

POSITIONING YOUR VISCIOUS MATERIAL PROCESS FOR SUCCESS

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Whitepaper

Positioning Your Viscous Material Process for Success



The Challenge

The food and beverage industry processes large quantities of raw material every day. Materials such as nut butters, jams, ice cream, yogurt, semi frozen concentrate, honey, and tomato paste are some of the most difficult products to process. Other viscous material found in the cosmetic, pharmaceutical, and industrial industries present very similar problems.

Highly viscous material removal from 55 gallon drums presents some unique challenges. Manufacturers often waste a significant amount of product unable to extract through conventional methods.

A considerable amount of time is spent attempting to capture material left behind. Loss of production due to low performing equipment that requires extensive cleaning is costly. All are causes for lost profit.

The Solution

Investing in equipment specifically designed to extract almost 100% of the material in the fastest and most efficient process available!

KNOLL America has developed equipment specifically designed to solve the many problems manufacturers face in regards to unloading drums of viscous material. Even the most difficult products with viscosity reaching as high as 1,000,000 Centipoise can be pumped with ease.

KNOLL America developed two very unique products to suit any application. The stationary drum Unloader and the articulating arm unloader. These products along with the multiple configuration options offer manufacturers a viable solution to an otherwise costly and inefficient process.



KNOLL America Stationary
Drum Unloader



KNOLL America
Progressive Cavity Pump



KNOLL America Articulating
Arm Unloader

Why is KNOLL America a better choice?

Key components such as the KNOLL progressive cavity pump allows for a smooth transfer of material without pulsation. Metering material can be achieved by utilizing the variable frequency drive which comes standard with all equipment. The progressive cavity pump operates at a fraction of the cost compared to that of an air piston or diaphragm pump.

Operational cost of air driven pumps versus electric pumps is minimally eight times greater. The higher the viscosity of the material to be pumped can equate to higher costs. KNOLL progressive cavity pumps come in several material configurations and are available in 3A sanitary.

Intelligent controls makes operating KNOLL America Drum Unloaders simple and easy, preventing unsafe work conditions by controlling all attributes of the equipment. The operator to equipment interface has been simplified, so that the operator is allowed to concentrate on the operation and not be distracted by a confusing sequence of buttons and knobs, thus reducing risk of injury and minimizing operator error.

Maximizing Operational Efficiency

Configuration options offer our customers the ability to customize the equipment to maximize operational efficiency.

- The stationary unloader can be purchased with or without casters allowing the equipment to be either permanently affixed to the floor or capable of relocating to other areas for use.
- The articulating arm can be fixed mounted to the floor or mounted to a portable base. This gives the customer the flexibility to meet production needs and reduce overall capitol cost of buying multiple units.

Matching the material demands to the proper follower plate assembly gives our customers the confidence of minimum material waste, thus ensuring near 100% extraction from the product drum.

Conclusion

Navigating through daily challenges of handling viscous materials are common obstacles in a manufacturing environment. There are enormous benefits to working with a KNOLL America drum unloading system designed specifically for your manufacturing process.

Its advanced capabilities offer a viable solution to an otherwise costly and inefficient process. An unloading system to this degree is exactly what helps companies succeed and prosper, setting themselves apart from competitors.

For more information on how KNOLL America can solve your extraction problems, please contact us directly at (248) 588-1500.

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