ACTEMIUM

Process Solutions
Saint-Etienne

FLEXIPLANT®

Solutions & Services for Industry

VINCI ENERGIES

FLEXIPLANT is a **pre-built modular unit** designed for **batch manufacturing of dry powder and granular products** with **fully automated operations**.

FLEXIPLANT specific design enables to process a **large number of products and recipes.**

Basic module

- **Rotation conveyor**: a carousel conveyor with 4 fixed arms, the upper ends of which support a batch hopper. The body of the carousel rotates a quarter turn from one processing step to the next
- **Batch hoppers**: hoppers designed to receive the batch quantity
- **Skip conveyor**: a conveyor that raises the filled batch hopper over the mixer
- **Mixer** and **receiving hopper**

Configurable and combinable elements

- Batch hopper
- Mixer
- Small quantity additive storage hoppers, dosing screws and weighing hoppers
- Large quantity storage silos and dosing screws
- Super sack, big bag and sack unloading equipment
- Process control solution

FLEXIPLANT process description

Loading process step: batch hoppers are filled with raw bulk materials constituting the recipe of the final product.

Mixing process step: the filled batch hopper is unloaded into the mixer before the mixing process.

Benefits

Performance

- By using the carousel conveying system with the 4 batch hoppers, manufacturers can process **4 production batches simultaneously** and **reduce production cycle time to under 3 minutes per batch**
- Plant automation ensures **short set-up times.** FLEXIPLANT can be supplied with **PRODOSE management control software** which has specifically been **designed for batch processes** and to manage all process manufacturing steps. Thanks to PRODOSE flexibility, no reprogramming is required when new additional equipment is added

No risk of cross contamination

Batch hoppers are **easy to remove and clean**. The mixer is available with a **Clean-In-Place (CIP) system**.

Reduced investment costs

- **FLEXIPLANT** can easily be installed in an existing building due to its **compact design (compact footprint and low height)**
- **Greatly reduced civil engineering works**

Scalability

FLEXIPLANT characteristics offer manufacturers the possibility of expanding the number of raw materials and **increasing capacity with low additional investment costs,** by adding new storage, weighing, dosing or bulk handling equipment around the carousel at each process step. FLEXIPLANT is **easy** and **quick to reconfigure**.

Low maintenance requirements

The FLEXIPLANT concept as well as the robustness and sustainability of ACTEMIUM equipment ensure **reliable batch operations** and **reduce maintenance costs.**

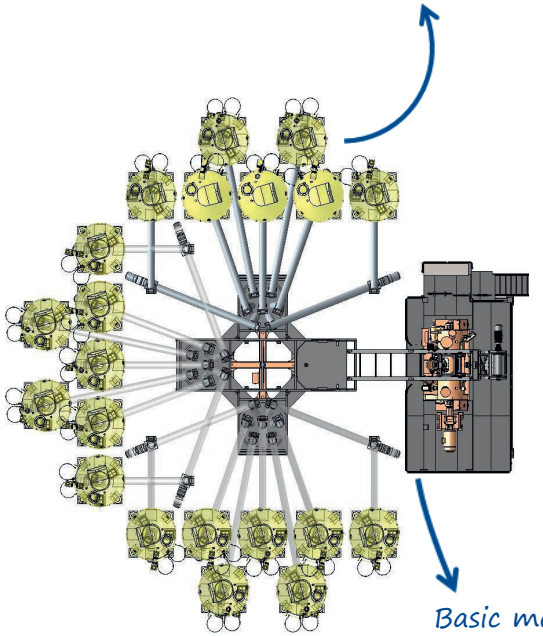
Time-to-market

Delivery time is **significantly shortened** thanks to standard manufacturing processes, equipment design, and Product and Manufacturing Information (PMI).

Each module is **pre-assembled, pre-cabled** and **tested** in the workshop before shipment thus **reducing mounting time on site** and making FLEXIPLANT **easy to move.**

Examples of configuration

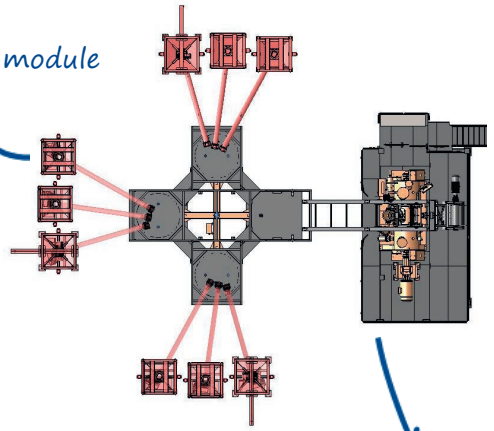
Large quantity bulk material handling module



Storage of raw materials in silos outside the processing building + automatic feeding

Basic module

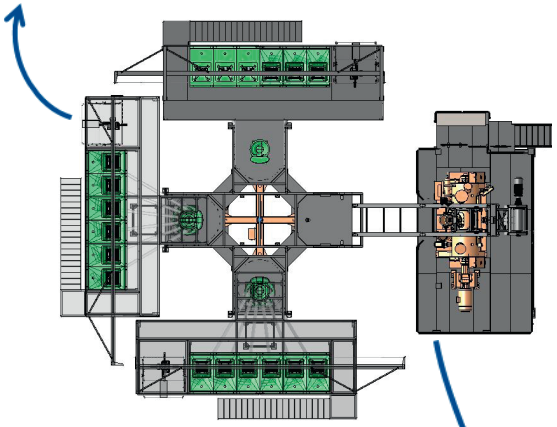
Big bag handling module



Big bag discharge system + automatic feeding

Basic module

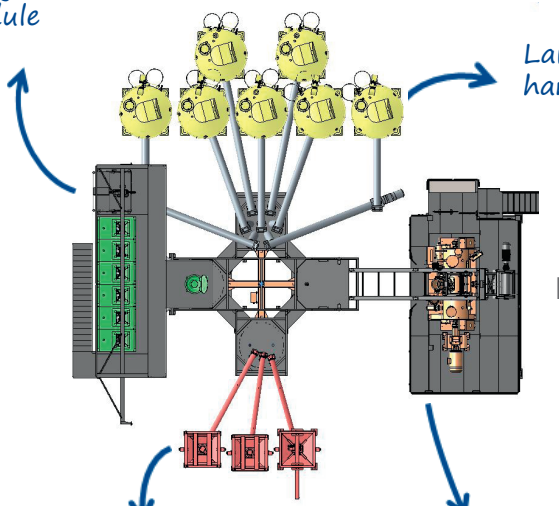
Small quantity bulk material handling module



Storage hoppers + automatic feeding + manual loading

Basic module

Small quantity bulk material handling module



Large quantity bulk material handling module

Multi-module configuration

Big bag handling module

Basic module

Standard auxiliary equipment

- Central dust collection system, batch weighing hopper maintenance equipment, compressed air production system

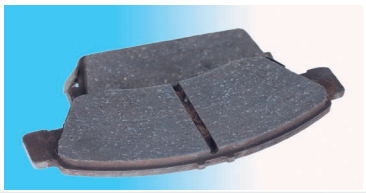
Optional

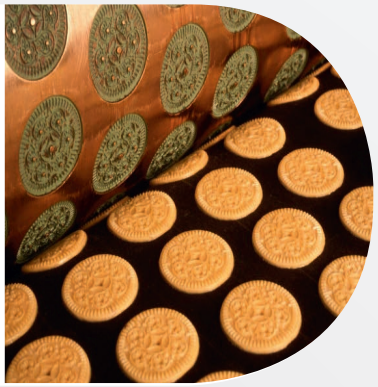
- Upstream and downstream processing equipment (e.g. sand dryer, sieve, packing line, palletizer)

  Recycling equipment

- Mixer optional features (e.g. CIP system, auxiliary outlet, discharging, high speed choppers)

FLEXIPLANT is **CE marked** and designed for use in **explosive atmospheres** (compliant with the ATEX EU directive), ensures safe handling of **CMR substances** and is suitable for use in the **food industry**.





FLEXIPLANT is designed for **all industrial mixing processes** using **dry powder**, **granules**, **pellets** and **other bulk solids**:

- Building materials
- Specialty chemicals
- Automotive
- Life sciences
- Food
- Animal feed
- Environment

Actemium, **a worlwide network**

A network **100% dedicated to industry**

40	Countries
300	Business Units
20 000	Engineers and Technicians
2,1 billion €	Turnover

Improving industrial performance

ACTEMIUM

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