

## **Contract Manufacturing Services**

Micronization • Dispersions • Blending • Extruding • Classification/Screening



iradiation	FOITHERE Materials	Trillillori - 4 milliori voit nigir energy electrori bearns	1 - 3,000,000 ibs.
Micronization	Powder 1 to 30 micron particle size	<ul><li>Air Jet mills</li><li>Impact mills</li><li>Media mills</li><li>Fluid Bed mills</li><li>Pulverizers</li></ul>	0.1 - 500,000 lbs.
Grinding	Powder 3 to 500 microns	10 - 145 HP Air Classifying mills	1 - 500,000 lbs.
Dispersions	Micronized Powder dispersions	<ul> <li>10 - 20 HP open-head, high shear dispersers</li> <li>50 and 350 gal. vacuum, high shear, jacketed, side-scraping mixers</li> <li>Hockmeyer Basket mill</li> <li>Horizontal mill</li> <li>Vertical Media mill</li> </ul>	25 - 500,000 lbs.
Microcrystallization	Sub-Micron Particle dispersions	Votator	1 - 500,000 lbs.
Dry Blending	Powder Blends	<ul><li>8, 40, and 100 cu. ft. Ribbon Blenders</li><li>2 cu. ft. Paddle Blender</li></ul>	25 - 500,000 lbs.
Melt Blending	Pastille or Ground Blends	<ul><li>500 gal. Indirect heated kettle</li><li>1,200 gal. Jacketed kettle with oil heat</li></ul>	150 - 500,000 lbs.
Classification	Powder 3 to 20 microns	Air Classifiers	10 - 500,000 lbs.
Screening	Powder	Turbo Screening to 500 mesh     48" Vibratory Screener for coarser separations	100 - 500,000 lbs.
Bulk Packaging	Drums (fiber, steel), Pails, Liquid Pack, Bags, and Super Sacks	Volumetric and Loss-in-Weight feeders	100 - 500,000 lbs.
Drying	Powder and Granulation	Tray oven to 600°F with multiple cycle partial integral derivative (PID) controller	100 - 100,000 lbs.
Extrusion	Pellets	Twin screw extruders	100 - 100,000 lbs.



## The Shamrock Advantage

Shamrock Technologies provides premium contract manufacturing services to customers in a wide variety of industries. As a manufacturer of micronized powders, dispersions, emulsions, and other specialty additives for over 80 years, Shamrock understands the importance of controlling particle size to meet customers' exacting specifications. We have the experience, specialized equipment, and processing/storage capacity you need to get the job done right – and on time.





## Contract manufacturing services include:

- Precise micronization down to 1 micron
- Air jet & cryogenic milling
- Classification, screening, blending, & dispersion
- Extruding
- Repackaging
- Class 100,000 CGMP clean room
- QC & analytical labs
- Pilot, small batch, and industrial-scale operations





ISO 9001:2015 Certified Facilities

Newark, NJ, USA Henderson, KY, USA Tongeren, Belgium Tianjin, China

For more information (973) 242-2999 ext. 1051 fcontangelo@shamrocktechnologies.com

shamrocktechnologies.com



