



Nederman

PAK-M Series

Central High-Vacuum Solution for
Dusts, Fumes and Industrial Housekeeping



Centralized High-Vacuum Extraction for Modern Manufacturing



Single platform for multiple extraction needs

PAK-M Series is a mid-size centralized high-vacuum extraction system delivers reliable source capture and housekeeping across 1-5 simultaneous users or extraction points. Its compact, space-efficient design allows for easy installation and mobility, while a powerful motor supports long ducting runs for flexible system layouts. Reverse-air filter cleaning and intelligent control features help maintain consistent performance, optimize energy consumption, and extend filter life.

Available in two application-focused configurations, the series supports both non-combustible and combustible dust applications.

Typical Applications

PAK-M Standard

- Manual & Robotic Welding
- Grinding & Sanding
- Machine Cleaning and Material Recovery
- Industrial Housekeeping
- Non-combustible Dust

PAK-M DX

- Combustible Metal Finishing
- Wood Secondary Processing & Housekeeping
- Food Dry-Powder Housekeeping
- Composite Finishing
- Combustible Dust Housekeeping

Bringing Performance, Efficiency and Protection Together

The PAK-M Series reflects decades of Nederman experience in industrial air filtration, combining proven engineering, intelligent automation and configurable safety in a centralized high-vacuum solution. Automatic operation, integrated system monitoring and application-specific protection features minimize operator interaction while supporting reliable production and applicable dust and combustible dust compliance requirements.



- **Continuous-Duty Performance.** Designed for continuous operation with a rated service life of up to 30,000 hours and filter life of up to 6,000 hours under typical operating conditions.
- **Energy-Efficient Operation.** Intelligent VFD control and sensors automatically adjusts airflow to match extraction demand while minimizing energy consumption.
- **Smart Monitoring.** Built-in monitoring and optional sensors provide continuous system supervision and early indication of abnormal operating conditions.
- **Quiet Operation.** Acoustic enclosure and optional discharge silencer help minimize operating noise in indoor installations.
- **System Protection.** Multi-level overheat protection, spark deterrence and configurable explosion protection options help safeguard the system across a wide range of industrial applications.
- **Compact Footprint.** Compact, space-efficient design simplifies installation while maximizing available floor space.



PAK-M Standard

PAK-M DX

PAK-M Standard

PAK-M Standard is a multifunctional high-vacuum solution optimized for weld fume extraction while also supporting non-combustible dust, on-tool extraction, machine cleaning, and industrial housekeeping. It provides centralized extraction across multiple welding stations, reducing the need for a separate unit at each cell.



Especially in MIG and TIG welding applications, consistent shielding gas coverage is important for weld quality. When operators start or stop extraction points, PAK-M Standard continuously monitors system pressure and automatically adjusts blower speed through its VFD. Even during major demand changes, such as moving from five active users to one, the system quickly adapts to maintain the selected vacuum level and help prevent pressure spikes that could disturb the shielding gas.

PAK-M DX

PAK-M DX is the combustible dust configuration of the PAK-M Series. It is designed for housekeeping and on-tool extraction in applications where collected dust requires explosion protection, including metalworking, woodworking, food, pharmaceutical, and processed dust environments.

The DX range is available with either explosion relief panel or flameless venting configurations. Relief panel versions are suited for applications where explosion pressure and flame can be safely directed to an outdoor or designated safe area. Flameless venting configurations help reduce flame and particulate release, allowing the unit to be installed indoors when properly selected and applied with the required safety precautions.

PAK-M DX with relief panel



This configuration uses an explosion relief panel to release explosion pressure and flame toward a designated safe area. It is suited for combustible dust applications where the unit can be installed outdoors or where the venting direction can be safely managed away from personnel, equipment, and active work zones.

PAK-M DX for organic dust with flameless vent



PAK-M DX for Organic Dust is designed for combustible organic dust applications in woodworking, food, pharmaceutical, and related production environments. It supports housekeeping and on-tool extraction for dust generated during cutting, sanding, processing, handling, or cleanup operations.

PAK-M DX for metallic dust with flameless vent



PAK-M DX for Metallic Dust is designed for combustible metallic dust applications in metalworking environments. It supports housekeeping and on-tool extraction for dust generated during grinding, sanding, deburring, and cleanup processes.



Handling Combustible Dusts

Applications involving combustible dust require specially engineered dust collection systems with explosion protection measures selected for the specific dust hazard and installation environment.

Engineered for Demanding Industrial Applications

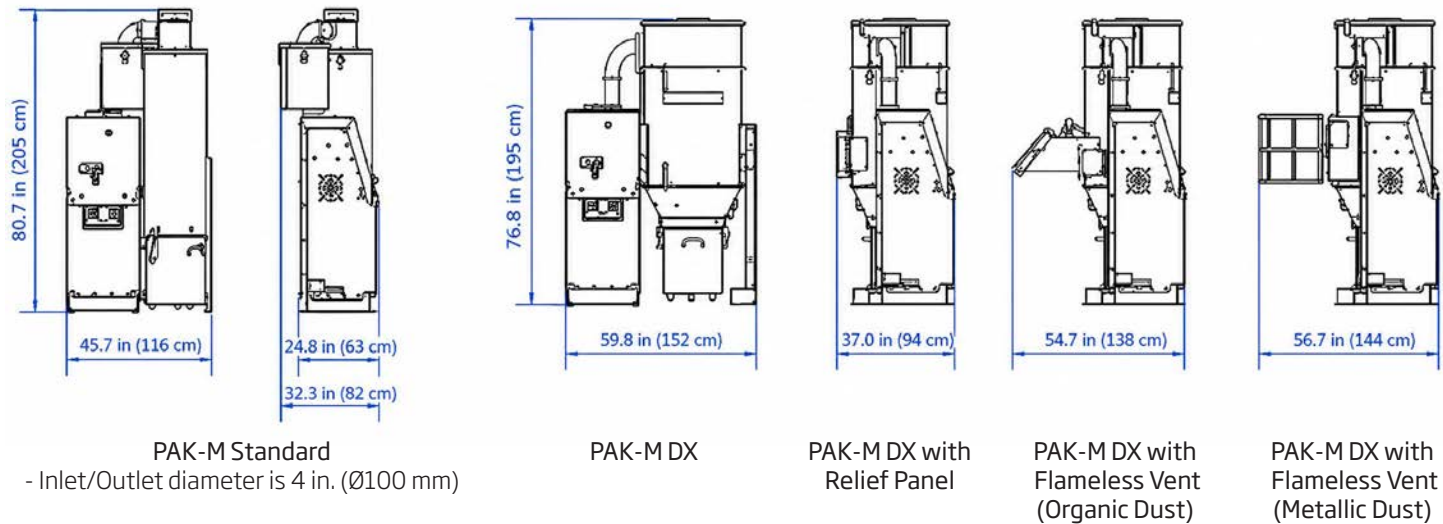


General Specifications

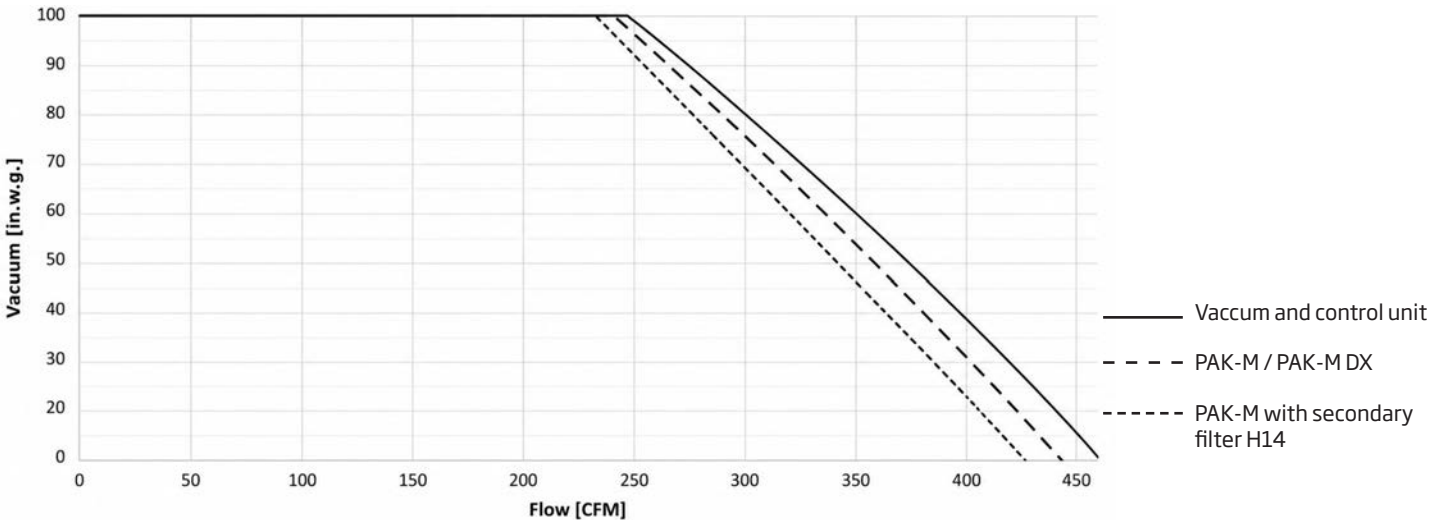
Model	Primary Filter Material	Main Filter Area ft²(m²)	Secondary Filter (Optional)	Secondary Filter Area ft²(m²)	Power HP (kW)	Sound Level (@60 in.w.g.)	Input Power	Protection Class
PAK-M Standard	Polyester with PTFE Membrane	36.6 (3,4)	HEPA H 14	66.3 (6,16)	12 (9) @ 60 Hz	<70 dB(A)	380-480 V / 3PH / 50-60Hz	IP 54
PAK-M DX	Polyester, Antistatic	32.3 (3,0)	HEPA H 14	56.0 (5,2)				IP54 Dust separation IP65
	Polyester with PTFE Membrane, Antistatic		Class M	58.1 (5,4)				

- PAK-M Standard is recommended for indoor use / can be installed at outdoor with proper protection.
- PAK-M DX application data for dust separator : II 3D Ex h IIIC T130°C Dc -10°C≤ Ta ≤40°C

Dimensions



Capacity



Options and Accessories

Advanced control box
Advanced PLC based control panel that allows up to four sensor inputs and enhanced system control.

Sensors
Our range of sensor accessories includes solutions such as a bin level indicator, safety switch, and vibration sensor kit. These sensors provide early detection of potential issues, help maintain system efficiency, and minimize downtime by triggering alarms or shutdowns when necessary.

Support leg
Additional filtration unit support leg for PAK-M DX use when separating the control/vacuum unit from the filtration system for improved versatility and accessibility.

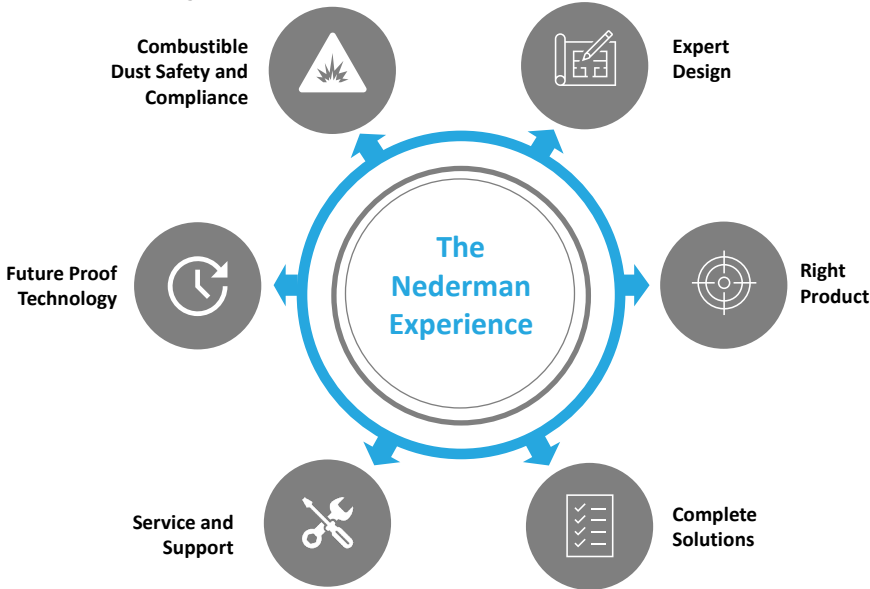
Secondary HEPA Filter
H14 Certified HEPA filter and filter housing for additional operational safety when collecting toxic materials including hexavalent chromium.

Silencer
Discharge silencer for reducing exhaust noise while maintaining efficient airflow.

Pipe and Bends
Pressure-resistant pipe and bends used between the B-flap isolation valve and the unit for safety and compliance for PAK-M DX.

The Clean Air Company

Nederman offers a comprehensive approach to clean air solutions for the woodworking industry. 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.





Nederman

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 optimize performance and validate emissions compliance to protect people, planet and production.