Glatt PELLETIZING SYSTEM

Your solution for “high drug loading” pellets
EXPERIENCE THE MOST COMPACT ALL-IN-ONE PELLETIZING SYSTEM FOR BATCH AND CONTINUOUS PROCESSES

The Glatt Pelletizing System is ideal for producing multiparticulate dosage forms using pellets manufactured with a high percentage of active ingredients. Pellets can be used to fill sachets or capsules, and can also be processed into tablets as multiple unit pellet systems (MUPS). Using a basket extruder technology, Glatt pelletizing lines provide a more gentle extrusion than screw extruders at low, stable temperatures. The downstream pelletizer forms the extrudate into spherical pellets.

Procedure

Typically, the powder to be extruded is moistened by a nozzle in a batch high shear mixer and then moved into the extruder. To make this first step more efficient, Glatt has developed a Mid Shear Granulator (1) to moisten the powder. This allows the powder to be moistened continuously by nozzles, ensuring the moistened product can be fed directly into the extruder (2). After extrusion, the extrudate can either A) be fed directly into a continuous Glatt dryer or B) undergo a spheronization process first to produce a spherical shape. Spheronizing is a batch process that can create spherical shapes depending on the pellet’s formula. The new compact Pelletizing System includes two spheronizers (3) arranged in a cascade process, allowing it to operate continuously.
CONTINUOUS, FROM POWDER TO PELLET

Modular Glatt solutions make it possible to flexibly expand the Pelletizing System. This makes it possible to integrate powder dosing before the process. The MODCOS Dryer in the new MultiLab or the GPCG 10 series fluidized bed can be used for continuous drying downstream of the process. The process can easily be converted by exchanging the process insert for a bottom spray Wurster coating process to coat dried pellets. Then Glatt delivers the coated pellets to the capsule fillers for the final process using a PCS (pneumatic conveying system).

Depending on the specific application, particles are often coated using a batch process in both variations, in order to provide a protective layer or a defined release profile. Glatt uses the effective Wurster HS for coating. Pellets can be produced continuously in a very compact design using the smart Glatt Pelletizing System.
THE ALL-IN-ONE SYSTEM FOR YOUR PELLET PROCESSES

Integrating the Pelletizing System into continuous MOCOS series systems by Glatt
Continuous processes offered today are typically based on direct pressing or continuous wet granulation using a double screw granulator. Glatt has been offering various designs for several years through its MOCOS series (Modular)

CONTROLLER

The Pelletizing System's controller is linked to the GlattView Conti control system to ensure seamless process control.

The GlattView Conti control system is SCADA based and guarantees complete control of all processes with connections to all PAT integrations. This means operating personnel can use a higher-level control system to operate the entire continuous process line.
Glatt offers a variety of screens for the extruder, depending on formulation and requirements. These can be used to adjust both extrudate size and density.

**Screen**

If pellets need to be produced from extrudates, the extrusion process is designed to ensure the extrudate breaks into pieces of approximately the same length and diameter in the pelletizer. Glatt has developed a unique blade that cuts the extrudate directly as it exits the screen in order to define length even more precisely. Two circumferential knife blades with an offset arrangement of 180° allow individual extrudate pieces to be optimally defined before rounding.

**The right size**