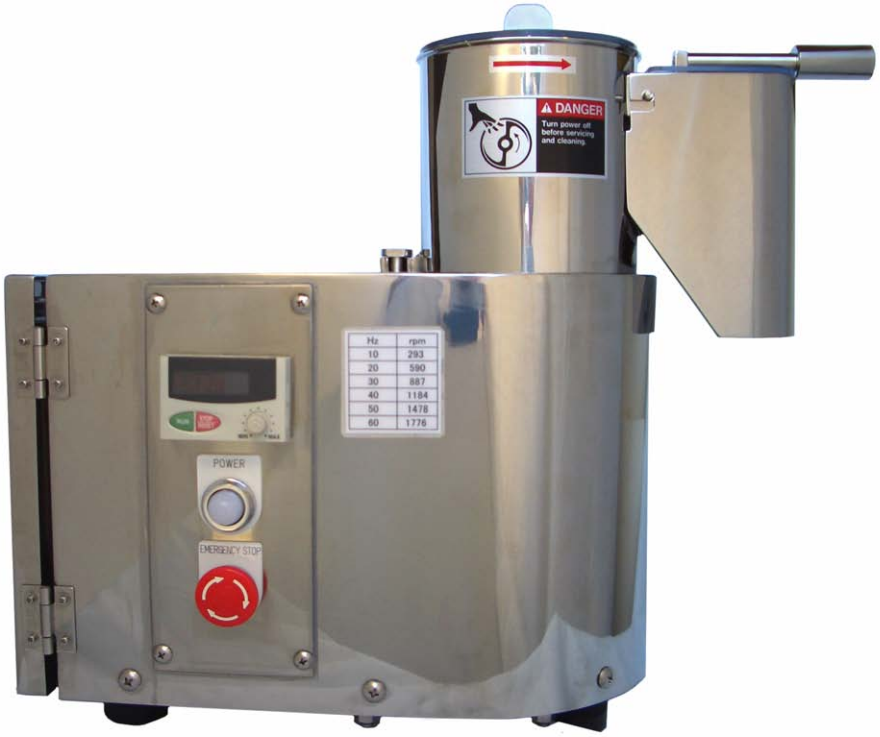
Laboratory Marumerizer®

Spheronizer Model Q-120T

TECHNICAL BULLETIN

The LCI Marumerizer Model Q-120T is a tabletop device that provides researchers and new product developers a means to readily evaluate the effectiveness of spheronization on their extruded products. The Q-120T's size and unique features allow it to evaluate batch sizes as small as 50g, while generating product that is indicative of a full-scale production system. The Marumerizer is designed to convert cylindrical extruded granules into smooth, uniform spheres in a variety of applications.

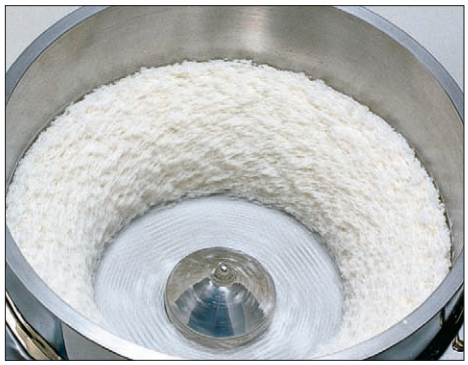


Features

- Benchtop device ideal for a laboratory environment
- 120 mm diameter friction plate
- Capable of producing 0.6 mm to 8.0 mm spheres
- Friction plates available with groove spaces of 1-8 mm
- Variable plate speeds between 600-1800 rpm
- GMP compliant design with 316SS product contact parts
- Easy disassembly of process parts
- .25 hp 110 VAC/1 phase/60 Hz motor to drive friction plate
- Simple integrated controls with motor starter and inverter

LCI Corporation is the exclusive distributor for Fuji Paudal Company, Ltd. in the Americas.

Operation



The Q-120T 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, 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.

Laboratory Marumerizer Q-120T (shown in mm)