

Company News

# VAC-U-MAX at iPBS 2018: Powder Handling and Combustible Dust Cleaning Solutions

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VAC-U-MAX application experience spans over 64 years, providing engineering and process know-how to the food/pet food, dry-powder dairy, chemical, pharmaceutical, nutraceutical, nonwovens, AM/3D Printing, and petrochemical industries. Equipment and demonstrations on display include a continuous convey and feeder refill system, a large product sampling of VAC-U-MAX's Signature Series<sup>TM</sup> Vacuum Conveyors, Mobile Conveying Systems, and a full range of NFPA-compliant and ATEX-approved continuous-duty industrial vacuum cleaners for high volume recovery of fine powders and combustible dusts. Visit <a href="https://www.vac-u-max.com/PowderShow">www.vac-u-max.com/PowderShow</a> to learn more about the equipment on display and to register for a complimentary expo pass.

# Signature Series<sup>TM</sup> - a "Family of Solutions" for Powder Conveying Applications

VAC-U-MAX Vacuum Conveying product range includes the Signature Series<sup>TM</sup> now available in 1500 Series and 3500 Series models, with standard or sanitary design options that include offset cone or straight-wall tube design - for free flowing to non-free flowing powders, pellets, and pastilles, including high moisture, fibrous or fat content powders. The 1500 Series conveys up to 1500 lbs/h (680 kg/h), featuring a 12-inch (approx. 300 mm) diameter receiver with large 6-inch (approx. 150 mm) discharge valve in stainless steel construction,

with offset cone or tube design options.



VAC-U-MAX Vacuum Conveying Signature SeriesTM (Picture: VAC-U-MAX)

The 3500 Series offers conveying rates up to 3500 lbs/h (1600 kg/h) with 16-inch (approx. 300 mm) diameter receiver with large 8-inch (approx. 200 mm) discharge valve, available in offset cone or tube design, with vacuum producer options that include single or twin jet venturi, regen blower, or vacuum pump. Packaged systems include UL-approved controls in NEMA 4 or 4X enclosure with multifunction controller (MFNC). All packages include unifilter and multifilter designs with static conductive filters.

Quick, Clean & Automated Refill of Single, Twin Screw, Vibratory and Belt Feeders



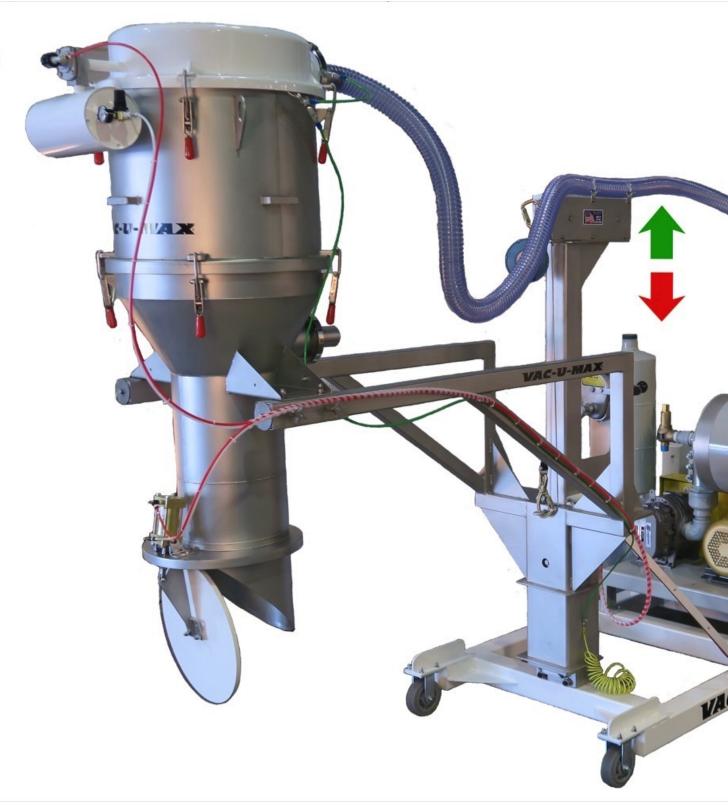
The VAC-U-MAX receiver always maintains a charge of material ready for dispensing. (Picture: VAC-U-MAX)

VAC-U-MAX Vacuum Conveying Systems offer the quickest and cleanest option for refilling loss-in-weight feeders for batch and continuous processes, and easily integrated into volumetric feeder refill applications. The "keep full" operation of

the VAC-U-MAX receiver meters material to the feeder below by immediately discharging material into the hopper when the feeder reaches a low-level signal. Refill process occurs in seconds, with the VAC-U-MAX receiver always maintaining a charge of material ready for dispensing into the feeder. Sanitary designs ideal for applications in the food, pharma and packaging industries. Stop by booth 1316 to preview a "vacuum conveying feeder refill" demonstration.

# **Processing Mobility with Mobile Vacuum Conveying Systems**

VAC-U-MAX Mobile Vacuum Conveying Systems offer ease-of-mobility for applications requiring access to tanks or other hard-to-reach processing areas. System incorporates an adjustable suction wand where operator introduces product to the vacuum system. Mobile frame incorporates the vacuum producer, conveying product up to 5000 lbs (2268 kg) per hour and beyond. Vacuum receiver is manually hoisted for easy up-and-down mobility, to a height of at least 91 in (approx. 0.23 m) at the discharge point, or down to operator level for easy disassembly, cleaning and transport.



VAC-U-MAX Mobile Vacuum Conveying Systems offer ease-of-mobility for applications requiring access to tanks or other hard-to-reach processing areas. (Picture: VAC-U-MAX) Vacuum receiver includes replaceable inlet assemblies, easy access to filters, pulse filter cleaning, and full opening discharge valves. Vacuum power source includes air-powered venturi system, regenerative blower package, or positive displacement vacuum pump. Control panel is mounted on the rolling frame and handles the convey, discharge and filter cleaning functions of the system. All Mobile Vacuum Conveying System are USDA-accepted in stainless steel, and available in carbon steel. All receivers meet the rigid requirements of the food and pharm industries. Stop by booth 1316 for a demonstration.

# NFPA-Compliant & ATEX Approved Industrial Vacuum Cleaning Systems

VAC-U-MAX product line includes a full range of portable and central industrial vacuum cleaning units and central systems, engineered for specific applications that address issues like worker exposure to dusts, chemical compatibility, flammability, and combustibility. An expert at combustible dust handling, VAC-U-MAX industrial vacuum cleaning systems are available for a wide range of applications for Class I or Class II processing environments.

## **Models on Display include:**

MDL15: Combustible Dust Air-Vac for Fine Powders / Dust



The MDL15 features a static-conductive PTFE primary filter and secondary cartridge filter. (Picture: VAC-U-MAX)

The MDL15 is designed with a VAC-U-MAX venturi power unit, proven to have the lowest compressed-air consumption in its product class. The MDL15 fills a niche between VAC-U-MAX's 5-gallon hand-held vacuum and the 30-gallon (approx. 113

I) model for combustible dusts, featuring a static-conductive PTFE primary filter and secondary cartridge filter. Unit collects powders and dusty debris in off-the-shelf static-conductive polybags eliminating the mushroom cloud associated with drum dumping. Standard construction is 304SS / 316SS with bead-blast finish, with unit suitable for food environments. MDL15 is ATEX-approved and equipped with static-conductive compressed air hose, casters, ATEX-certified vacuum hose and complete cleaning tool kit.

#### MDL40008SS: Stainless Steel Combustible Dust Air-Vac for Fine Powders

VAC-U-MAX MDL40008 Stainless Steel Industrial Vacuum Cleaner features a pulse-jet filter cleaning system for Class IL, Div 2 environments. The 30-gallon air-powered unit is ATEX-approved and completely grounded and bonded, meeting NFPA 77 requirements. VAC-U-MAX air-powered vacuums do not use electricity and do not generate heat, meeting the definition of an "Intrinsically Safe System". Unit feature anti-sparking stainless steel construction in bead blast or satin finish.

#### MDL40012: Combustible Dust Air-Vac for Fine Powders / Dusts

VAC-U-MAX MDL40012 Industrial Vacuum Cleaner features a pulse-jet filter cleaning system for Class II, Division 2 environments. The 55-gallon (approx. 208 I) carbon steel, air-powered unit is ATEX-Approved and completely grounded and bonded, meeting NFPA 77 requirements. Units are available in single (30 gallon and 55 gallon) and twin venturi (55 gallon only). Other models include MDL40013 with 55-gallon capacity, and MDL40008 with 30-gallon (approx. 113 I) capacity. All units are ATWX-approved and ideal for fine powders and combustible dusts.

#### MDL850: Continuous-Bagging System for Fine Powders / Dusts

VAC-U-MAX MDL850 Industrial Vacuum Cleaner is designed to reduce operator exposure to fine powders and dusts, improving material handling of dusty debris. This continuous-duty industrial vacuum is equipped with a continuous-bagging system that eliminates manual dumping of a drum or rigid collection container. Closed bags prevent fugitive dust clouds, with the MDL850 containing a unique filter cleaning system that eliminates the need for compressed-air and solenoid controls. Primary filters are static-conductive, non-stick and HEPA secondary filters are standard.



The MDL55E-XP features a vacuum equalizer kit that allows the use of off the shelf static conductive collection bags. (Picture: VAC-U-MAX)

VAC-U-MAX's newest explosion-proof electric-powered industrial vacuum cleaner that does not require compressed-air, and the only electric powered explosion-proof system available in 55-gallon (approx. 208 I) capacity. Unit runs on 110V with 1 hp (approx. 0.75 kW) motor and features a manual filter shaker with all parts designed in anti-sparking stainless steel per NFPA requirements. The MDL55E-XP also features a vacuum equalizer kit that allows the use of off the shelf static conductive collection bags. System is ideal for all combustible dust cleaning applications including grain elevator and agricultural packaging applications.

### MDL55SR: Submerged Recovery Air-Vac makes Explosive Powders Inert

The MDL55SR Submerged Recovery Industrial Vacuum cleaning system is designed to handle explosive powders and render them inert by drawing them under a level of fluid. System features a mobile cart with 6 in (approx. 150 mm) static conductive casters and dispersion screen that insures the combustible dust is wetted. System designed in anti-sparking stainless steel and features a 2 in (approx. 50 mm) sanitary stainless-steel drain valve, with disassembly in minutes without tools.

MDL1020: Continuous-Duty Industrial Vacuum for High Volume Recovery



Large rubber tires and dual swivel castor make the MDL1020 easily maneuvered by a single operator.

(Picture: VAC-U-MAX)

Unit features a powerful positive displacement pump designed for high volume recovery (up to 5 t/h), with continuous-duty vacuum production easily meeting even the toughest recovery challenges. Vacuum is very powerful yet portable, making it a versatile tool that can be used anywhere. Large rubber tires and dual swivel castor make the 1020 easily maneuvered by a single operator. Noise levels are below OSHA standard.

MDL1040PD: Central Vacuum Cleaning System for Use by Up to 3 Operators

Compact central industrial vacuum cleaning system engineered for 100% more suction power with design optimized for indoor installation. System supports use by up to 3 operators at one time. Flexible design offers longer vacuuming times and filter life. Unit is available in 10 hp or 15 hp (approx. 7.5 kW or 11.2 kW) and features a quiet positive displacement pump with automatic off-line pulse filter cleaning and HEPA filtration. The plug-and-play design offers full UL-Certified control panel. Visit <a href="www.vac-u-max.com/PowderShow">www.vac-u-max.com/PowderShow</a> to learn more about the equipment on display and to register for a complimentary expo pass.