

Laboratory Marumerizer® Model QJ-230T

A benchtop spheronizer from LCI

The LCI Marumerizer Model QJ-230T is a benchtop device that provides researchers and new product developers a means to easily evaluate the effectiveness of spheronization on their extruded products. The QJ-230T's size and unique features allow it to evaluate batch sizes as small as 150 grams, while generating product indicative of a full scale production system. The lab Marumerizer is designed to convert moist cylindrical extruded granules into smooth, uniform spheres in a variety of applications.

Features

- One liter working volume
- Benchtop device ideal for a laboratory environment
- Easy disassembly of process parts
- 230 mm diameter friction plate
- Capable of producing 0.5 mm to 10.0 mm spheres
- Friction plates available with groove spaces of 2-8 mm
- Friction plates available in various grid patterns
- Variable plate speeds between 600-1800 rpm
- GMP design with 316SS product contact parts
- 304SS jacketed bowl for heating/cooling
- 1.0 hp 230 VAC/3/60 motor to drive friction plate
- Separate stainless steel control panel with motor starter and inverter

Operation

The QJ-230T can be easily assembled with the desired friction plate for spheronization. Moist granules, from an extruder or mixer, are fed into the spinning friction plate and thrown against the inside of the Marumerizer,



The LCI laboratory Marumerizer is supplied with a touch screen control panel.

forming a “twisting rope”. Collisions of the particles with the wall, friction plate, and other particles result in plastic deformation of the granules, forming spheres. The final shape of particles is time and formulation dependent. Once the desired particle shape is achieved, the batch is discharged through a manual plug valve and discharge chute, collected, and dried.



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Laboratory Marumerizer and Control Panel Dimensions (shown in mm)

