



**Nederman**

# Woodworking

All you need for the safe extraction and handling of wood dust and chips

# Quality Production

## Nederman Woodworking Solutions contribute to:

- Energy optimization
- Less wear on equipment
- Improved health conditions and cleaner environment
- Better end-product quality
- Recycling of wood waste

Woodworking, involving everything from small hand tools to large CNCs, whether cutting, sanding, planing, edge banding, dowel drilling, etc. can create large amounts of wood dust. To handle these various applications safely and efficiently, Nederman has developed a wide range of products and systems including small localized to large central dust collectors, piping/ducting, fans, conveyors and automated control systems.

These systems make it possible for customers to not only achieve a good working environment, but also recycle wood waste, which can represent a large economic value.

Our solutions are used in various woodworking settings to reduce the impact on the environment from various woodworking processes and contribute to improved production economics and reduced environmental impact of industrial processes.

- Primary wood
- Secondary woodworking - small to large workshops
- Wood briquetting
- Incineration of wood waste



### Primary Wood

Sawing and planing generates large quantities of valuable wood waste. To deal with high volumes and continuous processes complete dust free waste handling systems can be engineered to suit your requirements. Closed loop transport systems for silo storage, or automated discharge into single or multiple box-cart stations may be specified.

### Secondary Woodworking

Nederman offers a variety of vacuum solutions for extracting and managing sanding dust to sawdust to chips directly at the source. Extraction can be fitted directly to large multi-port CNC machines down to small hand held tools. With wood dust being combustible, we offer these solutions to be compliant with combustible dust standards and regulation such as ATEX and NFPA.

We also supply all the components and needs to provide a complete system solution:

- QuickFit Ducting and flex hose
- ATEX approved components such as Explosion Isolation Flaps
- Starters, inverters and control systems
- Rotary valves and dust handling solutions
- System installation and commissioning

### Combustible Dust

Worldwide standards and regulations exist on how to handle combustible dusts, such as that generated by machining wood. Proper dust extraction at the source is just one of the necessary needs to have your facility compliant with these rules and keep your workers and facility safe. Unfortunately, too often, dust collection systems are installed without the full system being in compliance with the combustible dust codes and standards. As a world leader in providing combustible dust compliant system, Nederman can assist facilities in meeting the compliance needs of woodworking facilities subject to the standards and regulations such as ATEX and NFPA.



### Wood Briquetting

When converted into pellets, waste products can be used for energy production or be sold as an energy source. In recent year's landfill tax, road fuel and space heating costs have changed the value of wood waste - making equipment that upgrades the waste into valuable by-products more and more interesting.



### Incineration of Wood Waste

Wood waste can be incinerated to produce energy and heat, representing a large economic value. Nederman offers solutions e.g. fans and dust collection systems to deal with the hot gas from the incineration process.

Nederman also has solutions for recovering the waste heat. Depending on the process, the heat can be recycled back into the production or used to heat office buildings etc.

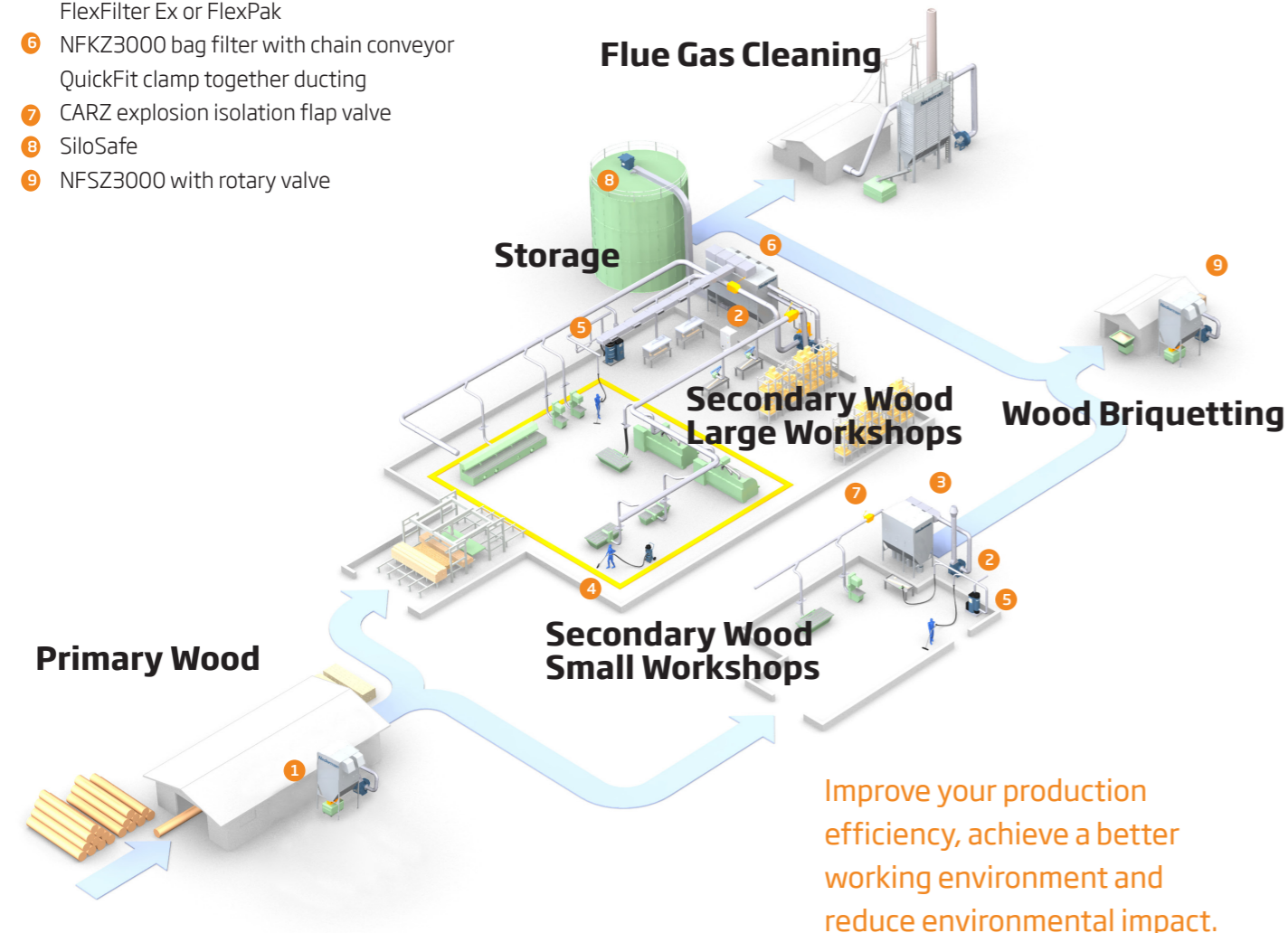


# Wood Dust Management Eco-efficient Solutions

Well designed and efficient wood waste handling installations are necessary in the woodworking industry. Nederman solutions combine care for the environment and employee health with improvements in work efficiency and production economy: ecologically and economically efficiency.

For all wood-based applications, ranging from centralized production plants to small carpentries

- 1 NFSZ3000 bag filter
- 2 Combifab-F fans and blowers
- 3 NFSZ3000 bag filter with rotary valve or screw conveyor
- 4 ATEX approved industrial vacuum cleaners
- 5 Stationary high vacuum systems e.g. FlexFilter Ex or FlexPak
- 6 NFKZ3000 bag filter with chain conveyor QuickFit clamp together ducting
- 7 CARZ explosion isolation flap valve
- 8 SiloSafe
- 9 NFSZ3000 with rotary valve



# Woodworking Solutions for Every Need



## S-Series

- Available in three sizes, the S-500, S-750 and S-1000 with an operating capacity of up to 5000 CFM
- The S-Series is an enclosure-less, silent and simple to setup dust collector
- Ideal for indoor installation
- The fan operates at a low rpm resulting in quieter operation
- Equipped with the Super Bag filter which is 99% efficient



## NFKZ3000 Bag Filter with Chain Conveyor

- ATEX Compliant and certified for ST1 and ST2 dust with a Kst value up to 300 bar m/s
- Modular galvanized steel construction
- Easy to install on site and extend if required
- Available for positive or negative pressure operation
- Low power consumption
- Powerful on-line cleaning by efficient regeneration fans
- Patented polyester SUPERBAG filter bags
- Wide range of discharge and waste handling options



## FlexPak Collectors

- High vacuum solution for small central system hand tool dust extraction
- Frequency inverter and PLC controlled for minimizing energy usage
- Automatic on/off capable for lowest energy usage.
- Compact and self contained for easy/fast installation



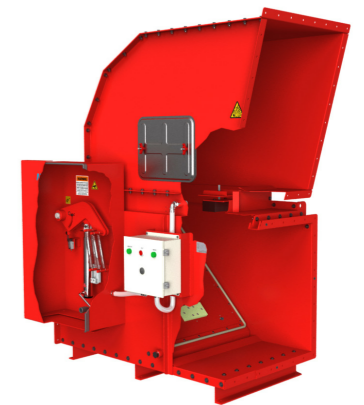
## FlexFilter Ex

- Central high vacuum solution for multiple hand small machine and tool extraction
- Automatic filter cleaning for easy disposal of dust
- Low airflow, high pressure suction: energy efficient



## CARZ-N Valve

- Safety device is designed to protect personnel and equipment
- NFPA Complaint
- Isolates a pressure wave and flame front generated from an explosion
- Designed for dry dust
- Max duct velocity 6,000 FPM
- Protected vessel with non-reclosing vent panels



## Abort Gate

- Activation Time < = 300 Milli secs
- Side Access Door for Removal of Magnets
- Manual Reset
- High Temperature Seals
- Limit Switches for gate position indication
- Prewired Electrical Panel (Input: 120 VAC) Mounted on side of gate. UL approved.
- OSHA guards for all exterior moving parts
- Seals in running and aborted positions
- Replaceable Gate

Ancillary components such as CARZ Explosion Isolation Flap, ducting, flex hose, starters/controllers, Combifab-F fans and other products available to provide locally compliant combustible dust filtration systems

# Your dust collection system is getting a whole lot smarter

Nederman Insight empowers you to take control of your filtration system by monitoring and tracking key performance indicators and then connecting you with the information and support you need to get the most out of your dust collection system.

Insight is an industry-specific digital IoT platform based on over 75 years of experience providing industrial filtration solutions to customers just like you. Whether you need help to improve the reliability, safety, energy efficiency, the maintenance program, compliance reporting or simply looking to track operational metrics more effectively, Nederman Insight can help.

## Nederman Insight Digital Platform for Filtration Solutions

### System Status at your Fingertips

Nederman Insight puts information at your fingertips, wherever you are. It provides you with valuable data on how your system is working and helps you build a broader understanding of your filtration system – its performance, maintenance needs, associated costs and potential improvements.

### The Bottom Line

Nederman Insight enables customers to take control of their dust collection system by giving customers access to system data. By connecting to Nederman Insight, you can go a long way towards understanding your filtration system and improving its performance.

**Connected** – The system is cloud connected and accessible from remote locations.

**Monitoring** – Insight actively monitors the system alerting and reporting on the performance.

**Support** – The Nederman service and technical support team are able to review and support more effectively with real data.

**Peace of mind** – We know that filtration is not your core business. Let Nederman Insight help and focus more time on what matters most.

### Here's how it works:

- Sensors are located throughout the dust collection system to monitor key performance data
- Data is securely uploaded to the cloud via a 3G/4G gateway
- Real-time and historical data is stored and accessible via customizable dashboards on the web or mobile devices

## Nederman SAVE On-Demand Ventilation Technology

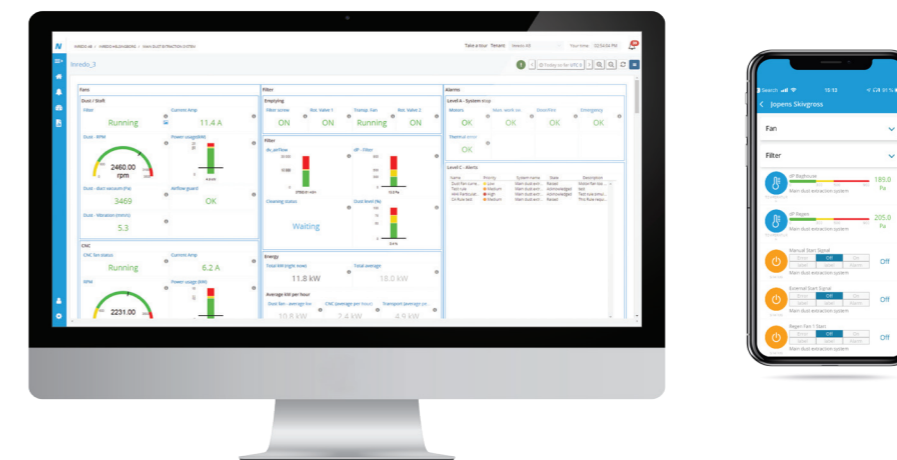
SAVE is an eco-efficient technology that reduces the total cost of ownership, reduces risk and increases productivity.

- **Energy Savings.** Over the life of the dust collection system, the cost to operate will exceed the initial investment. SAVE technology can reduce the consumed energy by up to 70% versus traditional systems.
- **Plant Safety.** Maintaining proper airflow to capture and convey the material is critical to proper dust collection and factory safety. SAVE monitors and adjusts the airflow to ensure the dust collection system is operating properly.
- **Increased Productivity.** Measuring and tracking key performance metrics provides users the data and tools to optimize their operation.

Nederman SAVE (Smart Air Ventilation Economics) technology monitors workstation usage and adjusts performance including fan speed and damper configuration to meet the real time extraction requirements to reduce energy consumption and maintain critical velocities within the duct system. Combining SAVE with Nederman Insight empowers users to monitor, analyze and optimize the performance of their operation and dust collection system.

## Nederman Insight

Cloud based IoT platform designed specifically for filtration systems that provides real time visualization and monitoring of system performance including customized dashboards and alarms. The data is stored and accessible via the web or mobile devices empowering users to optimize the system operation and maintenance or create useful system reports.



Nederman SAVE and Insight technology empowers you with the tools and data necessary to overcome today's operational challenges.

# Complete Solutions that Protect your Environment



## 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.



## Combustible Dust Hazards - Dust Extraction Systems Fulfilling the ATEX and NFPA Demands

- Proven strength of dust collectors and filters
- ATEX compliance by means of explosion, relief doors, panels, and flameless venting
- Safety equipment such as rotary valves and explosion isolation flaps etc.
- ATEX certified fans for handling potentially combustible dust



## Extensive Experience

For more than 75 years, Nederman has developed products and solutions to reduce the strain on the environment and protect people from harmful particles, fibers, dust, gas, smoke and oil mist. We have extensive experience of how to create a safe working environment. Our accumulated knowhow 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. 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.

The top half of the page features a large background image of a calm lake reflecting a clear blue sky and a dense green forest on the far shore. On the left side, there is a vertical white bar that contains the Nederman logo. The logo consists of the word "Nederman" in a bold, blue, sans-serif font.

**Nederman**

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 75 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, woodworking, and many others.

