



NDT-RAM SYSTEM QUALIFICATION PROGRAM

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- Powdered Metal
- Castings
- Forgings
- Metal Stampings
- Bearings
- Ductile/Gray Iron
- Ceramics
- Composites
- Additive Manufacturing
- Braze/Weld Joints

SIMPLE. RELIABLE. AFFORDABLE.

NDT-RAM provides confidence and peace of mind. Every part has a unique resonant signature or pattern. Any deviation from the expected signature or pattern indicates the presence of a structural flaw or variation. A familiar example is a cracked bell that no longer has a clear ring and cannot hold its tone. NDT-RAM Systems objectively discern between small differences in complex parts that produce far more tones than a bell.

WHO NEEDS NDT RESONANT INSPECTION?

Manufacturers or users of metal parts who...

- Have substantial inspection costs
- Require 100% parts inspection
- Desire to improve part quality
- Produce and/or use safety-critical parts
- Have customers demanding higher quality
- Have substantial scrap costs due to false rejects

A QUALITY SOLUTION

- **100% Inspection** - ensures that every part is objectively tested
- **No Prep** - part preparation not required for inspection
- **High Throughput** - approximately 3 seconds per part, typical*
- **Simple Interface** - simple to learn and use application software
- **Reduced Costs** - lowers operating expenses by eliminating consumables, eliminating quality recall / containment costs, and reducing scrap costs associated with false rejects
- **Industrial Package** - NEMA4 enclosure allows factory floor operation
- **Versatility** - one system can test parts of many different shapes and sizes
- **Durability** - NDT-RAM systems have been running 24 / 7 / 365 in the plant environment for over 15 years



RAM-DROP



RAM-AUTO



RAM-TEST-FIXTURE

PARTS QUALIFICATION PROGRAM IN THREE STEPS

The Modal Shop offers a simple process to assess the benefits of using Resonant Inspection NDT-RAM systems in your facility. Resonant Inspection systems are an effective solution for monitoring process quality in components. The trial process is as user-friendly as the NDT-RAM system is itself and each member of your team will get answers to their most important questions.

1. PARTS TEST

Is Resonant Acoustic Method right for your parts? Does it make financial sense for you? Find out with a free, no-risk assessment to determine how resonant testing can increase quality and performance in your facility.

- A Parts Test offers a no risk evaluation of your parts
- Send in a controlled set of known “good” and “bad” parts
- We test parts to determine compatibility with NDT-RAM technology
- Based on your specific situation, we can perform the test in your facility
- Post-test we provide a comprehensive, confidential feasibility report

2. SYSTEM RENTAL

Ready to try an NDT-RAM system? Our Rental Program ensures the system will work on your parts in your facility prior to purchase. An NDT-RAM rental allows you to avoid a capital expense as rental fees qualify as an operational expense. The process is easy and offers the following benefits:

Expert Support

- Installation and training at your facility
- Follow-up support during the rental period

First Rental Period

- 6 weeks long, offering two weeks free
- 100% of first rental period fee applies toward purchase

Subsequent Rental Periods

- 4 weeks long
- 40% of rental periods 2 and 3 fees apply toward purchase

3. SYSTEM PURCHASE – ONE-YEAR WARRANTY

Ready to buy? Accrued rental credit is applicable for 12 months from the start of the rental period. Purchase comes backed by The Modal Shop’s commitment to Total Customer Satisfaction and a one-year warranty.

CONTACT US TODAY!

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NON-DESTRUCTIVE TESTING METHODS COMPARISON					
DEFECT ISSUE	RAM RESONANT ACOUSTIC	ET EDDY CURRENT	MT/PT MAGNETIC / PENETRANT	UT ULTRASONIC	RT RADIO-GRAPHY
Cracks/ Chips/ Voids	■	■	■	■	▲
Material Properties	■	●	●	●	▲
Missed Operations	■	●	●	●	●
Structural Integrity	■	■	■	■	■
Product Lot Variation	▲	▲	■	■	■
Defect Location					
External (Surface)	■	■	■	■	●
Internal	■	●	●	■	■
Brazing/ Bonding/ Welding	■	●	●	▲	▲
Speed/Training/Cost					
Throughput	■	▲	▲	■	●
Training/ Certification	■	●	●	●	●
Total Inspection Costs	■	▲	▲	●	●
Automation Capacity					
Qualitative Results	■	●	●	▲	●
Ease of Automation	■	▲	▲	●	●
Cost of Automation	■▲	▲	●	●	●

■ Excellent ▲ Fair ● Poor

RAM SYSTEMS	
AUTO	Fully automated system for turnkey in-line 100% inspection
DROP	Fully automated system for high volume sort of small parts
TEST-SEMI	Core NDT system components for implementation with existing automation
TEST-FIXTURE	Semi-automated test station for manual part placement with automated testing
TEST-MANUAL	Manual system for laboratory or spot checking use

