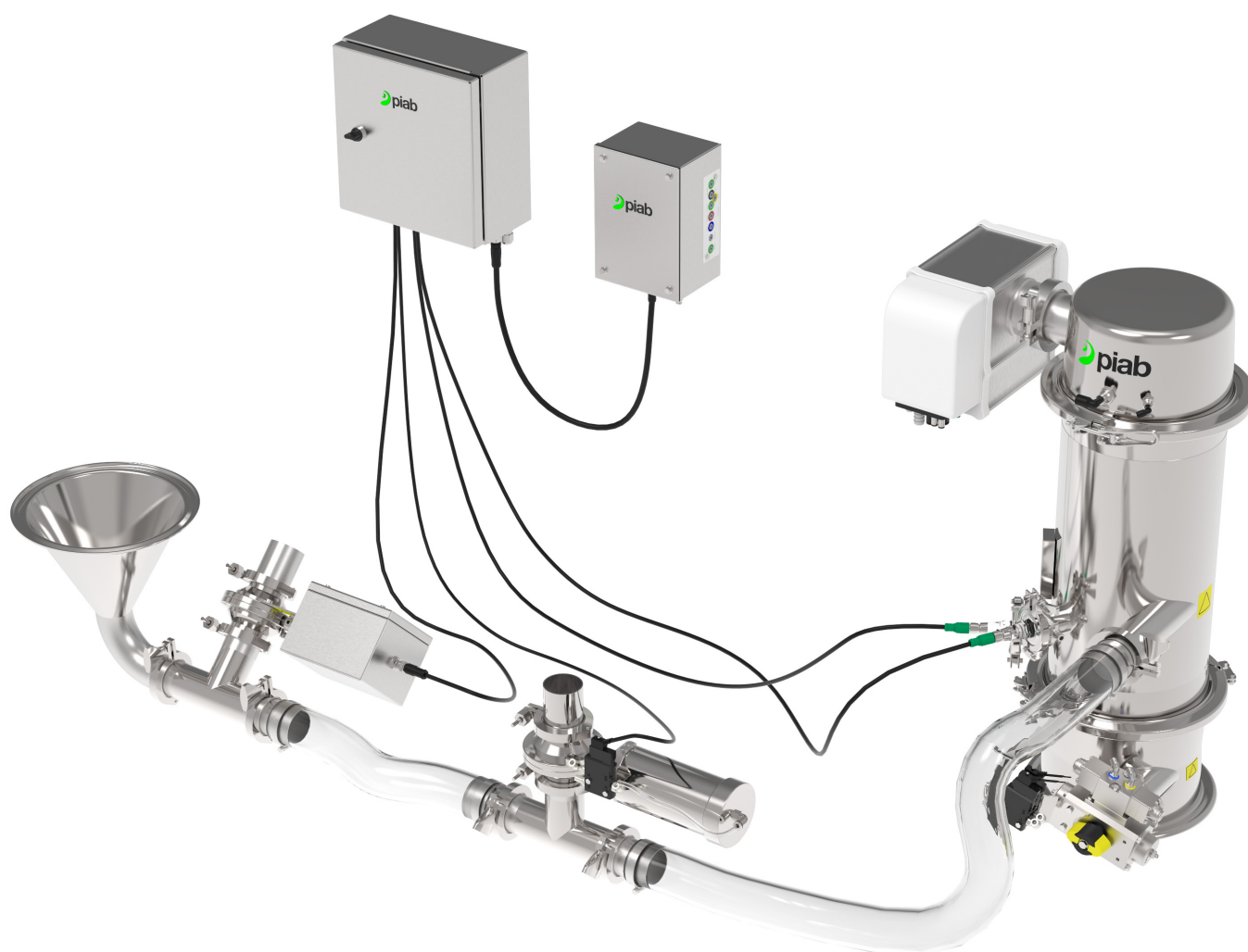
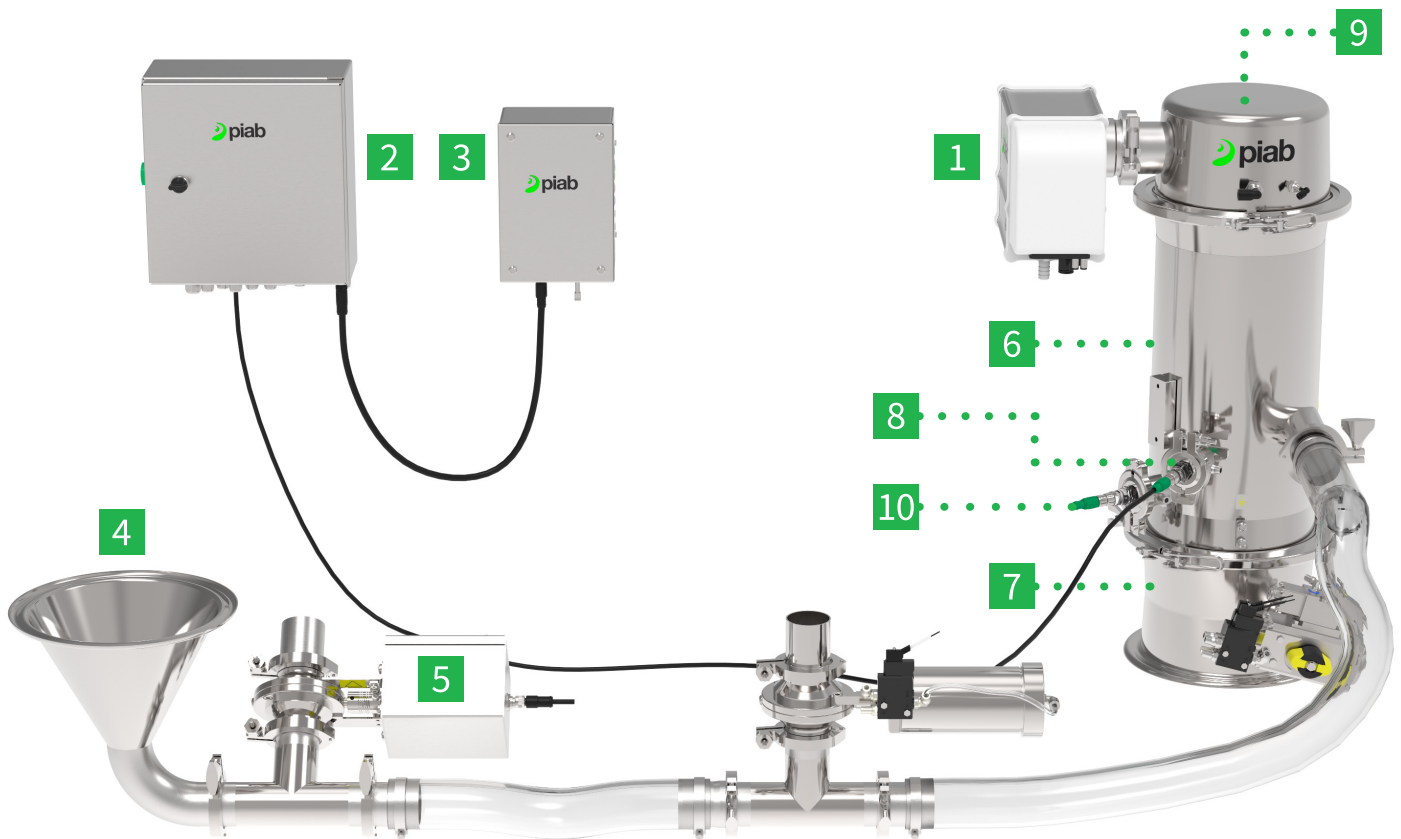


# Changeover Champion

piFLOW®p SMART takes vacuum conveying to a new level



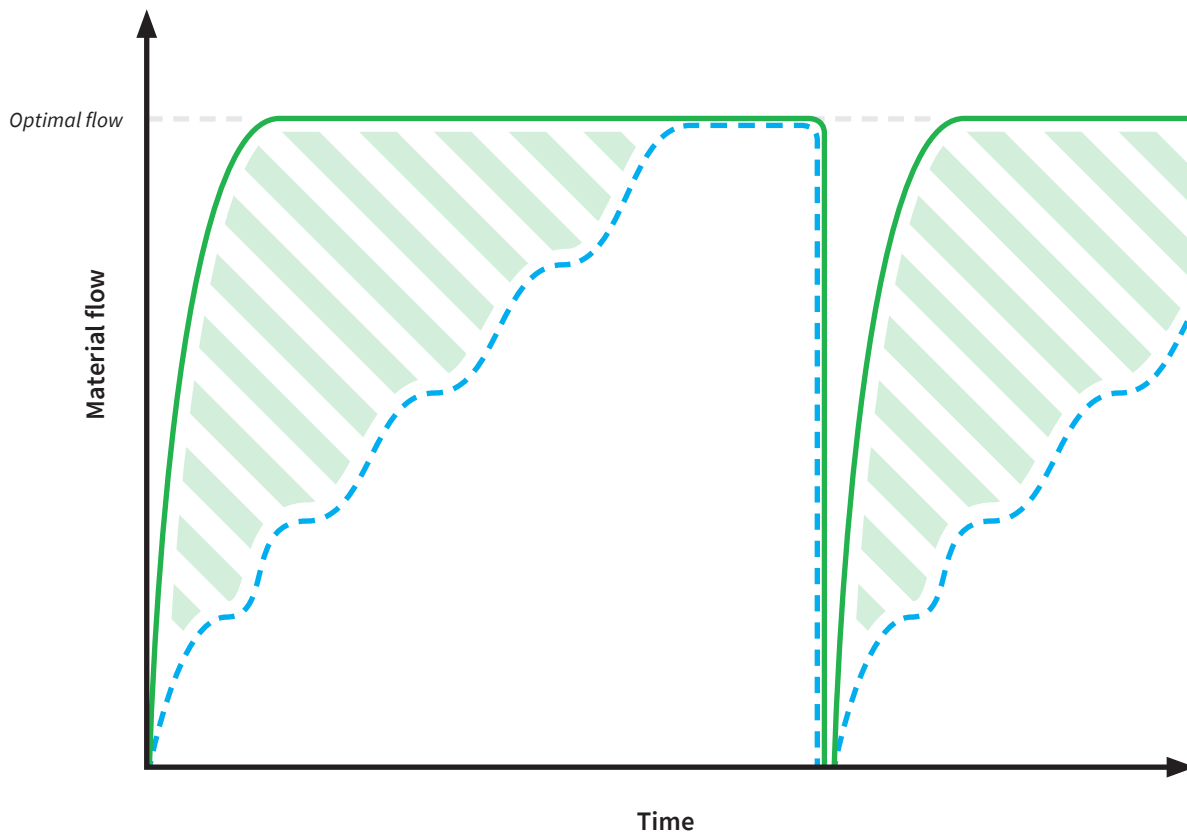
# A tour around the smart system



**piFLOW® p SMART is a complete system.** It has a heart, a brain and senses. At its heart **(1)**, vacuum is created with compressed air and Piab's COAX® technology. The system's brain, the Electrical Control Unit **(2)**, automatically controls the pump. It does so with the help of its Valve Unit **(3)** where vacuum and pressure are being sensed, and electrical signals converted into pneumatic ones.

Powder, grains or granules are carried from the feed-point **(4)** through the Air Carrying Unit **(5)** and the conveying line to the container **(6)** when the bottom valve **(7)** is closed. When the conveyor is full, the top sensor **(8)** is activated, stopping the pump and opening the bottom valve. The material is discharged at the same time as a shock of compressed air cleans the filter **(9)**. The bottom level sensor **(10)** is deactivated, closing the bottom valve and starting the pump. And so the next conveying cycle begins!

# Six times faster!



**Change materials six times faster with piFLOW®p SMART.** Changes that would normally take one hour in a conventional vacuum conveyor take only 10 minutes in piFLOW®p SMART.

That's why we call it the Changeover Champion!

The perfect performance and productivity promoter, piFLOW®p SMART is the world's first self-optimising vacuum conveyor. Integrated with smart software and sensor technology, it is the ultimate choice for processors handling many different materials or those that need to make frequent changes.



piFLOW®p SMART



Conventional vacuum conveyor

Proving its name, piFLOW®p SMART uses machine learning to automatically tune the process, resulting in a flawless flow of materials. Smart enough to configure itself and quickly adjust settings, taking into account environmental conditions such as temperature and humidity, it beats even the most experienced operator every time!

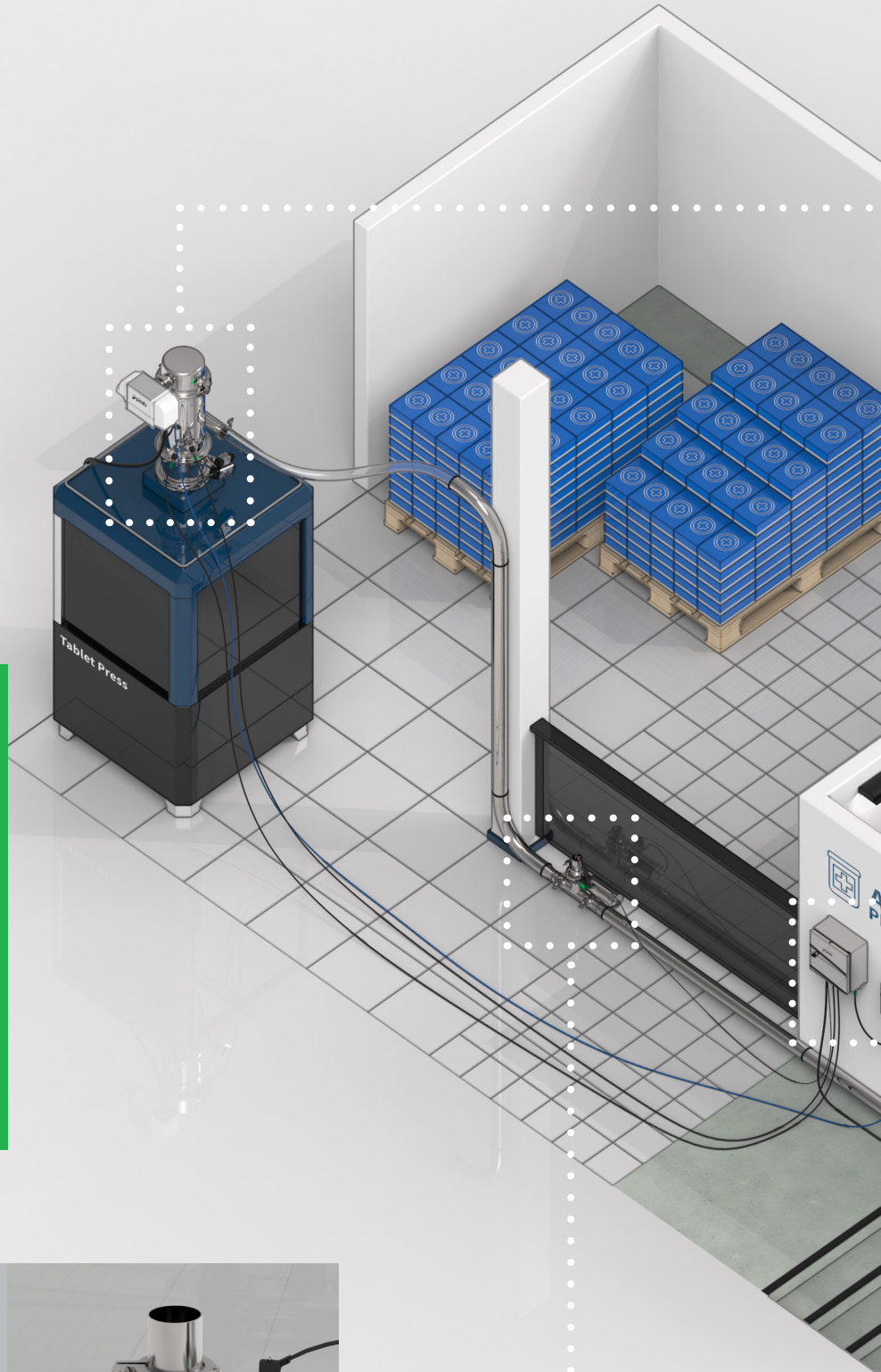
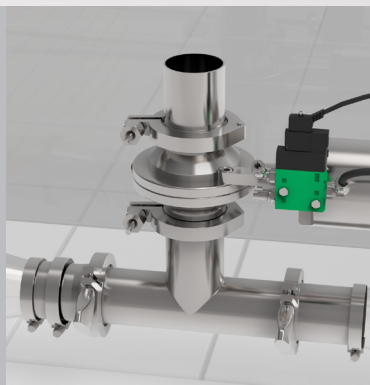
# Perfect for Pharma

## Batch optimisation

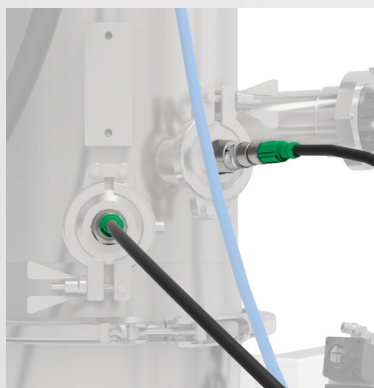
The combination of smart software, sensor technology and the Air Carrying Unit enables the entire filling volume of containers to be utilised and material throughput to be optimised. Correct tuning of the discharge time and/or readjustments due to environmental factors, such as humidity and temperature, are no longer dependent on the skills and experience of operators. This enables processors to always make the most of their batches, small or large.

## Pipeline Emptying Unit

In pipelines with a vertical lift of between 8 and 25 metres, the Pipeline Emptying Unit makes sure conveying lines are properly emptied, preventing blockages. Clearing vertical pipeline sections at the end of each suction cycle, this procedure is adjusted by the electrical control unit.

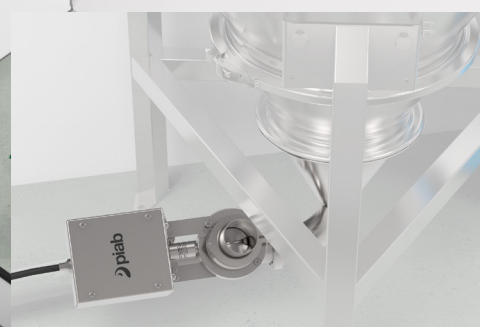






## Level Sensors

Calibrated and optimised for each conveyed material, strategically placed level sensors guard against overfilling and monitor the emptying process. No need for manual timer settings for starting/stopping the pump or opening/closing the bottom lid. In each cycle, sensors are cleaned by a shock of air, ensuring long life and optimal function.



## Air Carrying Unit

The carrying air ratio is automatically set and continuously adjusted during the entire cycle using machine learning in the integrated Air Carrying Unit. Eliminating the need for feed adapter tuning, this guarantees optimal transportation of materials and ensures applications run at premium capacity.

# Flawlessly feeding Foodstuff



## Smooth processes

The continuous auto-tuning allows processes to run as smoothly as possible. In combination with the faster changeover, this saves time and money. The smart, self-optimising conveyor will always operate at the correct speed to perfectly suit specific applications.

## Easy to learn & use

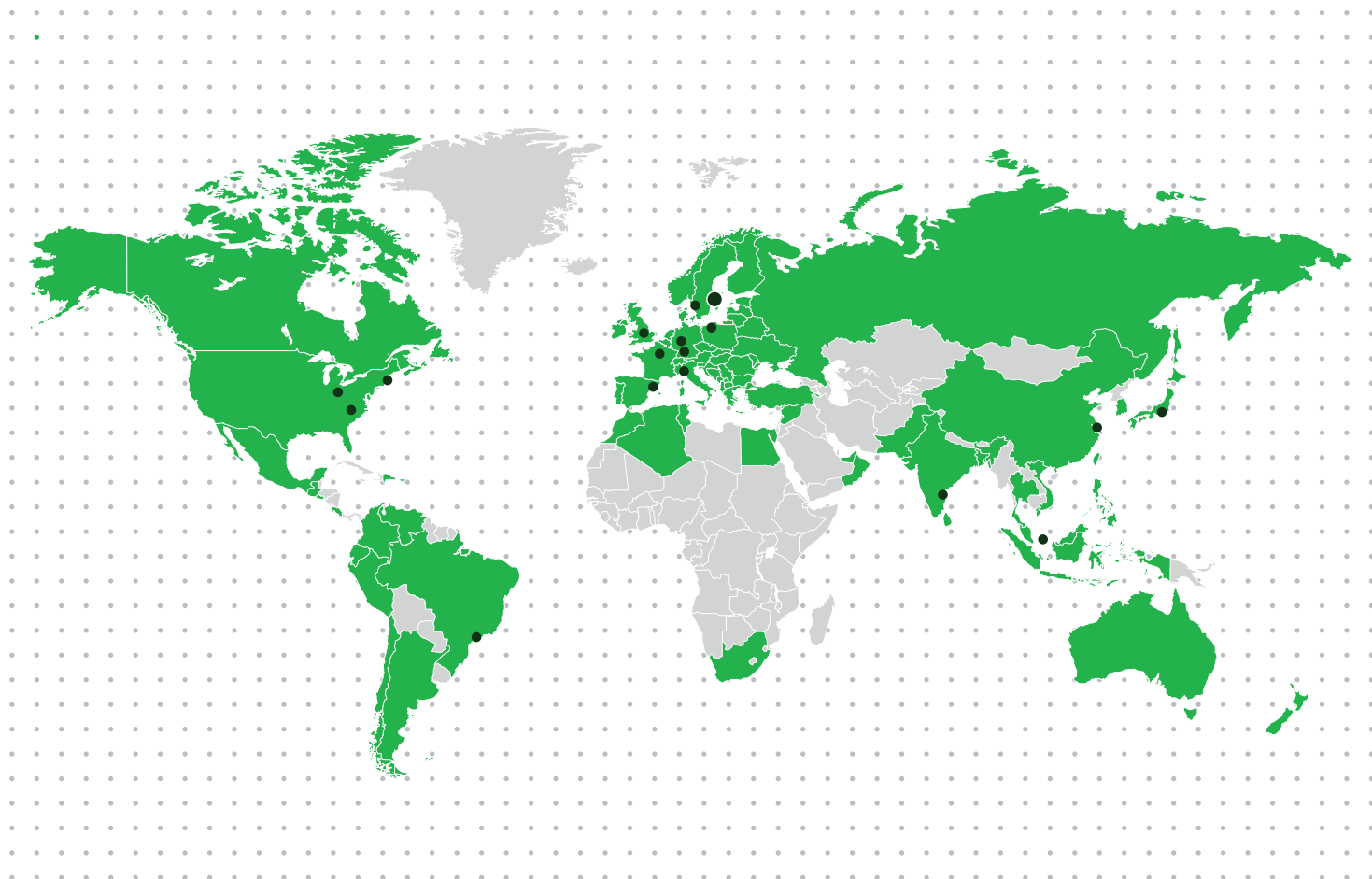
Operated through a user-friendly touch screen, piFLOW<sup>®</sup>p SMART is easy to learn to use and operate. Installation is straightforward, and built-in features, such as the anti-blockage function and air-assisted sensor cleaning, result in a system that requires only a minimal amount of maintenance.





## Promoting productivity

Additional features, such as the ability to store material settings, offer further performance and productivity enhancement. By guaranteeing a flawless flow in every conveying cycle, regardless of the performance of the material or changes in the surrounding environment, piFLOW<sup>®</sup>p SMART is the perfect productivity promoter.



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