

WAY

1

# Resodyn Acoustic Mixers Will Change the Way You Think About Compounding Formulations

**PharmaRAM™ I and PharmaRAM™ II compounding mixers deliver highly repeatable mixing quality, speed, cleanliness, and safety for more mixes and higher profitability. PharmaRAM™ I provides easy to use simplicity. PharmaRAM™ II delivers higher capacity, recipe control and data capture.**

**President & CEO:** Lawrence C. Farrar

**Founded:** 1994

**Employees:** 50

**Phone:** (406) 497-5333

**Fax:** (406) 497-5206

**Address:** 130 N. Main Street, Suite 630, Butte, MT 59701

**Website:** [www.resodynmixers.com](http://www.resodynmixers.com)

**Email:** [info@resodyn.com](mailto:info@resodyn.com)



## Company Background

Resodyn™ Acoustic Mixers, Inc. provides advanced solutions for a broad range of pharmaceutical and industrial mixing applications. The company's line of ResonantAcoustic® Mixers (RAM) are built on the company's proprietary technology (U.S. Patent was issued in March, 2007).

Specifically for the pharmaceutical industry, ResonantAcoustic® Mixing (RAM) provides exceptionally uniform mixing (RSD < 4%), short mix times, and scalable results from lab to production sizes which translates in a faster path to market for your product. This completely sealed process eliminates dusting during the mixing process resulting in enhanced operator safety as well as consistently repeatable results from mix-to-mix, ensuring batch-to-batch product quality.

Resodyn Acoustic Mixers, Inc. is an affiliate of the Resodyn Corporation, recognized as a world-class leader in providing innovative engineering solutions to industry and government entities. Founded in 1994, Resodyn Corporation has successfully developed and commercialized vanguard technologies and processes.

## Product Overview

Resonant Acoustic® Mixers (RAM) use high intensity – up to 100 times the acceleration of gravity, but low frequency, nominally 60 Hz. The technology provides acoustic mixing for reliably repeatable mixing results.

RAM mixers are available in 300 gram, 500 gram, 1 kg, 36 kg, and 417 kg systems for applications from R&D through pilot and production.

Optional functions and features include: mix under vacuum systems (both manual and automatic), temperature controlled mixing vessel system, recipe development and management, data capture and reporting, GMP capable systems.

## Markets Served

Compounding, research and development, pilot production, full-scale production, and GMP compatible manufacturing systems. Other industrial applications include high-viscosity materials, nano-materials, ceramics, energetics, chemicals, and many others.

## Features & Benefits

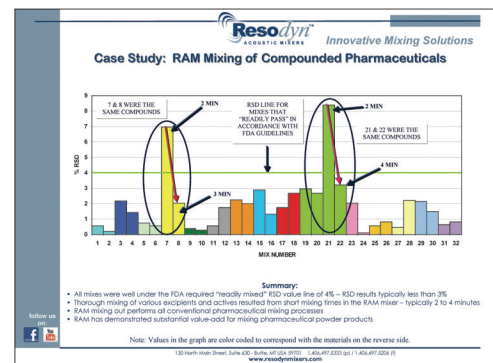
### ■ Features

- Simple Sample Handling and Menu Based Instrument Control
- ResonantAcoustic® Mixing
- Short Mixing Times (< 4 minutes)
- Control of Mixing Mode, Intensity, and Duration
- Store and Recall Compound Specific Mixing Conditions
- Completely Sealed Mixing Process
- Use of Single Use Jars
- Mix in Dispensing Container

### ■ Benefits

- Easy to Use
- Superior content uniformity. Relative standard deviation (RSD) less than 4.5% based on broad range of powder formulations.
- Capacity Increase/More Mixes
- Mitigate Formulation Errors
- Repeatable Results from Mix-to-Mix
- Short Turn-around Time
- Enhanced Regulatory Compliance
- Reduce Exposure to Compounds
- Eliminates Cleaning and Prevents Risk of Cross-Contamination
- Preparation of 300 - 750 Dosage Forms from a Single Compound Batch

## Graphs & Charts



## Ordering Information

(406) 497-5333, [info@resodyn.com](mailto:info@resodyn.com), [www.resodynmixers.com](http://www.resodynmixers.com)