# Blending Dissimilar Dry Ingredients

**How You Think About Mixing and Processing**

*Resodyn Acoustic Mixers'* second generation technology, *Lab*RAM II, provides up to I kg payload capacity and advanced control features. Virtually any combination of liquids, powders, pastes, and gases can be processed faster, better, more efficiently, and more productively using the *Lab*RAM II bench-top mixing systems and accessories. (www.resodynmixers.com)

## Blending Dissimilar Powders with RAM

Dry ingredients can be difficult to thoroughly and consistently mix, particularly when the particles are of different sizes and characteristics.

To illustrate the proper mixing of such ingredients, fumed silica was blended with sand. The image on the top right shows the starting materials while the image on the bottom right shows the results after mixing.

The starting materials were 100 grams of blue sand and 10 grams of fumed silica blended using the *Lab*RAM™ II mixer.

After only ten seconds of mixing the low bulk density 0.25 micron particle size fumed silica was completely blended with the 250 micron particle size sand.

No dust was generated during mixing due to the sealed mixing vessel. Post mixing samples exhibited no airborne fumed silica, demonstrating uniform blending at the multiple order of magnitude particle scale.

For this and other videos please visit:
www.resodynmixers.com/application



100 grams Sand    10 grams Fumed Silica
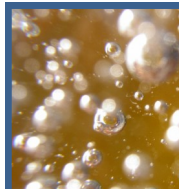


After 10 seconds of mixing
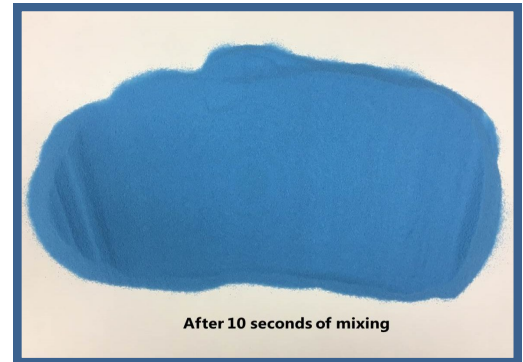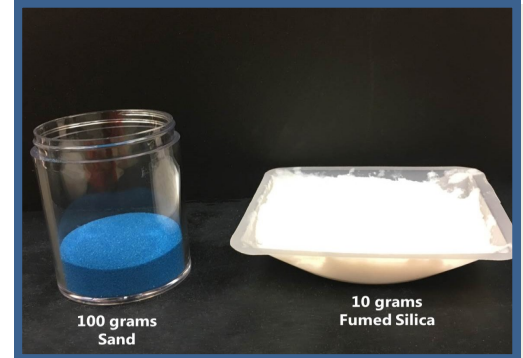
## ResonantAcoustic® Mixer Value Proposition

- Mix 10-100 times faster than traditional mixers
- Improve product quality to new levels
- Reduce or eliminate clean-up costs
- Eliminate cross-contamination
- Scale easily from development to production
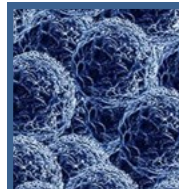- Scale up without increased processing time



| Solids/Powders | Liquids/Gases | Viscous/Slurry | Coating/Nano | Mill/Grind |

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# RAM Product Family

**change** How You Think About



LabRAM II

LabRAM II H

RAM 5

*Omni*RAM

RAM 5 H

RAM 55

*ResonantAcoustic® Mixing* performance is available across the **RAM** product line, enabling results and new product development not possible with traditional mixing methods. All **RAM** products use *low-*frequency acoustic mixing at up to 100 *g*'s of acceleration of intense, low-shear mixing for:

- 10x — 100x faster processing
- Highly repeatable processing results

- Exceptional ingredient distribution
- Hazardous material compatible options
- Direct scaling from laboratory to production without increases in processing time

**Capacities (Batch Basis)**

*Lab*RAM™ II - 1.1 lbs. ( 1 kg)

*Omni*RAM - 11 lbs. (5 kg)

RAM 5 - 80 lbs. (36 kg)

RAM 55 - 920 lbs. (419 kg)

**Witness RAM Technology First Hand, with Your Own Materials:**

Contact today to arrange a **FREE RAM** demonstration and mixing test at your facility.



LabRAM II

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**Reso**dyn
ACOUSTIC MIXERS

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