



Non-Destructive Test Resonant Acoustic Method (NDT-RAM™) for Automotive Components

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Realizing an enormous savings in cost, many manufacturers (especially automotive) are moving part requests to the powdered metal industry. Compared to traditional manufacturing, powder metal parts can cost as little as a tenth of the machined counterparts. As always, there are potential quality problems. Some problems can be found through visual inspection (which is tedious, time consuming and often inaccurate/subjective), but many critical faults (inclusions, gaps, irregular grain structure, etc.) are internal to the powder metal parts and are not detectable visually.

To address this challenge, Non-Destructive Test - Resonant Acoustic Method (NDT-RAM™) provides 100% inspection of parts either manually or on an automated line. Analyzing the acoustic response of a resonating part provides an objective indicator of part quality that correlates extremely well with proof load tests and often can find tolerance variations that are not noticed in standard mechanical inspections.

As an Exclusive Indian Representation of The Modal Shop, Inc. USA, SSPL now offers you a Non-Destructive Test Resonant Acoustic Method (NDT-RAM™) inspection to provide relief and security for the high volume manufacturer. NDT-RAM™ is designed to help you manufacture 100% fully inspected powder metal, cast, ductile iron, forged or stamped metal component parts, economically and on time, giving you assurance in the integrity of your product and performance. This Method is supported by the newly revised ASTM E2001-08 as a standardized method for nondestructive testing via resonant inspection.



Benefits:

- 100% inspection - ensures the confidence that every part is objectively tested
- No part preparation required for inspection
- High throughput - as fast as a part per second
- Simple to learn and use application software
- Reduces scrap costs associated with false rejects
- Greatly lowers operating expenses by eliminating consumables
- Industrial package - NEMA4 enclosure allows factory floor operation.
- Versatility - same system can test many different parts
- Eliminates quality recall/containment costs

Successful Applications:

- Powder Metal
- Ductile & Malleable Iron
- Metal Bonding such as sinter brazes
- Iron Castings
- Forged Metal
- Stampings
- Ceramics
- Aluminum foundry



For further product & application details please contact:

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