



## GRANUMILL® JR.

**Size Reduction Mill** with Flexible Containment Option for High-Potency Compounds

#### **GRANUMILL® JR. Features & Benefits**

- Three interchangeable rotor designs available (square/flat, round and knife) and fine feed control with optional screwfeeder for tighter control over particle size distribution
- GMP design and quick-release housing allow entire mill to be broken down in minutes for cleaning
- Virtually identical tip speed from R&D through production scale ensures easy scale-up and validation
- Approved for USDA 3A applications including dairy processing

### Flexible Containment Option Advantages

In cooperation with ILC-Dover, we are able to provide custom-designed solutions for the containment of hazardous APIs in R&D size reduction applications.

- Flexible enclosure set-up allows for use in both containment and non-containment applications, eliminating the need to purchase a second machine solely for containment use
- Capable of meeting an OEB5 classification
- Achievable containment level of 1.0 μg/m³ on a task basis

#### **Customizable. Versatile. Cost-Effective.**

GRANUMILL® JR. size reduction systems meet FDA SUPAC (Scale-Up and Post-Approval Changes) guidelines for both impact and screening mills, allowing for low-RPM screening of agglomerates in addition to high-speed impact milling. The mill's versatile design combined with the new, removable containment option provides users with the flexibility to run a variety of processes for a wide range of applications on a single, cost-effective system.

# Configurable to Meet Your Process Requirements

Other available custom options for the GRANUMILL® JR. include:

- Nitrogen-inerting systems
- Screwfeeding systems
- Water jacketing
- Explosion-proof construction
- In-line or portable base configurations

GRANUMILL JR. Specifications*	GR.	ANU	MILL	JR.	Spe	cifica	ations*
-------------------------------	-----	-----	------	-----	-----	--------	---------

Speed (RPM)	500-10000		
Finished particle size mesh (micron)	10-400 (2000-27)		
Throughput (lbs/kg) / hour	0.2 - 60 / 0.1 - 25		
System height (inches/mm)	25 / 635		
System width (inches/mm)	12 / 304		
System length (inches/mm)	15 / 381		
Screen width (inches/mm)	4 / 102		
Containment width** (inches/mm)	40 / 1016		
Containment depth** (inches/mm)	30 / 762		
Containment height** (inches/mm)	45 / 1143		

<sup>\*</sup>Dimensions include screwfeeder

#### Additional Resources

#### MAGNAFLO®/MAGNACOATER® Fluid Bed Systems, Bulletin FA100

Describes how these systems optimize drying, granulating and coating.



## **GRANUMILL® Size Reduction Systems,** Bulletin FA102

Details how these systems provide high-speed impact milling and low-speed screening of agglomerates.



#### PHARMX® High-Shear Granulating Mixer Systems, Bulletin FA101

Explains how granulating efficiency is maximized and downtime between batches is reduced.



## Retrofit Batch Equipment and Controls, Bulletin FA103

Explains how to update and expand the capabilities of current equipment through software upgrades and/or machine conversions.





Experts in Solid
Dosage Technology

A Division of *Spraying Systems Co.*°

2580 Diehl Road, Unit E, Aurora, Illinois 60502 USA Tel: 630.665.5001 Fax: 630.665.5981 www.fluidairinc.com



For more information on AutoJet solutions, visit www.spray.com.

<sup>\*\*</sup>Allow 36 inches / 915 mm on side for pass-through port