



Product Development Centre Powder Handling

Le May sur Evre, France



A fully equipped pilot plant

Located in Le May, France, our PDC consists of two areas, both situated in the same building: a pilot plant and a laboratory. Dedicated to validating process solutions and checking the feasibility of new settings, we have the facilities to process a wide range of products, from dairy to baby food, sugar, flour, and mixed recipes.

Our PDC facilities include a laboratory equipped with devices for the analysis of powder properties and a library of more than 5,500 powders. Each powder has been tested and documented to determine suitable conveying processes and equipment.

Experience and expertise

Tetra Pak's extensive experience processing dairy products has proven effectiveness conducting these kinds of trials. When analysing the properties of new dry recipes, we pay special attention to key product values including segregation, density variation and wettability.

Customer focus

To ensure the optimum development of your products, our team of engineers will work closely with you each step of the way. Because powders behave differently from other materials, characterisation and trials are crucial for every new product application.

We invite you to test your new products or processes at our test facility in France. Together we can define a trial program that meets all your needs.



How to organise a test?

To arrange a trial at our pilot plant, please contact your local Tetra Pak or the PDC representative directly (details at back of this brochure).

On request, we can also organise remote presentations of some of our equipment at our PDC.



What our PDC offers you:

- Expertise on process performance and feasibility
- Savings on product development costs
- Better product quality
- More efficient use of raw ingredients and less waste
- Greater knowledge and understanding of the characteristics of your ingredients



Laboratory

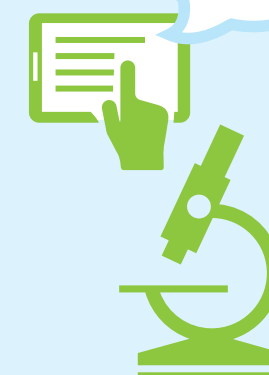
Equipped with a thorough understanding of how ingredients respond to different processing methods, our food technologists and process engineers can help you adapt product recipes for new markets, find smarter processing solutions, or simply satisfy consumer desire for new taste experiences.

60
years

of powder
handling
knowledge

POWDER ANALYSIS

- Breakage measurement
- Moisture measurement
- Homogeneity measurement (conductimetry)
- Rheological analysis (Hosokawa & FT4)
- Particles size distribution
- Porosity
- Fragility index (laser granulometer)
- Powder explosion demonstration (Hartman tube)



A lab for all the powders that we handle, with close to 6,000 samples.

Reliable product trials

Within the pilot plant, process functions are used as modules for reproducing real situations with machine combinations. This type of small-scale validation testing has been proven to be highly reliable when translating to the final plant design.

Our pilot plant trials are organised around pneumatic conveying systems from different technologies like vacuum or pressure and lean or dense phase. Individual optional functions are then added according to customer processes such as mixing, sifting, dosing and big bag unloading. The following equipment is available for testing:

- Tipping & discharging
- Pneumatic conveying
- Dosing
- Sifting
- Mixing



Applications

We handle a wide range of applications, from ingredients, to dairy, beverage, food, and nutritional powders



**Dairy
Beverages
Ice Cream
Prepared Food**



**Dairy
Ingredient
Whey
Plant-Based**



**Dairy
Consumer
Beverage
Powder
Food Powder
(Incl. nutritionals)**



High-performance powder handling solutions

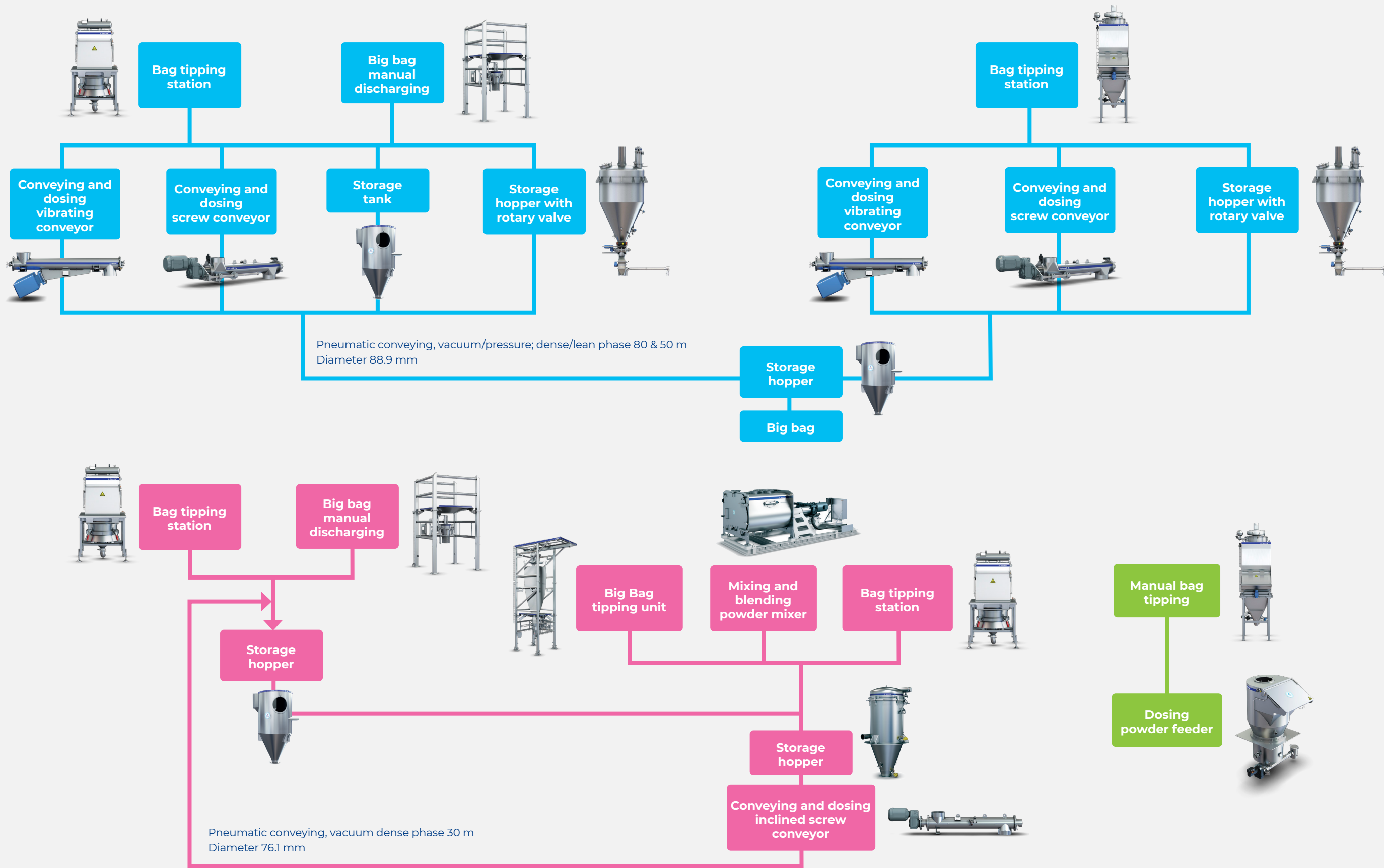


Tetra Pak Powder Handling combines an extensive and competitive portfolio with expert knowledge of building line solutions that secure food safety with the highest hygiene, while enabling fast cleaning and low downtime. Our equipment's reliable and robust design requires minimal maintenance, meeting all your needs for easy and safe operation.

We cover the full spectrum for powder-handling requirements in the food industry. Our expertise ranges from powder handling in discharging and conveying operations to dosing and dry-mixing solutions, all the way to powder packing and end-of-line operations.

Pilot plant process and instrumentation diagram

Multiple configurations available – for testing according to your needs





Travel-free product trials

Now you can take you product development even further, without needing to travel. We offer high-resolution live streaming of product trials that you can follow in real time from anywhere in the world. After your virtual visit to the PDC, we will send you a recording of the trial for future reference, along with a written technical report and samples from the trial itself.



Contact details:

Plant address:
12 rue du Bordage,
49122 Le May-sur-Èvre
France

+33 2 41 63 26 26

