PAK-M

Central High-Vacuum Extraction Solution

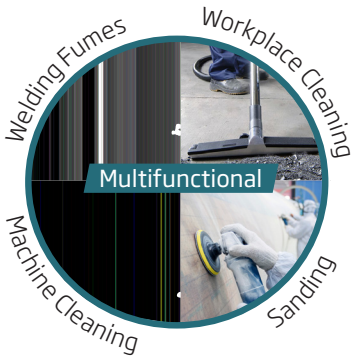
In industrial environments, maintaining clean air is essential for safety and operational efficiency in manufacturing. The Nederman PAK-M is a high-efficiency, centralized vacuum solution designed for multiple extraction points, ensuring reliable performance and consistent airflow for each user during simultaneous use. It effectively controls weld fumes, dust, and particulate matter, offering versatile extraction for housekeeping and weld fume extraction. Designed for convenience and seamless multi-user functionality, PAK-M adapts to diverse non-combustible dust types, creating a cleaner, safer, and more efficient work environment across industries.

Weld Fume Extraction: Supports on-torch fume extraction for multiple weld cells, with automated extraction controlled by current sensors and pilot signals, improving production efficiency.

Industrial Housekeeping: Enables centralized extraction at strategic points throughout the facility, with shut-off valves allowing for flexible connection of various tools such as brooms, nozzles, and hoses, providing efficient dust control.

Performance Redefined

Engineered for consistent performance, this unit adapts seamlessly to varying demands while maintaining efficiency through smart controls and Variable Frequency Drive (VFD). This technology is especially important for preventing disruptions to shielding gas flow and welding quality, ensuring stable, optimal conditions for superior results.



Constant Pressure Control: The unit maintains steady airflow and pressure by adjusting blower speed based on real-time needs. It prevents pressure spikes caused by rapid changes in user demand, ensuring stable shielding gas flow and optimal welding quality.

Energy-Saving Operations: The VFD adjusts blower speed to maintain system pressure at a set point, adapting airflow in real time to meet changing extraction demands. Additionally, the pilot signal arrangement enables an auto start/stop function, shutting off the unit when no users are active, further reducing energy consumption.

Extended Lifespan: Designed for continuous duty, the unit provides up to 30,000 hours of reliable performance under specified operating conditions, ensuring long-term dependability.

Safety That Adapts to Your Needs

Inlet design for spark deterrence

Safety is central to this unit's design, with advanced monitoring systems and intelligent features ensuring secure operation through overheat protection, spark deterrence, and smart alerts. Unit designed to maintain safe internal temperature to mitigate fire and component failure risks, allowing users to focus on their work without concern for hazards or downtime.

Overheat Protection: The multi-level cooling system adjusts to maintain safe internal temperatures, even during challenging conditions like low extraction demand, long ducting runs, or issues such as accidentally closed inlets or blocked exhaust.

Spark Deterrences: Inlet design with an impingement baffle in the internal inlet reduce the risk of sparks reaching the filter.

Smart Alerts: Built-in and optional sensors monitor operational parameters to alert operators of abnormal operation that could create unsafe conditions.

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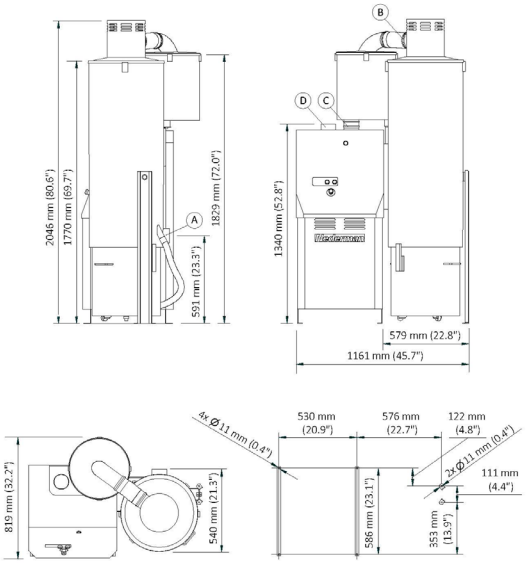
General Specifications

Model	Primary Filter Material	Primary Filter Area ft²(m²)	Secondary Filter (Optional)	Secondary Filter Area ft²(m²)	Power HP (kW)	Airflow cfm (m³/h)			Sound Level (@60 in.w.g.)	Input Power	Protection Class*
						@60 in.w.g. (15 kPa)	@80 in.w.g. (20 kPa)	@100 in.w.g. (25 kPa)			
PAK-M Standard	Polyester with PTFE Membrane	36.6 (3,4)	HEPA H14	66.3 (6,16)	10 (7,5)	320 (545)	280 (475)	238 (405)	<70 dB(A)	380-480 V / 3PH / 50-60 Hz	IP 54

*Recommended for indoor use / can be installed at outdoor with proper protection.

Note: Please contact us for more information on our PAK-M DX versions designed for combustible dust applications.

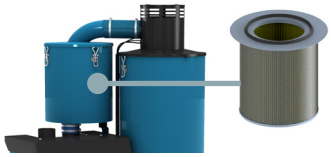
Dimensions



Options and Accessories

Advanced control box

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



Secondary HEPA Filter

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

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.

Silencer

Discharge silencer for reducing exhaust noise while maintaining efficient airflow.

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