





MODEL RAM-TEST-FIXTURE

# NDT-RAM TEST STATION

- Tests many different parts on a single system
- No part preparation or elaborate fixturing required
- Easy-to-learn application software
- Simple pass/fail result no human interpretation required
- Generates production report, with statistical analysis

## **TYPICAL APPLICATIONS**

- Production End-of-Line Inspection + Process Monitoring
- Field Service Troubleshooting
- Quality Control Spot Checking
- Engineering New Product Development

#### REPEATABLE MANUAL TESTING

The NDT Test Station, Model RAM-TEST-FIXTURE, Resonant Inspection System is an ideal choice for testing when repeatable manual inspections are required. The innovative Test Station allows precise control of part positioning with an adjustable table ranging up to 6.25 inches (158.75 mm) in height. Photo eye sensors trigger the integrated industrial impactor when a part is in position.

Test parts such as:

- Powdered Metal
- Brazed Parts
- Ceramics
- Composites
- Small Metal Components

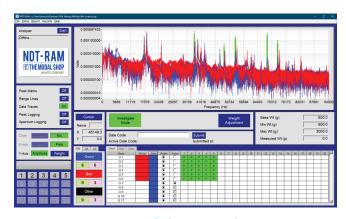
Once impacted, a simple pass/fail result is returned by the NDT-RAM system. The system includes a laptop PC, running NDT-RAM software which acquires data for analysis from each part, requiring no human interpretation. The included light tower provides a clear, visual indication of a part's test status, allowing easy sorting.

This easy-to-use NDT system quickly becomes a critical quality assurance tool in your inspection process. The RAM-TEST-FIXTURE detects imperfections or flaws such as variations in overall geometry, cracks, and missing features. It can also detect if processes have been missed, such as machining or heat treating operations.

### **NDT-RAM SOFTWARE**

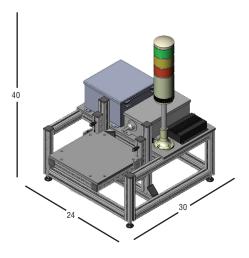
NDT-RAM application software compares each part's resonant signature against reference criteria limits and accepts or rejects the part accordingly. The system report generation feature allows for full part signature archival and statistical analysis of your parts and manufacturing processes. The software offers:

- Graphical features provide easy visual data evaluation
- Data shows color-coded spectra for good and bad parts against acceptable criteria ranges
- Investigate Mode supports up to 1500 part spectra, labeled good, bad or unknown
- Clear indication of pass/fail by criteria range



**NDT-RAM Software Interface** 

| SPECIFICATIONS   |  |                            |
|--|--|----------------------------|
| Performance  |  |                            |
| Part Throughput –<br>Manual load by operator               | Typical 5 to 10 seconds between parts    |                            |
| Pass/Fail Mechanism –<br>User defined criteria ranges      | Up to 20 frequency bands                 |                            |
| Acoustic Measurement                                       |  |                            |
| Response sensing   | Prepolarized microphone - PCB 130 series |                            |
| Frequency range  | Up to 50 kHz                             |                            |
| System Control   |  |                            |
| PLC  | 8 inputs/6 outputs modular expandable    |                            |
| Computer   | Laptop PC provided                       |                            |
| Physical   |  |                            |
| Industrial Impactor Force                                  | 50-500 lbf                               | 222–2224 N                 |
| Part Detector via Photo<br>Eye Sensors – Adjustable height | 0 – 4 in                                 | 0 – 101.6 cm               |
| Dimensions (H x W x D)                                     | 24 x 30 x 40 in                          | 60.96 x 76.2 x<br>101.6 cm |
| Weight   | 90 lb                                    | 40.8 kg                    |
| Adjustable Table   |  |                            |
| Height Adjustment  | 0 – 6.25 in                              | 0 – 158.75 mm              |
| Table Dimensions (L x W)                                   | 13.5 in x 13.5 in                        | 34.29 cm x 34.29 cm        |



#### **NDT-RAM Test Station**

The light tower status indicator provides prominent visual display of passed or failed parts – green light for passed and red for failed. A system fault or error is indicated with a yellow light.

