



### Sole Source Application and Determination Form

A sole source determination is not effective until the sole source application for determination has been posted on the Purchasing website for thirty (30) calendar days without protest and is subsequently approved in writing by the Vice President of Administration and Finance.

1. Name of Department: EMRTC  
Contact Name: Tom Pleva  
Phone: 484-636-8063  
Email: Thomas.pleva@nmt.edu
  
2. Name of Prospective Vendor: Resodyn Acoustic Mixers  
Contact Name: Jake Rowen  
Phone: 406-497-5264  
Email: jake.rowen@resodyn.com  
Estimated Cost: \$91,353  
Duration (for Services or Professional Services – limited to four years): One year or until the equipment is received.
  
3. Purpose/need for purchase and detailed list of items of tangible property, services, or professional services:  

This advanced system enables rapid, uniform processing of high-explosive and energetic material samples, up to approximately 1 kg (2.2 lb) per batch in a safe, remote, and controlled environment. This capability is essential to meeting the growing workload at EMRTC in explosive and energetic materials mixing.

The purchase includes the following equipment and accessories:

  - LabRAM II Bench Top Mixing System; 1,000 gram payload
  - 5" Diameter Standard Vessel Holder 2.5"–5"
  - Automatic Vacuum Control Package
  - 8 oz. Vacuum Lid
  - 16 oz. Vacuum Lid
  - 32 oz. Vacuum Lid
  - LabRAM II 16 oz Jacketed Vessel System
  - 4 oz Vessel Liner
  - 8 oz Vessel Liner
  - 16 oz Vessel Liner

- Shipping.

4. Detailed explanation of criteria developed for this purchase:

The equipment must be capable of safely mixing energetic and high-explosive materials used in EMRTC research and testing. The system must allow for rapid, uniform mixing of materials in a controlled laboratory environment and be compatible with vacuum and jacketed vessel configurations used for formulation development and testing.

The system must also be capable of processing batches of energetic materials up to approximately 1 kg while maintaining safe handling and consistent mixing results.

These criteria reflect the operational requirements of EMRTC laboratories conducting research and testing involving energetic materials.

5. Provide a detailed, sufficient explanation of the reasons, qualifications or unique capabilities of the prospective vendor that make that prospective vendor the one source for providing the items of tangible property, services, or professional services:

Resodyn Acoustic Mixers holds patents covering the Resonant Acoustic Mixing (RAM) technology used in the LabRAM II system and is the manufacturer and supplier of this equipment.

The LabRAM II uses resonant acoustic mixing technology to mix materials without blades or mechanical contact with the product. This technology allows materials to be mixed uniformly while minimizing risks associated with sensitive energetic materials.

Because this technology is proprietary to Resodyn, the LabRAM II system and associated accessories are only available directly from Resodyn Acoustic Mixers.

6. Provide a detailed, sufficient explanation of how the items of tangible property, services, or professional services is/are unique and how this uniqueness is substantially related to the intended purpose of the department/grant:

Unlike traditional blade-based mixers, the LabRAM II employs resonant acoustic mixing technology, which provides intense, low-frequency energy without mechanical contact, minimizing risks associated with sensitive energetics.

The LabRAM II will significantly enhance our research infrastructure by supporting:

- Small-scale formulation development and rapid prototyping of new explosive compositions
- Quick-turnaround batch mixing for customer testing and evaluation

- Improved scalability from bench-top experiments to larger production trials
- Increased overall research output, efficiency, and safety in handling hazardous materials

By enabling faster iteration on formulations (often in minutes rather than hours) while maintaining high uniformity and quality, this equipment will directly accelerate project timelines, support sponsor deliverables, and strengthen EMRTC's position as a leader in energetic materials research and development.

7. Please provide a narrative description department's due diligence in determining a basis for the procurement. Include:

- a) Method used to research and review other available sources (i.e. list of potential vendors from Purchasing, internet, state pricing agreements, purchasing cooperatives)

EMRTC reviewed available laboratory mixing technologies and determined that the LabRAM II system uses resonant acoustic mixing technology that differs from traditional mechanical mixing systems.

- b) b. List of vendors contacted, the date and method of contact (i.e. email, phone call)

Resodyn Acoustic Mixers was contacted directly to obtain specifications and a quote for the LabRAM II system. No other vendors were contacted because the LabRAM II utilizes proprietary Resonant Acoustic Mixing technology that is manufactured exclusively by Resodyn Acoustic Mixers. A market review confirmed that no independent competing manufacturers exist for this technology. Sources that appear to be alternative suppliers are third-party resellers who source equipment directly from Resodyn and therefore do not constitute independent or competing procurement avenues. One identified online listing originates from an international source with no verifiable company information and is deemed unreliable for procurement consideration. One additional variant, the PCCA RAM Mixer, is a Resodyn-developed platform built specifically for the pharmaceutical compounding industry and sold exclusively to PCCA members; it is neither a general-market product nor an independent alternative. In all cases, Resodyn Acoustic Mixers remains the sole manufacturer and ultimate source of this equipment, and no viable alternative manufacturer exists for the required Resonant Acoustic Mixing capability.

- c) c. Documentation explaining why:
- i. those vendors cannot provide the required items of tangible property, services, or professional services

Traditional laboratory mixers rely on blades or mechanical mixing components, which can introduce friction and mechanical contact with the material. The LabRAM II system mixes materials using resonant acoustic energy without mechanical contact, which is important for the safe handling of energetic materials. Other commercially available laboratory mixers rely on mechanical blades, paddles, or impellers to mix materials. The LabRAM II utilizes

patented (10258945) Resonant Acoustic Mixing technology that mixes materials without mechanical contact. Resodyn holds an active patent (10258945) on the technology.

- ii. other similar items of tangible property, services, or professional services cannot meet the intended purpose of department/grant

No other known manufacturer provides equipment utilizing this technology. All other reliable sources found are 3rd party vendor for Resodyn, or specialty variations manufactured by Resodyn.

I certify I have performed thorough and diligent research and analysis to determine that Resodyn Acoustic Mixers is the only source capable of providing the required LabRAM II equipment. I understand that violations of the New Mexico Procurement Code (Chapter 13, Article 1 NMSA 1978) can carry severe penalties. I affirm that the information provided in this Sole Source Determination is true and accurate to the best of my knowledge and belief.

Name, Title: *Tom Pleva* 4/15/2026

Tom Pleva  
Technical Director, Research and Development  
EMRTC

Review: Purchasing Services (Name, Title): Associate Director of Purchasing *Meradeth Montoya* 4.15.26

Website Posting Date: 04/15/2026

Posting Expiration Date: 05/16/2026

Protested (Yes/No):

Approval: Delilah A. Walsh  
Vice President of Administration and Finance



15-Apr-2026

Version: July 2025







# Resodyn LabRamII\_Signed

Final Audit Report

2026-04-15

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