



# The “SCOUT” Corrosion Under Insulation (CUI) Detection System

TestTex has developed an innovative system for the detection of Corrosion Under Insulation (CUI) using our proprietary Off-Surface-Electromagnetic-Technique (OSET).

The “Scout” system allows you to pinpoint the areas that require attention, instead of needlessly stripping insulation or doing random thickness checks,

## Advantages and Features

- One or two-man operation
- Portable all-in-one electronics with 10.1" (257 mm) sunlight-readable touch screen
- AC or DC power
- A true scanning technique with high throughput
- Light-weight scanner design that fits most piping, vessels, and tanks (starting at 2" (50.8 mm) diameter piping and ranging up to flat surfaces)
- Scans through stainless steel and aluminum cladding with insulation thicknesses up to 4" (102 mm)
- Type of insulation (calcium silicate, mineral wool, fiberglass, etc.) has no effect on signal response. The presence of moisture within the insulation also has no effect
- Detects surface corrosion (wall loss, pitting) on piping of any wall thickness and large area I.D. corrosion on schedule 40 piping
- Can locate butt welds
- Encoded data with mapping option
- Multiple wheel sets and quick release pins on the axles allows the versatility of using only one scanner for your inspection needs
- Water Resistant
- Circumferential scanning technique on cladding overlaps to eliminate “reduced sensitivity/dead zones”



- Positioning device displaying circumferential position and reference angle to assure straight scans and angular position of the next scan

## Detection Capabilities

Cladding Material	Insulation Thickness		
	Wall Loss Detection	Pit Detection*	Weld Detection
Stainless	up to 4"	up to 3"	up to 4"
Aluminum	up to 3"	up to 2"	up to 3"

\*30% Surface Depth, 1" (25.4mm) Diameter Pit Detection

## Options

- Mapping Software
- Extra batteries/chargers
- 75ft. (23m) extender cable
- Specialty calibration pipes with specified defects (a standard pit calibration pipe and a welded calibration pipe is included with system purchase)

# The "Scout": Corrosion Under Insulation (CUI) Detection System *(continued)*

## Instrument Specifications

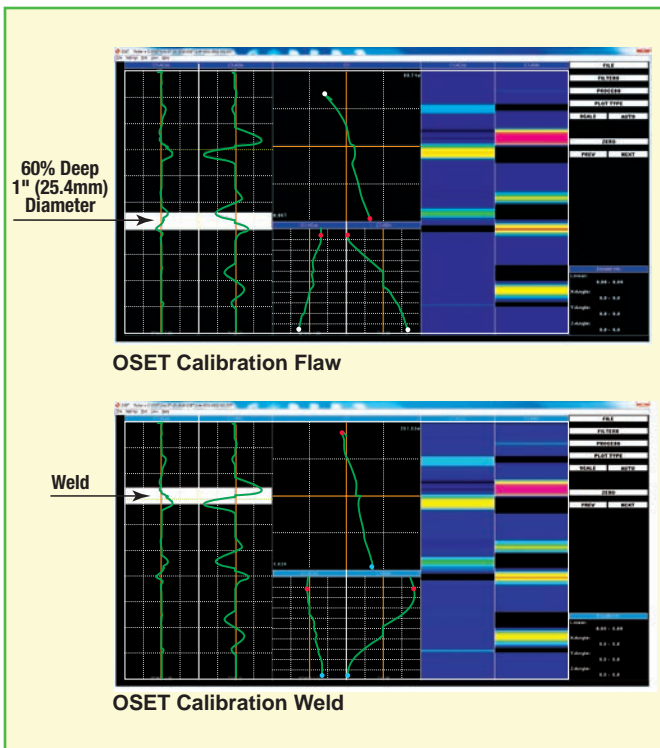
- **Dimensions:** 12" W (305mm) x 8" H (203mm) x 3" D (76mm)
- **Weight:** 7.6 lbs (3.45 kg)
- **Display:** 10.1" (257mm) Capacitive, 10 point multi-touch input  
Anti-reflective coating  
Sunlight readable  
Chemically strengthened tempered glass cover  
Optically bonded LCD and touch screen
- **Connectivity:** USB 2.0 Gigabyte Ethernet
- **Power:** 100-240VAC, 47-63Hz, 1.5-0.6A, or 14.8VDC 10Ah  
Lithium Polymer (5 hour charge life)
- **Frequency Range:** 5 to 40 Hz
- **Channels:** 2 channels (1 Absolute, 1 differential)



OSET Scanner Performing a Linear Scan



OSET Scanner Performing a Circumferential Overlap Scan



OSET Calibration Flaw

OSET Calibration Weld

## Scanner Specifications

- **Technique:** Off Surface Electromagnetic Technique (OSET)
- **Dimensions:** 5.5" W (140mm) x 2.5" H (64mm) x 8.3" D (211mm)
- **Weight:** 5.2 lbs (2.36 kg)
- **Cable:** 10ft (3.05m) and 25ft (7.62m) standard with 12 pin right angle lemo connectors, longer cables are available upon request
- **Encoders:** Quadrature linear encoder and 6 axis positioning encoder
- **Wheels:** Polyurethane with 95A durometer, extra durable for a much longer life
- **Coverage:** 3" (76.2mm) wide scanning path



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