

Improved Fluidised Bed Granulator

Hosokawa has further developed the production capabilities of its Agglomaster fluidised bed granulator for a range of applications, including thin film coating, cGMP particle coating and surface modifications, and nanoparticle suspension drying. The Hosokawa Agglomaster is a sanitary, batch type, multi-functional granulator that brings together spray-drying, agglomeration and granulation technology, reducing the need for multi-step processing and the amount of ancillary equipment used. Single-stage operation eliminates the need for re-wetting and secondary processing. During operation the liquid is atomised via the bottom spray nozzles into the fluidised bed that can be filled with or without seed material. Liquid droplets that are initially fed by spraying into the fluid bed evaporate instantaneously and all solid material



solidifies to become fine particles i.e. spray-drying. Once fine particles begin to form, particle growth by particle-to-particle agglomeration or layering agglomeration takes place, depending on process conditions ie. spray granulations. Its innovative fluid bed bottom design with rotating slit disk and agitation blades, together with its opposed pulse jet mechanism and facility to inject liquid at different positions, makes the Agglomaster highly versatile and allows control of not only the particle size, but shape, density and other characteristics. Accurate process control is facilitated with a PC/PLC based control system and SCADA supervision system..