

### AS200PA – Special Application

Phased Array Scanner for Inspection of Pipes



The inspection of the weld is performed by several sets of wedged linear PA probes by electronically steering an array of angled UT beams.

The weld area is completely scanned for detection of longitudinal and transverse defects. HAZ delaminations are also detected.

At any point of the longitudinal inspection it is possible to automatically produce a report of the defects found in the pipe and their location. The operator can also choose a defect from the defect table and perform a detailed evaluation scan of the suspect area.

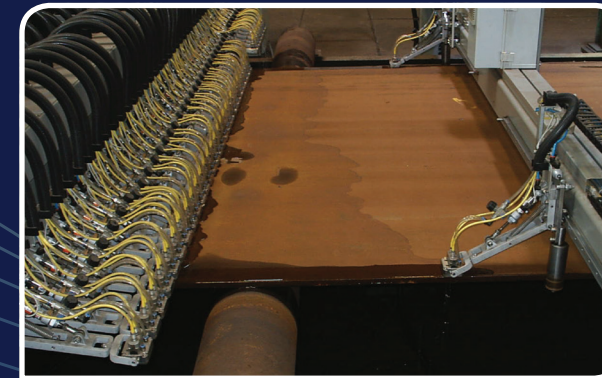
A detailed evaluation report, including a defect table and UT views such as sectorial scan is automatically produced upon completion of the scan.

#### Phased arrays transducers provide:

- Enhanced detectability
- Accurate flaw sizing
- Accurate flaw location

### AS200 – Plates & Strips

High-speed, precision inspection systems for detection, evaluation and documentation of flaws in Plates and Strips



#### Strip Inspection

Inspection of strips also known as coils performed within the production line before the strip is formed into Submerged Arc Welded (SAW) or Electrical Resistance Welded (ERW) pipes.

Different systems configurations are available depending on the specifications and the design of the test area.

#### Strip inspection features include:

- Testing for laminations or inclusions in the body material of welded pipes.
- Statistically inspection using oscillation or full body (100%) inspection
- Adherence to industry standards according to the pipe designation
- Different probe configurations depending on the specifications and customer requirements
- On-site calibration station

#### Plate Inspection

These systems provided for the heavy metal plate inspection, acquire UT data, analyze and evaluate indications found in the plates in accordance with the industry common standards such as: EN 10160, EN 10246-15, ISO 10893-9, SEL-072, ASME SA / ASTM A 435, ASTM A 578 and others

#### System Highlights:

- 100 % coverage of the plate body and edges
- Extension for Head and Tail inspection
- Different TR probe configurations
- Documentation and reporting according to the chosen standard
- Possibility of integration into customers IT network and QA databases

#### Headquarters

ScanMaster Systems (IRT), Ltd.  
5b Atir Yeda St. Industrial Park  
Kfar Saba, 4464305 Israel  
Phone: 972-9-7791990  
Fax: 972-9-7791989  
www.scanmaster-irt.com

#### Operations

ScanMaster Systems (IRT), Ltd.  
5, Atir Yeda st.  
Kfar Sava , Israel  
Phone: 972-9-7885270  
Fax: 972-9-7885277  
www.scanmaster-irt.com

#### North America

ScanMaster (IRT), Inc.  
1200 Woodruff Rd, Unit H-17  
Greenville, SC 29607  
Phone: 864-288-9813  
Fax: 864-605-7110  
www.scanmaster-irt.com



# ScanMaster

## Ultrasonic Inspection Solutions



Founded more than 25 years ago, ScanMaster is a world leader in development, design and manufacturing of automated ultrasonic inspection systems.

ScanMaster products, all developed and manufactured in house, are used in various industries such as Aerospace, Steel, Railways, Energy and Automotive

ScanMaster AS-200 Series systems are aimed to cover a large variety of ultrasonic inspection needs in the steel industry.

These heavy duty systems, specially designed to operate under harsh conditions, include multi-channel ultrasonic instrumentation, rugged and reliable mechanics, multi-axis motion control and user-friendly software.

### Systems include:

- On line and off-line systems for inspection of spiral and longitudinal H-SAW and L-SAW pipe
- On line and off-line systems for inspection of ERW pipe
- Systems for inspection of steel plates and strips
- Systems for special applications and phased-array based solutions



## Helical SAW Pipes

ScanMaster offers on-line and Off-line systems configurations for inspection of Spiral Submerged Arc Welded (SAW) pipe after the welding or after the hydrostatic test.



### Common Defect Types:

- Longitudinal and transverse flaws in the weld seam
- Delaminations in the Heat Affected Zone (HAZ)
- Delaminations in the pipe body
- Delaminations in the pipe ends (for off-line systems)

### Adherence to common industry standards:

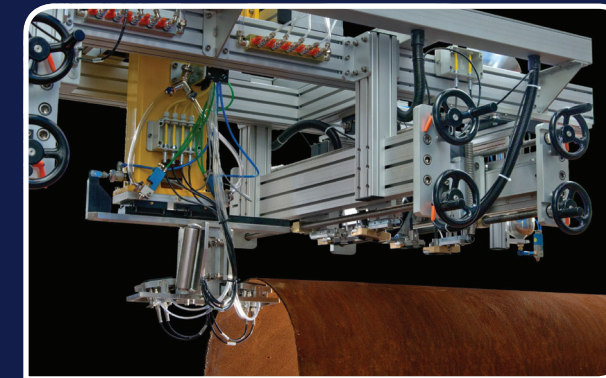
- API 5L/ISO 3183
- Shell DEP-31.40.20.37-Gen.
- Chevron
- Per request

### System Highlights:

- Modular inspection heads supporting different UT configurations
- Automated seam following by laser tracking
- Ease of operation for quick setup and calibration
- On-site operator console
- Automated custom tailored inspection report for endless and cut pipes
- Robust - vibration free mechanical structure
- Unique UT transducers with internal coupling verification
- RFI shielding and UT instrument layout specifically designed for enhanced SNR
- Low maintenance and long lifespan

## Longitudinal SAW Pipes

ScanMaster offers on-line and off-line systems configurations for inspection of Longitudinal Submerged Arc Welded (LSAW) pipe before or after the hydrostatic test



### Common Defect Types:

- Longitudinal and transverse flaws in the weld seam
- Delaminations in the Heat Affected Zone (HAZ)
- Delaminations and defects in the pipe ends (for off-line systems)

### Adherence to common industry standards:

- API 5L/ISO 3183
- Shell DEP-31.40.20.37-Gen.
- DNV-OS-F101
- Per request

### System Highlights:

- Modular inspection heads supporting different UT configurations
- Ease of operation for quick setup and calibration
- On-site operator console
- Automatic seam following by laser or pilot line
- Automated custom tailored inspection report
- Robust - vibration free mechanical structure
- Unique UT transducers with internal coupling verification
- RFI shielding and UT instrument layout specifically designed for enhanced SNR
- Low maintenance and long lifespan

## ERW Pipes

The AS200E System inspects Electro Resistance Welded Pipe (ERW), including weld and HAZ inspection. Systems may be in either online or offline configurations.



A variety of ultrasonic configurations according to inspection requirements and site conditions are available. Both static and moving inspection head configurations are available to accommodate different site conditions and throughput requirements.

Full body inspection systems for detection of delaminations in the pipe body are also available for off-line inspection with different pipe conveying configurations.

### System Highlights:

- Stationary or moving inspection heads supporting different UT configurations
- Measurement of wall thickness in the HAZ and on the weld
- Integration with pilot line trackers
- Body inspection available for either longitudinal or transverse pipe transport configuration
- Ease of operation for quick setup and calibration
- On-site operator console
- Automated custom tailored inspection report
- Robust - vibration free mechanical structure
- Low maintenance and long lifespan