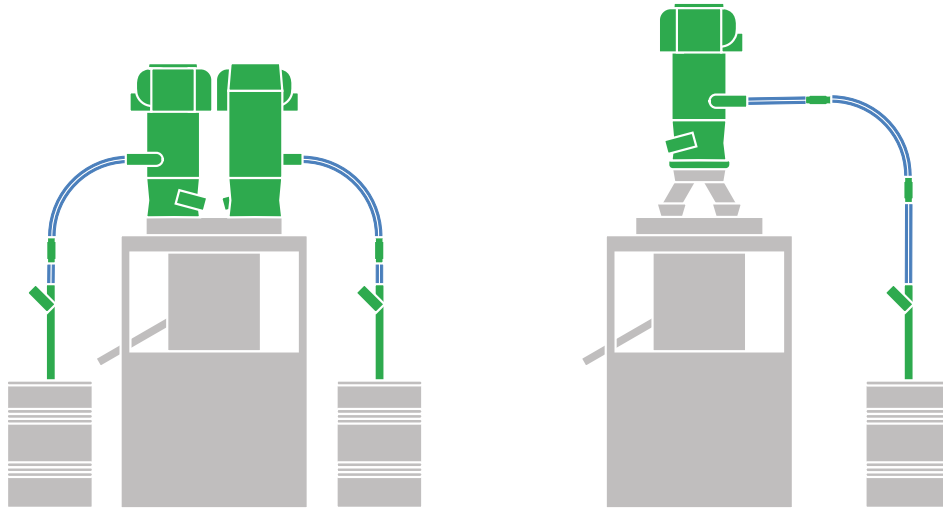


7. Application illustrations

7.1 Pharmaceutical applications

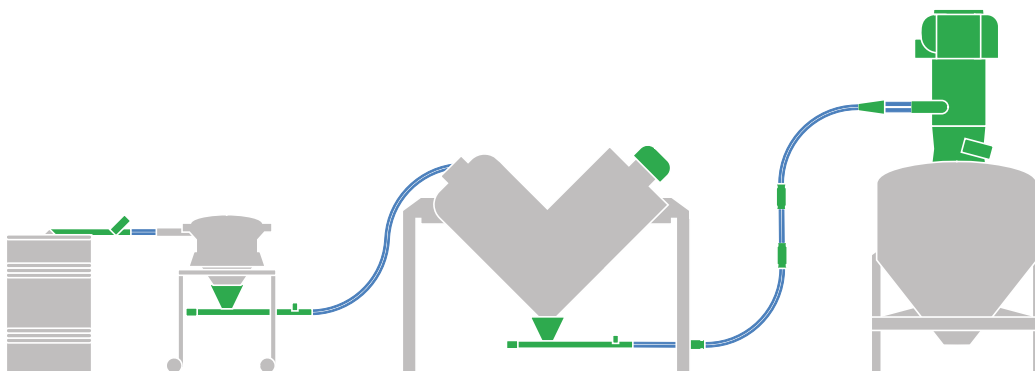
Feeding a tablet press:
piFLOW[®]p normally used.



A. Two conveyors transporting material to a tablet press.

B. High speed conveying to a tablet press with a single conveyor. Splitting the feed into two hoppers.

V-blender:
piFLOW[®]p normally used.

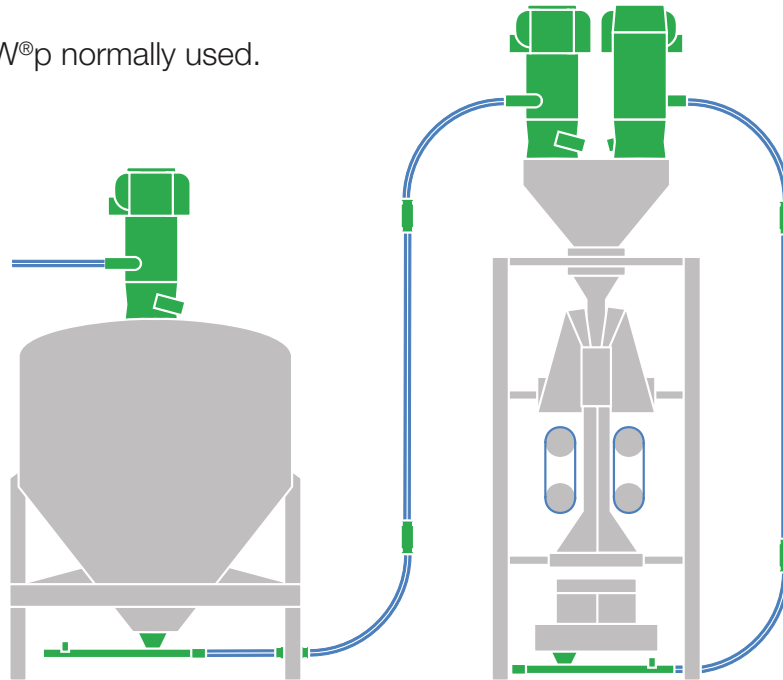


Direct charging a V-blender from a screener. Unloading with a second conveyor.

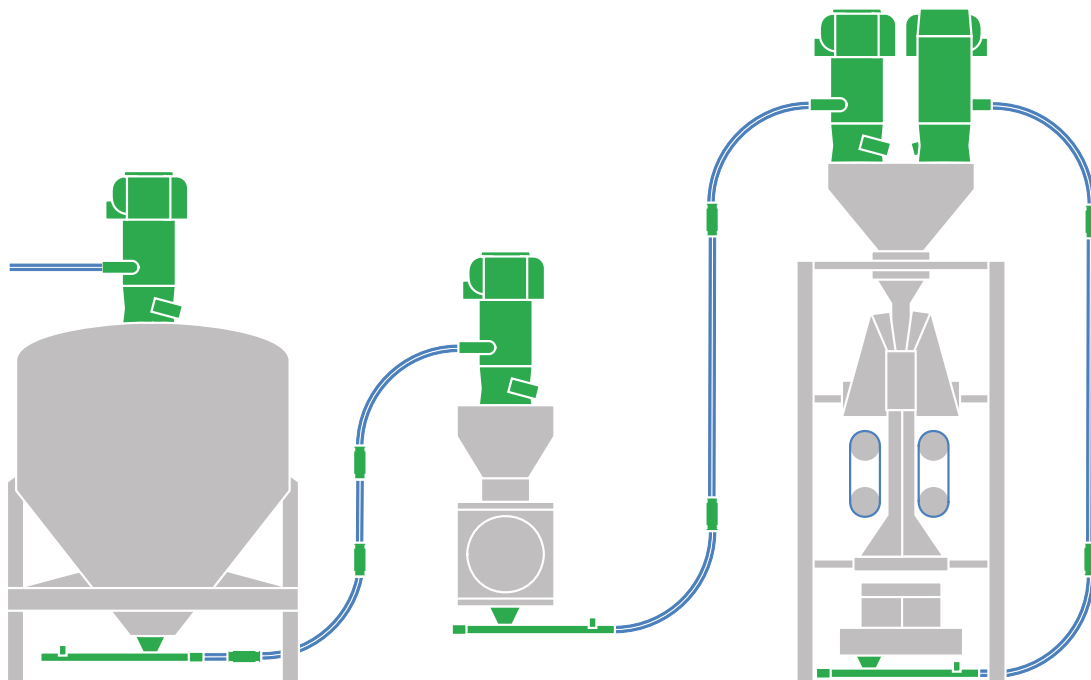
7.2 Food applications

Coffee application:

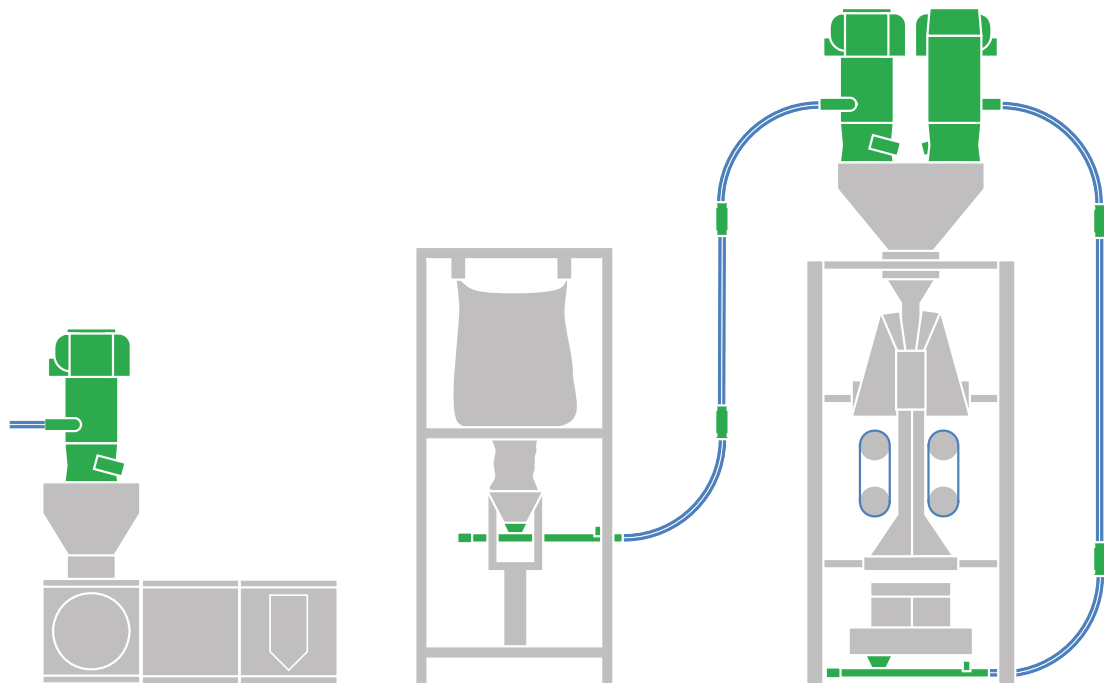
piFLOW[®]f and piFLOW[®]p normally used.



Beans after roasting process into hopper with roasted, stabilized and dried beans. Conveying to portioning machine. Into packaging machine and bags. Reclaiming back to packaging machine.

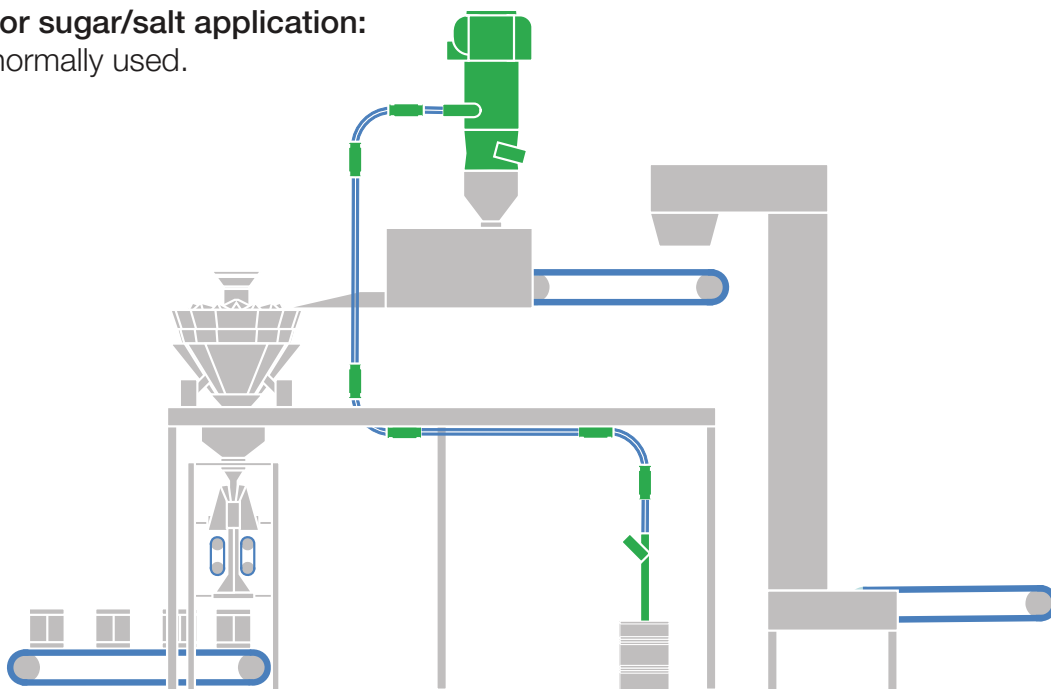


Beans after roasting process into hopper with roasted, stabilized and dried beans. Conveying to Milling process. Conveying to portioning machine. Into packaging machine and bags. Reclaiming back to packaging machine.



Instant coffee in big sacks/container with coffee and additives. Conveying to portioning machine. Into packaging machine and bags. Reclaiming back to packaging machine.

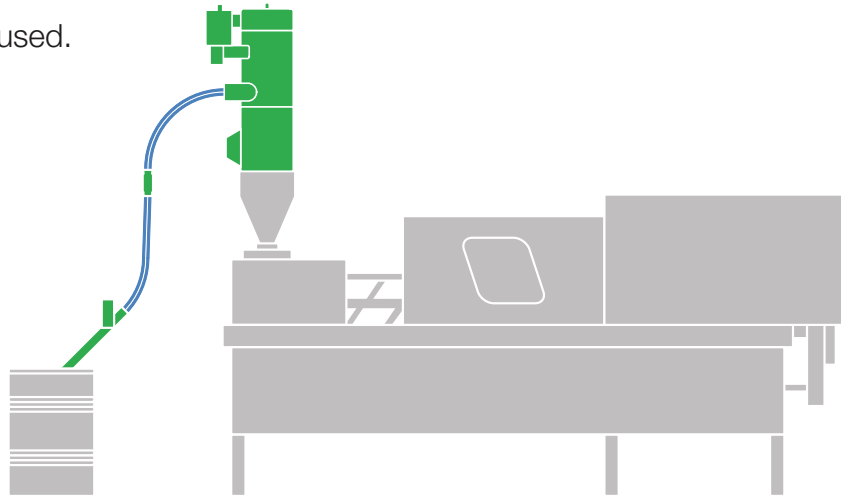
Seasoning or sugar/salt application:
 piFLOW[®]p normally used.



Conveying seasoning/salt/sugar to a seasoning machine with piFLOW[®]p conveyor. Into sorting and packaging machine then out to transportation belt.

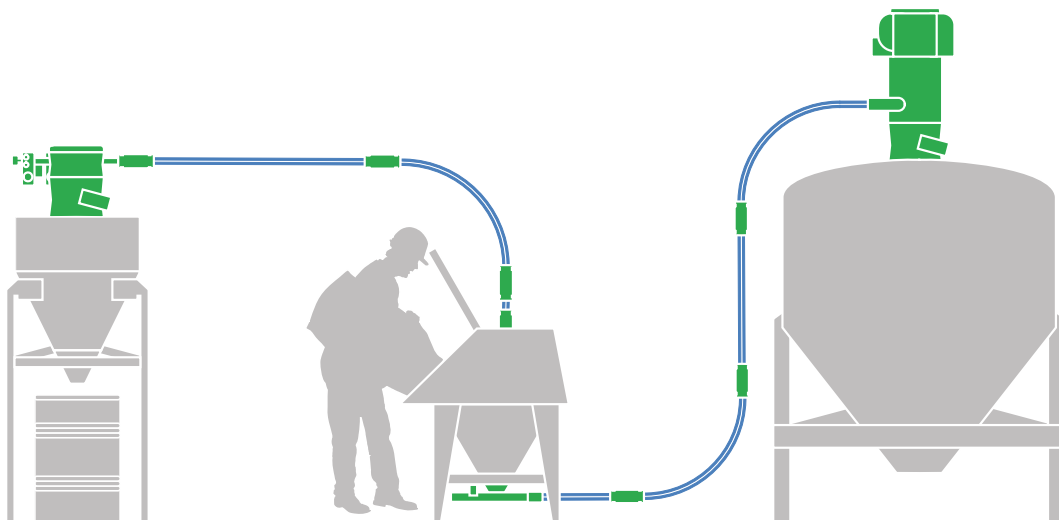
7.3 Industry applications

Plastic granules:
piFLOW®i normally used.



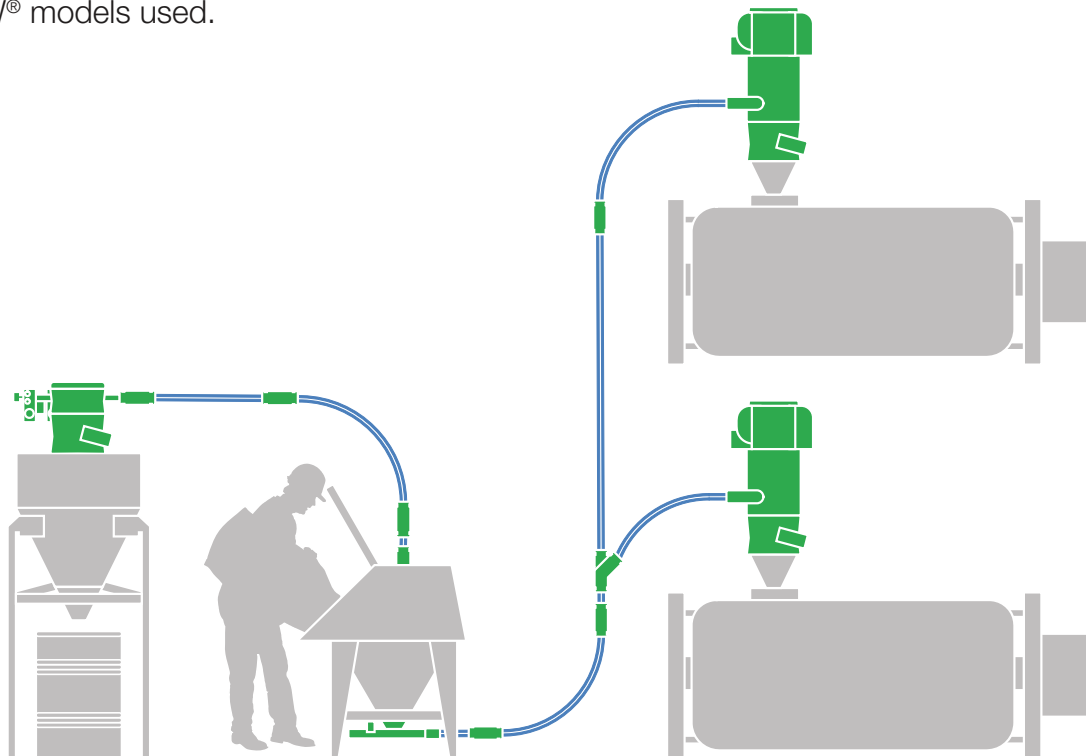
7.4 General applications

All piFLOW® models used.



Bag dump station with conveying to a hopper as well as dust collection.

All piFLOW® models used.



Bag dump station with conveying feed split to two blenders and dust collection.

8. Vacuum pumps

8.1 Compressed air-driven ejector pumps

All ejector pumps are driven with pressurised gas, usually compressed air. The compressed air flows into the ejector pump, where it expands in one or more ejector nozzles. When expanding, the stored energy (pressure and heat) is converted into motion energy. The speed of the compressed air jet increases rapidly, while the pressure and the temperature go down, attracting more air and thereby creating a vacuum on the suction side. Some ejector pumps may also be used to blow air. Piab uses a patented technology for its ejectors, the COAX® technology. It is a three stage ejector and the most energy efficient

ejector available today. Its advantages is that it provides high efficiency, low energy consumption and operates even at low feed pressures. It is extremely easy to clean and also to upgrade later on when the vacuum needs have increased.

8.2 Mechanical pumps

The main principle for all mechanical pumps is that they convey, in one way or another, a certain volume of air from the suction side (the vacuum side) to the exhaust side. In that way they create a vacuum. Mechanical pumps usually have an electric motor as power source.