



NDT SOLUTIONS INC

# MAUS<sup>®</sup> RotoArray<sup>™</sup>

## Portable C-Scan System

- Quick Set-up
- Fast scanning
- Immersion Quality
- Light Weight
- Simple to Use



The MAUS<sup>®</sup> RotoArray<sup>™</sup> is a portable, manually operated, phased array, ultrasonic inspection device which can be connected to the MAUS<sup>®</sup> C-Scan System to allow rapid scanning of a wide variety of materials and components.

Well suited for scanning composite and aluminum aerospace components, the MAUS<sup>®</sup> RotoArray<sup>™</sup> can provide MAUS C-Scan images that are achieved with the simplicity of a handheld probe and with performance rivaling that of a full immersion C-scan system.

### *Description and Notes*

- Standard MAUS<sup>®</sup> RotoArray<sup>™</sup> kits include the MAUS<sup>®</sup> encoder and the MAUS<sup>®</sup> FlawInspecta connector.
- Standard MAUS<sup>®</sup> RotoArray<sup>™</sup> units include 20-foot cabling.
- Standard MAUS<sup>®</sup> RotoArray<sup>™</sup> units will be non-focused (flat elements).
- 0.8mm/0.0315" pitch MAUS<sup>®</sup> RotoArray<sup>™</sup> has a 51.2mm/2.01575" active coverage width.
- 1.27mm/0.050" pitch MAUS<sup>®</sup> RotoArray<sup>™</sup> has a 81.3mm/3.2" active coverage width.
- All RotoArray kits are shipped with a Certificate of Conformity.

The MAUS® RotoArray™ can complement or replace immersion scanning systems in a manufacturing environment, while being equally functional inspecting in the field or laboratory. It is ideal for scanning aircraft on the ground for collision damage, post-repair and other inspections.

### System Description

The compact and lightweight MAUS® RotoArray™ consists of a linear, 64 element ultrasonic array contained within a tire which is inflated with a fluid to create a flexible coupling chamber between the array and the test piece. The ultrasonic tire is fitted within a scanning cart that can be rolled along the surface of a part to create an encoded high quality C-scan image.

### Key Benefits

- **Portable**, putting the power of an immersion C-scan system in the palm of your hand
- Is **quick and simple**, with minimal setup
- **Replaces or compliments** full immersion tank and squirter system scanning
- Provides **fast and reliable** portable scanning, with A, B and C-scan data
- Is **light weight and ergonomically** designed
- Is supplied with a **Service Station** to allow users to carry out simple repairs and configuration adjustments, such as tire replacement and air purging without factory assistance
- Features **easy coupling** with no need for complicated irrigation systems
- Platform is designed to be **scalable** and arrays can be **customized** to solve new applications

### Rapid Scanning of Composite Surfaces and Structures

The MAUS® RotoArray™ scanning platform is designed primarily for the inspection of aerospace materials such as composite and aluminum, although the platform can be used for flaw detection and thickness measurement in a wide range of materials. It can be used for inspection during manufacturing as well as for the inspection of damage of aircraft in service.

