

Continuous Drug Pelleting System

LCI's Continuous Drug Pelleting (CDP) System fully integrates the extrusion and spheronization process to continuously convert drug formulations into free flowing spheres of a controlled shape and size.

Features

- Components include patented Circle Feeder™, patented Twin Dome Granulator™ or Radial Xtruder™, Discharge Device, and Marumerizer™ (Spheronizer)
- Compact design ideal for GMP suites
- System components easily accessible for cleaning and maintenance
- 316 stainless steel GMP design with high polish finish
- Integrated spheronizer plate lifting device
- Optional Marumerizer wash-in-place (WIP) system
- Fully integrated, PLC based control system featuring LCI's New XT-CDP CFR 21, Part 11 compliant controls
- Various production sizes available, the CDP system is custom designed and manufactured to client specification.

Operation

A wet granulation batch is prepared in a high shear granulator and loaded into the hopper of the patented LCI Circle Feeder. The feeder continuously meters the wet granulation into the LCI Extruder forming cylindrical extrudates. The extrudates break off by their own weight and are collected in LCI's special discharging system. The wet extrudates are then charged to the LCI Spheronizer where they are converted into well-rounded spheres, which are subsequently dried/coated.

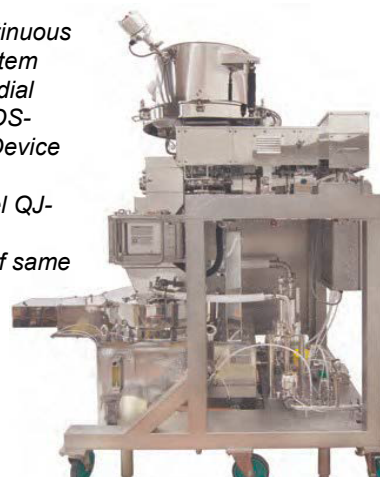
Advantages Over Batch Processing

- Increased product consistency
- Increased process yield
- Reduced operator intervention
- Greater safety with fully contained process



Above: LCI's Continuous Drug Pelleting System shown with the Radial Xtruder Model EXDS-100G, Discharge Device Model CD-30, and Marumerizer Model QJ-700TG.

Right: Side view of same system.



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Continuous Drug Pelleting System (shown in mm)

