Nederman

Welding & Thermal Cutting

Fume and dust control solutions for welding and thermal cutting processes

Take Control of Your Factory Air

The Clean Air Company

- Complete Solutions. Broad range of fume extraction solutions that allows us to provide the right product.
- Industry Expertise. 80 years of experience with tens of thousands of successful installations globally.
- Quality and Reliability. Welders around the world trust our products every day in harsh environments to deliver clean air.
- Turn-Key Approach. From design, commissioning to service and maintenance, we have all your needs covered.
- Sustainable Partner. Commitment to deliver clean air solutions to help manufacturers protect people, planet and production.

Protect welders and production from weld fume

Welding and other thermal processes generate hazardous fumes that pose serious health and safety risks to today's manufacturers. Short term exposure can lead to sore throats, eye irritation, and metal fume fever, while long-term exposure may result in chronic respiratory diseases or even cancer.

Beyond the human cost, uncontrolled weld fumes settle on equipment, infiltrate electrical cabinets, and contaminate products–leading to unplanned downtime, increased maintenance, and additional cleaning.

Recognizing these risks, international health and safety agencies have enforced strict exposure limits for airborne contaminants. Notably, even fumes from mild steel welding are now classified as carcinogenic, reinforcing the need for effective mitigation strategies.

The most effective way to safeguard workers and equipment is to capture fumes at the source–before they enter the breathing zone or settle in the environment. Nederman offers a comprehensive range of weld fume extraction and filtration solutions designed to protect both people and productivity.

Did you know?

The International Agency for Research on Cancer (IARC) classifies weld fume as a known carcinogen.

Clean air, stronger business

In today's competitive manufacturing world, controlling weld fumes isn't optional–it's essential. Poor air quality impacts worker health, productivity, and retention, costing businesses time, money, and talent. The facts speak for themselves.

30+
Metals and chemicals in weld fume

Weld fume is a complex mixture of metallic compounds – including manganese, nickel and chromium.

60%
Increased cognitive ability

Well-ventilated environments can increase worker focus by 60% compared to those in poorly ventilated spaces.

33%
Would leave company

1 in 3 workers would consider leaving their job due to poor indoor air quality.

Clean air. Safer workplaces. Smarter operations.

At Nederman, we believe that clean air is not just a safety requirement–it's a competitive advantage. With increasing demands on productivity, sustainability, and compliance, manufacturers need solutions that go beyond basic fume extraction. Our clean air-optimized approach delivers advanced weld fume solutions that prioritize:

Health & safety. Protecting your workers from harmful exposure to carcinogenic metal fumes and particulates.

Compliance. Solutions that not only protect workers but comply with relevant standards including ISO 21904 and permissible exposure limits.

Process efficiency. Improve productivity and reduced downtime with cleaner, more comfortable workspaces and easy-to-maintain solutions.

Energy use. Minimizing energy consumption through advanced filter technology, monitoring and smart airflow control.

Clean air begins with effective capture

Effective weld fume control begins by understanding manufacturer's unique welding process and determining an effective method of capture at or near the source where possible. Nederman offers four proven methods tailored to fit any workspace and welding application:

On-torch

Extraction directly on the welding torch capturing fume at source protecting welder breathing zone.

Source capture

Extraction arms or hoods near the weld captures fumes near the source protecting welder breathing zone.

Containment

Enclosed welding zones contain and capture welding fumes preventing migration throughout the facility.

Ambient

When source capture or ducting isn't practical, ambient air filter factory air to maintain a healthy workspace.

Portable & Mobile Fume Extractors

Mobile and portable fume extractors are common solutions that capture fume at the source with added flexibility to be moved around within workstations or factories to return clean air to the workplace. With their flexibility and variety of configurations, these solutions are excellent choices for both manual and automated welding cells.

On-Torch (Hi-Vac)

Fume Eliminator

The Fume Eliminator (FE) is a portable on-torch fume extractor intended for light duty, single welder applications. It features a large and ergonomic carrying handle, making it easy to transport. The FE860 model features adjustable airflow to match torch requirements, airflow monitoring alerts and automatic start/stop for enhanced safety and productivity.

Fume Eliminator GoMax

FE GoMax is a compact, mobile fume extractor designed for on-torch extraction in both manual and robotic welding applications. Capable of supporting up to two extraction points, it easily integrates with welding machines and robots to enable automated, synchronized operation.

Local Exhaust

FilterCart+

FilterCart+ is designed for light to intermittent duty fume applications with a small footprint and lightweight construction making it easy to move and locate inside welding booths. The advanced models are loaded with technology and features that monitor performance and make it easy to own and operate.

FilterBox

The FilterBox is a versatile solution for production welding and accessorized to cover a variety of needs and requirements. It features an on-board filter cleaning system that regenerates the filter to maintain airflow and fume capture. Configured to match the production process with features that monitor airflow and filter life and available options to automate operation to improve productivity.

MFS Filter Kits

The MFS, Modular Filter System, filter kits are a modular, economical wall mount fume extractor for light, intermittent duty fume applications. Fans install directly to the filter frame for a simple installation and zero-footprint.High Efficiency (HEPA) and carbon filters are also available.

Extraction Arms & Hoods

Extraction arms are the welder's primary interface with fume extraction systems making the design, quality and performance vital for reliable and effective capture. Nederman's best-in-class extraction arms are designed to keep welders productive by reliably holding their position and extended capture zone reducing necessary adjustments.

Comprehensive range for effective source capture

Standard Arm

Light duty and economical fume extraction arm.

Original Arm

Extraction arm design with optimised capture hood and handle for positioning.

Telescopic Arm

Extraction arm that swivels and extends making it great for tight work spaces.

NEX MD

Enhanced design with improved motion control, extended airflow and temperature range for more demanding fume and dust applications.

NEX HD

Designed for the most demanding fume and dust applications with enhanced design that increases the capture zone, airflow and temperature ratings.

Hi-Vac Magnetic Hoods

Optional accessory for hi-vac extraction that can be secured near weld for source capture. Useful for confined spaces, cobots or applications where on-torch extraction is not preferred.

Accessories

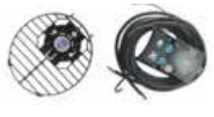
Nederman's extraction arms can be equipped with a variety of accessories that can cover greater distances, automation options that increase productivity and energy efficiency, improved lighting to see work better and increased safety through spark control. This range of options allow our extraction arms to adapt to each customer's unique needs.

Extension Arms

Automation Controls

Streamline Modular Hood

Hood Switches & Light Kits



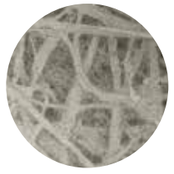
Spark Management

Configured Solutions

At Nederman, we deliver complete, custom-configured fume extraction systems that protect welders, maintain productivity, and ensure regulatory compliance. From on-torch to ambient air solutions, we engineer systems with future-ready technology–all from a single source.

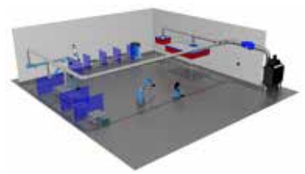
Built for performance. Designed for you.

Nederman designs turn-kay weld fume extraction systems that deliver measurable performance–cleaner air, greater efficiency, and reduced operational disruption. Each solution is built around the unique needs of your facility, workforce, and production goals. From Nanofiber filter media that delivers superior filtration to IntelliPULSE™ technology for efficient filter cleaning and Insight Control for real-time system visibility, our smart technologies work together to maximize uptime and compliance. We use proprietary software to design and configure systems with precision and speed–ensuring our solutions are both technically sound and purpose-fit for your operation.



Nanofiber filter media

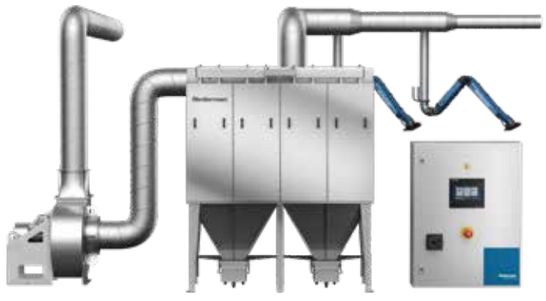
Insight Control Automation platform



Digital system design in Nederman ProQuote

MCP SmartFilter

The MCP SmartFilter is a modular, reverse pulse-jet cartridge collector engineered for demanding welding and thermal cutting applications–including laser and plasma tables. Available in both fully configurable models and a plug-and-play version (MCP-GO), it delivers reliable fume and dust extraction with advanced filtration and smart monitoring capabilities.



MCP SmartFilter system

MCP-GO plug-n-play models

High Vacuum Central solutions

Nederman's high-vacuum fume extractors are built for effective and efficient on-torch capture at multiple welding stations–manual, robotic, or automated. Well-suited for production lines, welding booths, and integrated cells, they deliver consistent performance in environments where precise, tool-mounted extraction is required. With flexible configurations, they support a range of welding processes and are ideal for both new installations and system upgrades.

PAK-M

FlexPAK

FlexFilter

Air Purification Tower

When source capture isn't feasible–such as around large weldments, overhead cranes, or open production areas–the MCP Air Purification Tower offers an effective solution. Designed to control welding fume in difficult-to-ventilate spaces, it draws in contaminated air, filters it, and returns clean air back to the work zone. Units can operate individually or be installed in arrays to create optimized airflow patterns that improve overall air quality throughout the facility.

LCP SmartFilter

The LCP SmartFilter is designed for large-scale welding and thermal cutting environments with high fume loads and extended run times. Ideal for heavy fabrication, structural steel, and high-throughput manufacturing, it provides high-capacity extraction across large work areas. Its modular design ensures adaptability as production demands grow.

Shaping the Future of Clean Air

Nederman empowers fabricators with service plans, intelligent automation and connected services that enhance safety, efficiency and control.

Smarter maintenance that matches your needs

Regular service and maintenance of fume and dust collection systems are essential for protecting workers, reducing fire risks, and supporting sustainability. To meet customers where they are in their service journey, Nederman offers the flexible and scalable myAir platform.

myAir is designed to support a wide range of needs–from traditional on-site inspections and maintenance to advanced digital monitoring and smart filter solutions. Whether a customer prefers a hands-on approach or wants to leverage real-time insights through Nederman Insight, myAir adapts to their operational goals.

With this comprehensive platform, customers can proactively address filter-related issues, extend equipment life, and enhance overall efficiency–on their own terms.

Digital monitoring & data for new and existing systems

Avoid unplanned downtime, lower service costs, and boost productivity with Nederman's connected solutions. Our digital platform continuously monitors fume extractor performance, emissions, and operational parameters–all in one place. Live, customizable dashboards provide remote access from any web browser, complete with automated reports, alerts, and notifications via the cloud or published to local BMS systems. Suitable for both new installations and retrofit of existing dust collection systems.

Nederman Insight provides customisable dashboards, real-time notifications, and automated reports for enhanced system visibility and control.

Easily retrofit Insight Monitor to any fume extractor and start streaming performance data to Nederman Insight or your existing BMS.

Smarter airflow, bigger savings

Nederman SAVE optimizes the performance of both new and existing fume and dust extraction systems. By leveraging real-time machine and process data, SAVE automatically adjusts dampers to precisely regulate airflow. This ensures efficient contaminant extraction and safe material transport throughout the ducting system. The result is reduced energy consumption, lower combustible dust risk, increased operational capacity, and minimized maintenance requirements–making SAVE an essential upgrade for any metal fabrication operation.

SAVE monitors process and provides minimum airflow required for optimal performance. Wireless communication allows for simple installation and operation.

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> *We can see substantial energy savings for our extraction system and a return on the whole investment in just 18 months, even shorter if the increased production efficiency as a result of the data collected is included.*
>
> Managing Director – Jost, Hungary
> Global manufacturer of truck and trailer components

Experience and Competence You Can Trust

With over 80 years of experience, Nederman is a trusted leader in weld fume extraction. Our tailored solutions, backed by a broad product range and deep industry expertise, ensure clean air throughout your facility–optimized for safety, compliance, and performance.

> *For us, it was very valuable to work with one partner who has been able to provide a solution that covered all technical aspects we needed.*
>
> VTI Bruges Campus
> Welding Technical School

Leading the way in robotic weld fume extraction

As automated welding continues to grow, so do the demands on effective fume extraction. Robotic and cobot welding systems create concentrated, high-volume fumes that require precise, reliable capture to maintain air quality and worker safety. Nederman's advanced extraction solutions are engineered to meet these challenges–ensuring compliance, efficiency, and protection in even the most demanding automated environments.

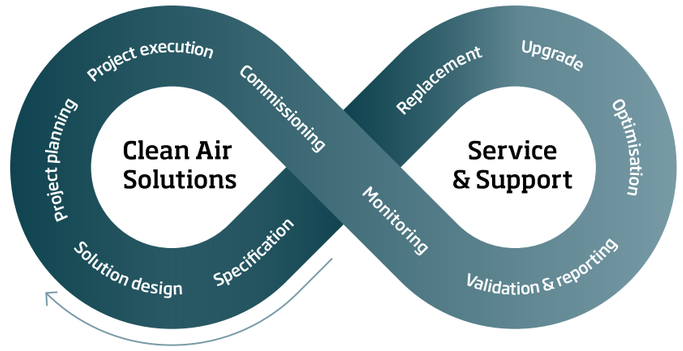
Whether you're integrating industrial robots, collaborative cobots, or fully automated workstations, Nederman offers scalable, smart solutions designed for seamless integration with robotic systems. Our extraction units can communicate directly with welding robots to automate extraction based on welding activity–ensuring optimal performance, energy efficiency, and minimal operator intervention. From compact source capture units and intelligent airflow control to real-time monitoring with Nederman Insight, we help manufacturers future-proof their operations with clean air technologies built for Industry 4.0.

Local containment of robotic weld cell with MCP-GO & Streamline Hood

On-torch fume extraction for cobot workstation with FE GoMax

The Clean Air Company

Nederman offers a comprehensive approach to clean air solutions for the metal fabricators. We consider ourselves a partner in our customers operation and are committed to helping them achieve a productive, profitable and sustainable future. Therefore, we provide complete, turn-key solutions beginning with the system design and continuing through the operation and service resulting in an effective, safe and efficient dust collection system.



The Clean Air Company

Nederman is an environmental technology company and a global leader in industrial air filtration dedicated to extracting, transporting and cleaning air to make industrial production more efficient, safe and sustainable. Based on industry leading products, solutions and services in combination with innovative IoT technology, we monitor and optimise performance and validate emissions compliance to protect people, planet and production.