



GEA Lecithin Adding Unit 2.0

The simplification of lecithination



We created the technology to add lecithin more than 50 years ago and made a whole new process possible. But now it's time for another significant improvement in the world of spray drying.

GEA Lecithin Adding Unit 2.0 is a more intelligent lecithin adding unit. It is a cost-effective and easy-to-install solution for ready mixed lecithin and concentrated lecithin, with a thoughtful hygienic design for maximum safety and easy maintenance.

Safety first

Food safety is a concern for all. The Lecithin Adding Unit has been carefully designed to meet the highest standards for dairy powders, such as whole milk powders and whey protein concentrate (WPC). The functional design offers easy

access to all components, and it's simple to disassemble all the parts, including pipes. Hygiene is prioritized with open profiles, open cable trays and cabinets with an angled roof. Lecithin pipes can be flushed with compressed air, and the system is fully drainable. Importantly CIP is not necessary, as the system can be cleaned with vegetable oil, thereby avoiding the use of water and cleaning agents.

Your benefits:

- Easy to install
- Easy to access, clean and maintain
- A fully drainable system
- Cleaned with oil
- Electrical heat trace
- Remotely controllable unit (optional)

A more profitable process

We not only found ways to simplify lecithination, making it cleaner and smarter. It has become cost-effective. We decreased your capital cost by designing an off-the-peg unit; we minimized your setup costs by making it ready to run, and we reduced your running costs by making it a breeze to clean and maintain. In other words, we minimized downtime to maximize your payback.

Ready for new as well as existing plants

The Lecithin Adding Unit is compatible with all spray drying plants running with a powder capacity from 1000 – 15000 kg/h. It can easily be a retrofit on existing plants or it can be installed on new plants. The lecithination capacity ranges from approx. 6 l/h to 120 l/h.



Specifications

GEA Lecithin Adding Unit 2.0 comes in two versions. The one-tank system is configured for “Ready mixed lecithin”, whereas the two-tank system is made for “Concentrated lecithin”, where the lecithin is mixed with vegetable oil.

	Ready mixed lecithin	Concentrated lecithin
Configuration	One-tank system	Two-tank system
L x W x H (mm)	2190 × 1430 × 2570	3352 × 1430 × 2700
Feed tank	140 liters	140 liters
Mixer tank	–	500 liters

Why spray with lecithin?

Dissolving whole milk powder, for example, requires a water temperature of > 40°C, because whole milk powder particles are covered with a thin layer of fat, which makes the powder cold-water repellent. To meet the demand for instant whole milk powder – and other products – that dissolve easily in cold water, it is necessary to apply a surface-active agent, such as lecithin, by spraying it onto the surface of the dried whole milk powder.

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