

# Energy Saving Conveyor Applications

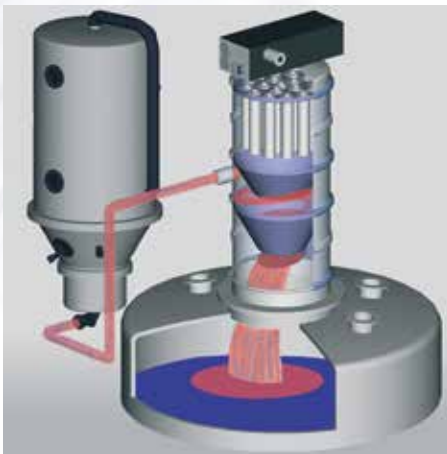


**Volkmann “energy saving” vacuum conveyors are ideal for the transfer of powders, granules, or tablets to mixers, packers, etc. from:**

- Drums
- Bulk Bags
- IBCs
- Gaylords

**And we can do it:**

- Environmentally Friendly
- Quietly
- Economically
- Dust Free



Vacuum conveying principle—self contained.

The transfer of powders and solids from bulk containers to processing stations in a dust-tight, environmentally acceptable and economic manner is an increasingly important requirement of today’s manufacturing processes. Be it in food, pharmaceutical or chemical applications, this requirement presents specific challenges in terms of handling uniquely addressed by the Volkmann range of vacuum conveyors.

Contrary to some opinions, the use of compressed-air-driven systems is often the most economical choice. Volkmann’s range of vacuum conveyors transfers product under vacuum. In the unlikely event of a leak, air is drawn into the process – material is not blown out. When coupled to specially designed rip and tip bag stations, or IBC unloading units, contained transfer easily results.

In addition, the dense phase and low velocity conveying achieved by the Volkmann Multijector® vacuum pump uses minimum air consumption, translating to more energy savings.



## WHY VOLKMANN?

- VACUUM CONTAINMENT
- MULTIJECTOR HIGH EFFICIENCY PUMP
- FROM DRUMS, BOXES, BULK BAGS OR IBCS
- ALL PNEUMATIC OPERATION
- HIGH QUALITY FILTERS
- ATEX CERTIFIED FOR EXPLOSION APPLICATIONS
- DUST FREE
- NO WASTE ENERGY FROM PUMP IDLING
- “PLUG AND CONVEY”
- LESS THAN 82dBA
- OIL FREE, NO MAINTENANCE PUMPS
- SUPERIOR FILTRATION, WITH 3µ AS STANDARD
- MODULAR DESIGNS
- LIGHTWEIGHT PUMPS



[www.VolkmannUSA.com](http://www.VolkmannUSA.com)

# Quality Vacuum Conveying Systems for 30+ Years

VOLKMANN vacuum conveyors are the first choice for safe and hygienic powder handling.

## Energy Efficient

Volkman Multijector® vacuum pumps use the Venturi principle to generate vacuum. Unlike single stage pumps, they create energy efficiency with their reuse of generated air as it passes through a series of Venturi in multiple stages. This process provides a greater level of vacuum, down to 27" Hg, and high airflows.

The pumps are lightweight, quiet and use up to 50% less compressed air in any given application than their competitive single-stage units.

Multijector pumps can be adjusted by varying the inlet pressure so that a conveying system need only use sufficient air to achieve conveying. This capability is in strict contrast to the electric pumps used by alternative systems where they are sized by motor, typically 7 1/2 hp, 10 hp or 15 hp in the competing capacity range. In these, the motor energy level is defined regardless of demand.

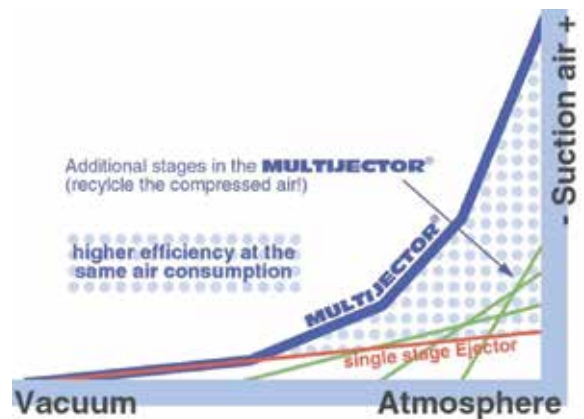
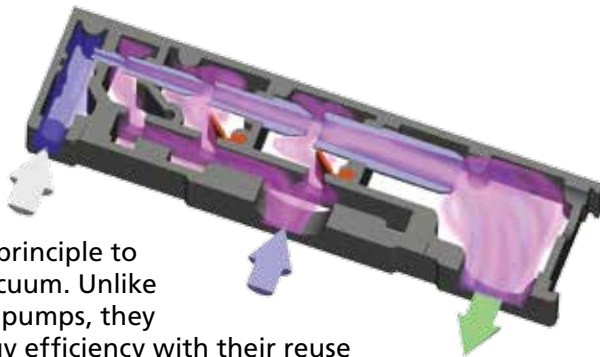
In addition, Multijector pumps can be turned on and off without fear of damage to the unit, offering more efficiency than electrical pumps restricted by the number of starts and stops allowed per hour.

## High Containment

Whenever powders are transferred, dust emissions are a potential concern – a situation complicated by the need for production changes from product to product. Volkman conveyors are adaptable, allowing handling of a wide variety of powders by the same unit. The ability to adjust inlet air volume and vacuum level allows the velocity of transfer to be carefully controlled.

## Flexibility of Design

All Volkman conveyors use modular designs to allow for adaptation to specific production needs. Variations in filter area, type of material entry to the receiver, pump size and specification, discharge flange connections and the incorporation of flow aids are all available. The same modular concept allows the attachment of drum, box or IBC unloading.



**Special designs are available to fulfill the demands of the Chemical, Food, Pharmaceutical and Pigment industries.**

### Suction out of/from...

- Hoppers
- FIBCs
- Silos
- Drums
- Bags/liners
- Dryers
- Cutting machines
- Floors
- Molds

### Feeding directly into...

- Mixers/blenders
- Filling machines
- Tablet presses
- Weighing hoppers
- Reactors
- Sieves
- IBCs
- Bag fillers
- Drums
- Silos

