

Case Study

Produce, Transfer and Store
Controlled-Release Fertilizer

COMPO HELLAS S.A.
Korinthos (GR)





Compo

Compo operates internationally and is a market leader in the segments of biological/chemical brand products for home and garden, as well as for specialised fertilisers for professional use.

Compo's factory facility located at Korinthos, Greece was recently upgraded. Kinematik planned, manufactured and executed a complete solution for producing, transferring and storing fertilizer.

System Operation Description

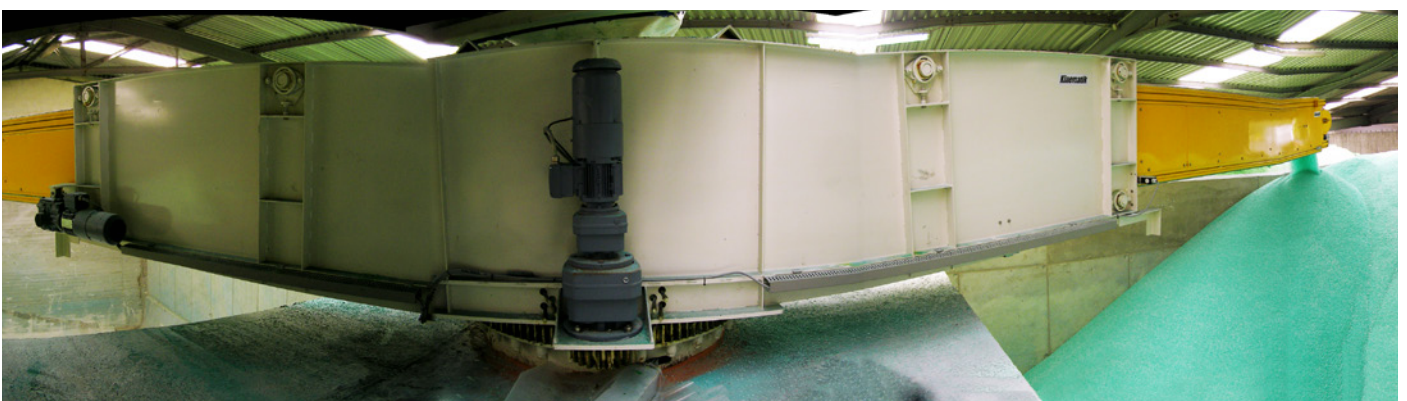
The fertilizer without the controlled-release substance enters the system through a silo capable of being loaded both from a truck or an excavator.

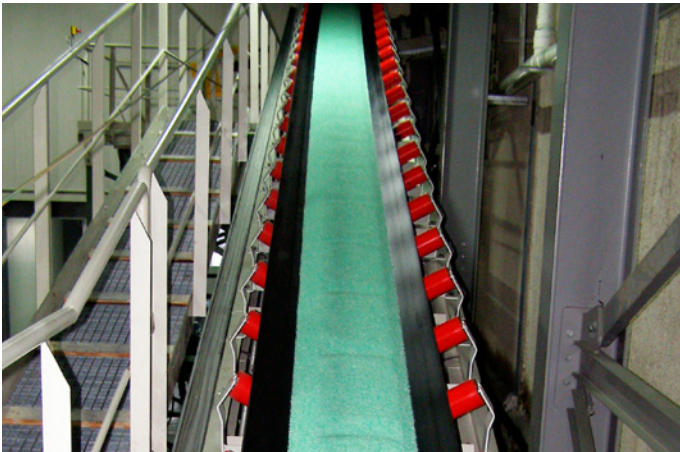
The material is dynamically weighted during its

transfer to the mixer. The fertilizer is sprayed with the controlled-release fluid in the mixer, achieving uniform overlay on each granule. The controlled-release fertilizer is transferred to a storing compound of 3 silos. A telescopic and rotating conveyor belt fills the three silos, succeeding maximum utilization of space and applying a FIFO logic, filling the silos from the first pick-up position to the last, taking into account the maturing time needed.

The Solution

- Unloading Silo integrated on inclined conveyor
- Conveyor with dynamic weighing scale
- In-flow mixer (solid with liquid)
- Inclined belt conveyors
- Telescopic and rotating belt conveyor for silo filling
- Tanks for controlled-release liquid and oil with flow regulating pumps
- Engineering, Automation, Integration





Product Quality

Throughout the process, the granule is handled gently, even in the mixer. The final result is uniformly overlaid controlled-release liquid on every granule, maximizing the product quality and value.

Accuracy

Product quality relies mainly on the mixing process, where liquid control-release substance is applied at the solid fertilizer. At the storage process the telescopic and rotating belt conveyor is controlled with absolute encoders, to achieve increased storage density, avoid fertilizer contamination of lateral silo storage areas and reduce initialization times.

Simple Use

The system works with the minimum possible supervision. It is operated from a touchscreen controlling both the mixing and the transfer process.



Flexibility

Numerous production recipes as well as storage area selection and operation mode (with/without oil or controlled-release liquid), can be defined directly on the touchscreen and activated immediately.

Safety

Personel and equipment safety is guarded with emergency pull-ropes and safety switches preventing door opening while the system is running.

Reliability & Minimum Maintenance

The system was designed especially to cope with the harsh and corroding environment. In fact the mixer is manufactured from top quality corrosive resistant steel alloy. Equipment protection from corrosion with special paints, autocleaning devices and prevention of fertilizer dust spread through the air.





CS05004_v1.0 KINEMATIK © 2012

Kinematik

KINEMATIK SA

Theodora 3, Metamorfosi
144 52 Athens, Greece

Phone: +30 210 2846 893
Fax: +30 210 2846 894

www.kinematik.eu
[info\[at\]kinematik.eu](mailto:info[at]kinematik.eu)