Nederman  $FX_2$  arms are supplied with a mini hood as standard – no extra extraction nozzle is required. The mini hood is also a universal interface for connecting to other hoods: the ergonomically designed

combi hood, the dome hood, the flange hood and the metal hood. All of them can be attached directly to the mini hood, irrespective of arm size.

# Nederman FX<sub>2</sub> arms for maximum flexibility

The Nederman FX<sub>2</sub> arms allow complete freedom when planning installation points. They can be mounted on ceilings, walls and floors or fixed to worktops.



**Connection Down**Mounting options:
bench edge, floor, or any
other horizontal surface



**Connection Down-Through**Mounting options:
through bench



**Connection Up**Mounting options:
ceiling, wall, shelf
edge, etc.



**Connection Up-PLUS**Mounting options:
ceiling, wall



### Adapt your installation

Nederman offers you a unique possibility to adapt the arm installation to your facilities. Cut2fit extension is an aluminium profile, which can be cut at any length and assembled together with the classic bracket for mounting arms to the ceiling or wall. With our cut2fit extension profile you are free to cut the profile length, which gives you unparalleled flexibility. In addition, we also provide complementary products such as filters, fans and control equipment that further let you adapt your installation.

Nederman  $FX_2$  arms are available in self-assembly kits, which include a fan, a filter, a fan speed controller, hoses, table bracket and connectors. No duct is needed. These kits provide a quick and conventient solution for creating a fume-free workplace.

# Complete solutions that protect your workplace



#### **Comprehensive product range**

Nederman is a world-leading environmental technology company with solutions that take their origin in "capture-at-source", i.e. extraction of contaminants right at the point of creation. We filter, clean and recycle to create eco-efficient production in demanding industrial surroundings. Our offer includes individual products, engineering design, installation, commissioning and service. By continually adding new skills and solutions and expanding our geographic presence, we help our customers to develop their businesses both economically and ecologically.



#### **Extensive experience**

For more than 70 years, Nederman has developed products and solutions to reduce the strain on the environment and protect people from harmful particles, fibres, dust, gas, smoke and oil mist. We have extensive experience in how to create a safe working environment. Our accumulated know-how is easily accessible when you plan a new facility or need to modernize existing operations.



#### **Worldwide presence**

Nederman has a strong global presence in both sales and production. We have our own sales companies in 25 countries and distributors in more than 30 countries. Production is performed in 12 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.



Nederman is a world-leading environmental technology company. We filter, clean and recycle to create eco-efficient production in demanding industrial surroundings.

For more than 70 years, Nederman has developed, manufactured, and installed products and 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, mining, automotive, composite manufacturing, food, pharmaceuticals, wood-working, and many others.