

## LabRAM II™



how you think about mixing and processing



Slide-out Handles

ResodynAcoustic® Mixers' **LabRAM II™** features operational and control features for mixing and processing a broad range of applications. Many difficult-to-mix materials can be processed faster, better, more efficiently, and more productively using the **LabRAM II™**.

### Designed for Dynamic Processing Requirements

The **LabRAM II™** design features reflect users' critical needs, delivering twice the capacity of the **LabRAM I™**, intense but low frequency mixing power, exceptional sound reduction below 70 db, integrated accessory operation, recipe development, and the speed, quality, and the lab-to-production scaling on which ResonantAcoustic® Mixing's (RAM) reputation is built.



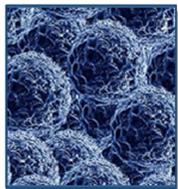
Solids/Powders



Liquids/Gasses



Viscous/Slurry



Coating/Nano



Mill/Grind

### Key Processing Capabilities

- Mixing and processing up to 2.2 lbs. (1 kg) mix capacity, double the capacity of the **LabRAM I™**
- Up to 100 g of acceleration for fast, effective, easy processing
- Any combination of Solids/Powders from nano-scale and up, Liquids/Gasses, and Viscous/Slurry Materials
- Coating, milling, grinding capability
- Adjustable vessel holder accepts many mixing vessel types
- Jacketed Vessel provides mixing vessel temperature control from 304°F (150°C) heating to 0°F (-18° C cooling (optional))
- Manual or automatic/programmable vacuum operation (optional, see back of this sheet)
- Vacuum control before, during, and after mixing and curing
- Temperature sensor - precision resistance temperature detector (RTDs) with m12 connector, (optional, see back of this sheet)
- Built-in strobe facilitates view of **RAM** mixing phases and progression (optional)
- Monitor and collect vessel content's processing data while mixing
- Monitor mixing parameters in real-time
- Multiple level security and access control
- Develop, store, and secure up to 100 recipes for permanent recording of operations and measured results
- Fully integrated operating system with touchscreen interface and data download
- Fully integrated **LabRAM II™** houses all electronics, power and control hardware, eliminating the need for a separately housed control component
- Acoustic housing dimensions 33"H x 29"W x 24 1/2"D (cm: 83.8 x 73.7 x 62.2)
- **LabRAM II™** weighs 260 lbs (117.9 kg)
- Intense, but gentle acoustic mixing for rapid, highly repeatable, ultra-high quality results

### Global Mixing and Processing Technology

Since its introduction to the marketplace in 2007, ResonantAcoustic® Mixers' (RAM) mixers technology has become the choice for many commercial mixing and processing applications. RAM's unique combination of features and performance has proven successful at Fortune 500 laboratories and production facilities in 30+ countries across a broad range of industries.





## Jacketed Vessel

- Up to 2.2 lbs (1 kg) payload
- Cooling system capable of temperature range for 302°F (150°C) to 0°F (-18°C)
- Free-standing chiller/heaters available



Jacketed Vessel

## Spray System

- Distribute or coat dry-ingredients with minute amounts of liquid without wetting or clumping
- Up to 2.2 lbs (1kg) payload
- Vacuum compatible reaching 10 Torr
- Syringe and Peristaltic pumps available



Heater/Chillers

## Automatic Vacuum System

- Automatic vacuum controlled through LabRAM operating system
- Integrate vacuum function in recipes
- Can operate in manual mode for development reaching 10 Torr
- Manual Vacuum System also available



Integrated Spray and Vacuum System



Solids/Powders

## ResonantAcoustic® Mixing (RAM) Product Line Features

LabRAM II™ performance extends across the RAM product line, enabling new product development and break-through results not possible with traditional mixing methods. All RAM products use low frequency acoustic mixing at up to 100 g of acceleration for intense but low-shear mixing resulting in:

- 10 - 100x faster processing
- Highly reliable repeatability
- Direct scaling from laboratory to production without increases in processing time
- Capacities for:
  - LabRAM I™ 1.1 lbs./500 grams
  - LabRAM II™ 2.2 lbs./1 kg
  - OmniRAM™ 11.0 lbs./5 kg
  - RAM 5™ 80.0 lbs./36.3 kg
  - RAM 55™ 920.0 lbs./417.3 kg
- Exceptional ingredient distribution
- Hazardous material compatible options



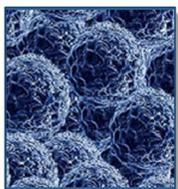
Automatic Vacuum System



Liquids/Gasses



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Witness RAM Technology first-hand with YOUR materials. Arrange a FREE RAM demonstration and mixing test at your facility. 406-497-5333 info@resodyn.com

