## TECHNICAL BULLETIN **| SPHERONIZER** LCI'S MARUMERIZER SPHERONIZER MODEL Q-120E



## Model Q-120E

LCI's Marumerizer Spheronizer Model Q-120E 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-120E's size and unique features allow it to evaluate small batch sizes of nominally 100 g, while generating product that is indicative of a full-scale production system. The Marumerizer Spheronizer is designed to convert cylindrical extruded granules into smooth, uniform spheres in a variety of applications.

## Features & Benefits |

- Benchtop device ideal for laboratory environment
- 120mm diameter friction plate
- Easy assembly/disassembly of process parts
- Variable plate speeds between 600-2000rpm
- 304 SS product contact parts
- 0.2kW 110V/60Hz/1 phase motor
- No jacket or discharge valve
- Simple controls

## Operation

The Q-12OE can be easily assembled with the desired friction plate for spheronization. Moist granules, from an extruder, are fed into the spinning friction plate and thrown against the inside of the Marumerizer Spheronizer, 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 can be removed from the bowl of the spheronizer.



