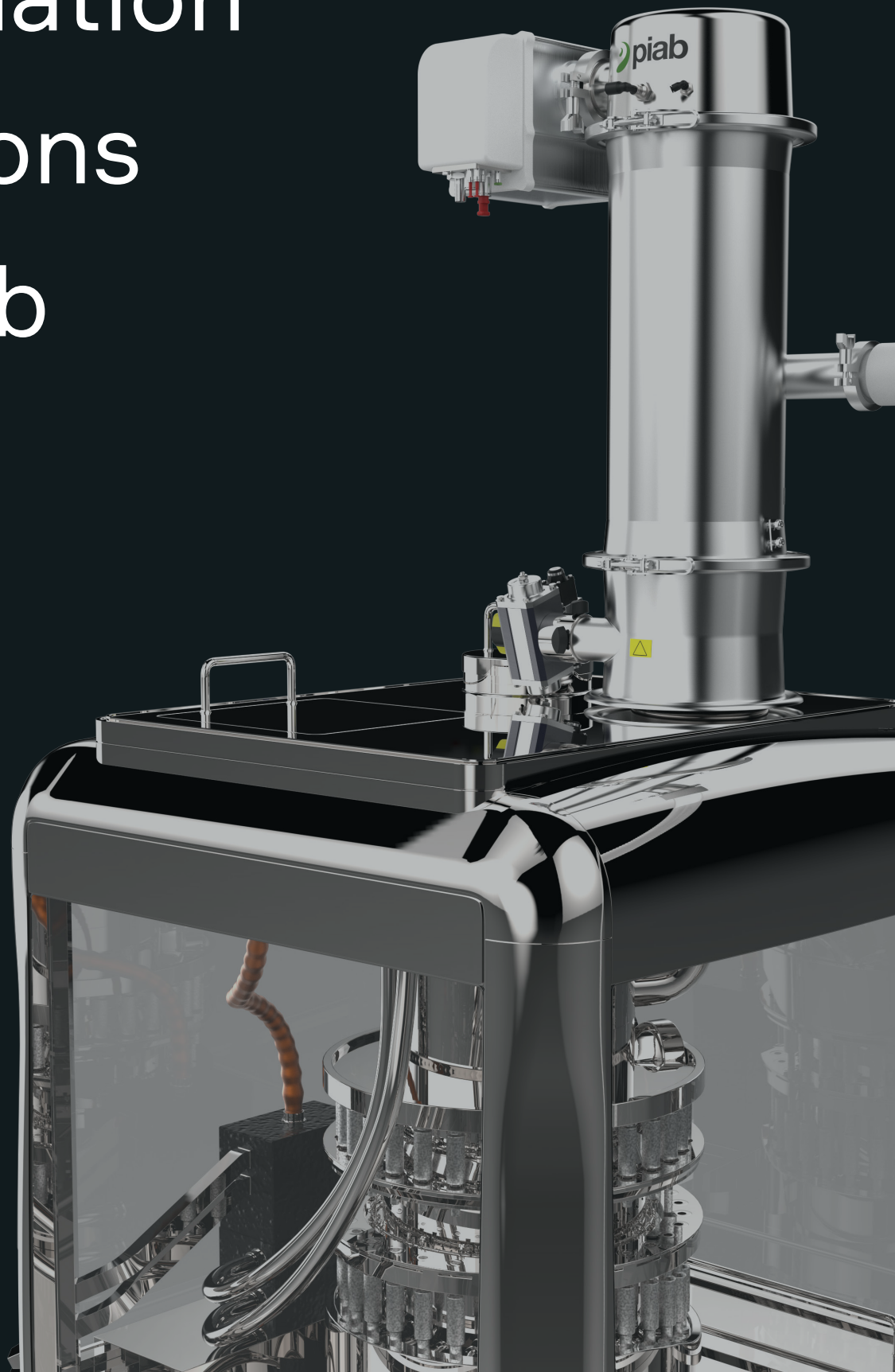


piFLOW®

Pharma Automation Solutions by Piab



 piab

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Piab provides reliable vacuum conveyor solutions for the safe and efficient handling of pharmaceutical powders, tablets, and capsules. Designed to minimize cross-contamination, preserve product integrity, and meet stringent industry regulations, our enclosed systems support a seamless and hygienic production process.

With a focus on reliability and ease of use, our solutions help pharmaceutical manufacturers maintain high standards of safety and efficiency, ensuring smooth operations and consistent product quality.

Moving Powders, Tablets, and Capsules

Pharmaceutical materials, including powders, tablets, and capsules, can be handled using either manual or automated processes. Piab's vacuum conveyors are specifically designed to provide a safe, enclosed, and hygienic transfer solution, ensuring efficiency and contamination control.

Our systems support various applications, from powder transfer to capsule filling and tablet press operations, delivering precise and consistent handling. Specially designed vacuum conveyors minimize tablet chipping during transfer, using gentle conveying. Moreover, utilizing slow-speed, dense phase conveying, vacuum conveyors ensure there is no segregation. This has been tested and confirmed by an external party.



Adapting Batch Processes to Continuous Manufacturing

For companies transitioning from batch to continuous manufacturing, Piab's vacuum conveyors provide a seamless adaptation by:

- Ensuring a consistent flow of powders and ingredients throughout the production line.
- Eliminating manual handling bottlenecks, improving efficiency and reducing contamination risks.
- Integrating easily into continuous production setups, replacing traditional batch-fed systems.

Pharma manufacturers looking to modernize their production for faster time-to-market and improved compliance can rely on Piab's vacuum conveying technology for a smooth transition to continuous manufacturing.



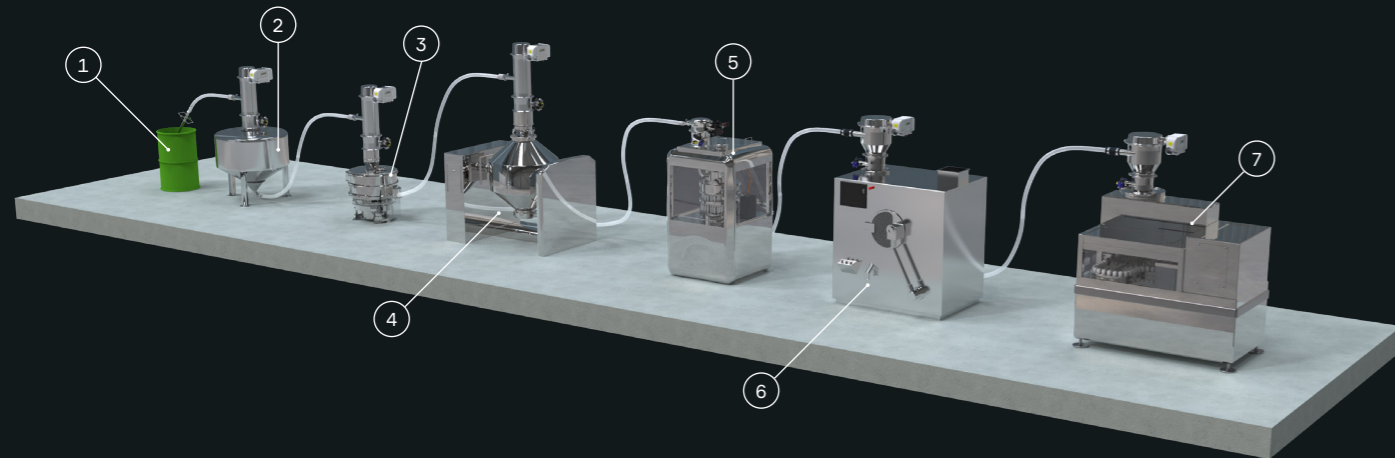
Why choose Piab?

- **Prevents Cross-Contamination** – Fully enclosed system prevents exposure and ensures regulatory compliance.
- **Meets industry Standards - Safety:** CE Machinery Directive 2006/42/EC, ATEX 2014/34/EU *
Food Contact: EC No 1935/2004, EC No 10/2011, FDA food contact regulation under 21 CFR 170-199.
- **Increases safety by powder transfer automation.**
- **Maintains Product Integrity** – Gentle vacuum technology minimizes segregation and degradation.
- **Energy-Efficient & Low Maintenance** – COAX® technology reduces energy use while requiring minimal upkeep.
- **Compact & Versatile** – Easily integrates into existing pharmaceutical production lines.

* Selectable configurations

How Piab Vacuum Conveyors Integrate into Pharmaceutical Manufacturing

The image illustrates key applications where Piab vacuum conveyors efficiently transfer powder between equipment, ensuring a fully enclosed and contamination-free process.



Powders are safely extracted from barrels or drums (1) into the production process, reducing manual handling and exposure to hazardous materials. Piab Vacuum conveyors ensure efficient powder transport to silos (2) or sieving machines (3), separating oversized and fine particles for uniform material consistency, then the powder is conveyed to blending or mixing units (4), maintaining ingredient uniformity and preventing segregation.

The vacuum conveyor feeds tablet presses (5), coating machines (6) and after that tablets, capsules, or powders are efficiently transferred to packaging lines (7), preventing dust contamination and ensuring hygienic processing.

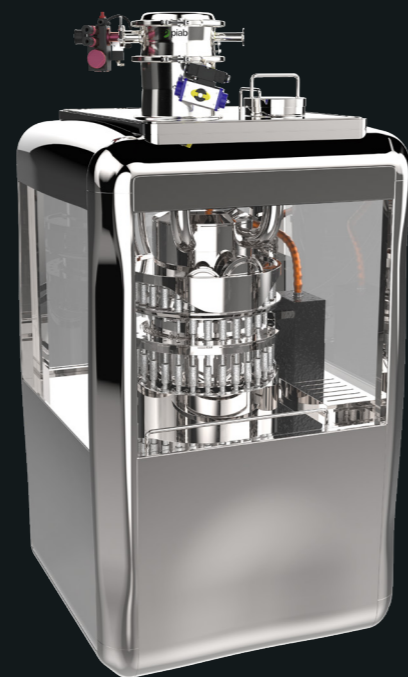
Unused or damaged products can be automatically collected for disposal or recycling, minimizing material waste and optimizing production efficiency.

Feed your tablet press with ease; The Piab piFLOW@p64 vacuum conveyor streamlines tablet press feeding by eliminating manual handling, ensuring efficiency, safety, and precision in pharmaceutical production. Designed to automate material transfer, it seamlessly conveys small amounts of APIs or product mixes while maintaining the smallest footprint in its class.

The piFLOW@p64 reduces operator intervention, minimizing the risk of cross-contamination and exposure to hazardous substances. By eliminating traditional manual transfer or gravity feeding, it improves production hygiene and enhances operator safety.

Various transition pieces are available to connect the conveyor to tablet presses from different manufacturers, ensuring a tailored fit.

By automating material flow in tablet press operations, the piFLOW@p64 enhances process reliability, reduces downtime, and improves overall production efficiency.



Ideal vacuum conveyors for the Pharmaceutical industry

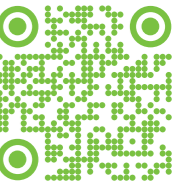
Piab's vacuum conveying system is a premier powder conveying technology solution. It provides a safe and clean way to handle bulk solids. This includes handling fine dust, abrasive materials, and materials that absorb moisture (hygroscopic) or form bridges. These vacuum powder transfer systems represent an ideal alternative to traditional conveying methods, ensuring no product quality variations while minimizing product loss.

Piab's vacuum conveying systems are optimal powder conveying solutions, offering unparalleled safety and hygiene. Equipped with innovative technology like COAX®, these systems are the epitome of efficiency in vacuum conveying for powder handling. Configurations are straightforward and reliable, using the most energy-efficient way to produce the vacuum.

Upgrade Your Pharma Production with Piab

Piab's vacuum conveying solutions help manufacturers automate, optimize, and scale pharmaceutical production while maintaining high safety and quality standards.

Scan the QR code to learn more or visit piab.com



	piFLOW®p	piFLOW®t
Primary applications	A versatile, premium device used in a wide range of industries. Equipped with a quick release system, it is easy to be sanitized. It comes with a variety of accessories and possible configurations to meet specific conveying needs.	When a premium technology is needed for transporting fragile products in the pharmaceutical industry piFLOW®t will together with piGENTLE® automatically conveys tablets or capsules without breaking or chipping thanks to a controlled flow and constant speed, guided entry and the elimination of all sharp edges.
Capacity	Up to 14 tons/h / 30,000 lbs/h	Up to 3 million parts/h
Available batch sizes	2 - 56 litre / 0,07 – 2 ft³	10 litre / 0,35 ft³
Conformity	EC, FDA, USDA*, ATEX	EC, FDA, USDA*, ATEX
Main material	ASTM 316L	ASTM 304L
Surface finish	Ra < 0.6	Ra < 0.6
Height	From 289 mm (25.3 inches)	From 765mm (30.1 inches)

* All conveyor parts which are in contact with the conveyed material fulfill the requirements of the FDA, and the conveyor is designed according to the USDA dairy guidelines. Piab's experts can configure a customized solution to meet specific needs.



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