Phoenix Inspection Systems Limited

Innovators in NDT Technology

Bracelet

Small Bore Weld Scanner

Bracelet scanning a 2" pipe (5mm W/T) with a single phased array probe

Dual Bracelet configuration scanning double sided phased array on 2” pipe

Benefits

- Low-profile for use in areas with limited access
- Can provide 360° inspection when only half of the pipe is accessible
- Operates past neighbouring obstructions
- Tool-free adjustments to resize the belt when scanning different pipe diameters
- Lightweight innovative design makes it easy to set up and attach around pipes
- Rubber wheels provide excellent axial grip to prevent unwanted slippage
- Operates on any material
- Compatible with industry standard phased array probes and flaw detectors

This manually operated belt scanner is the the ultimate scanning aid for phased array inspection of circumferential welds in small bore pipework.

With a radial height of 13mm the lightweight, low profile Bracelet scanner is designed to be used in areas of limited access. The scanner is extremely simple to set-up and use for weld testing on pipes from 0.5” to 12” nominal pipe size (NPS) and the innovative tool-free design allows for speedy set ups between this range.

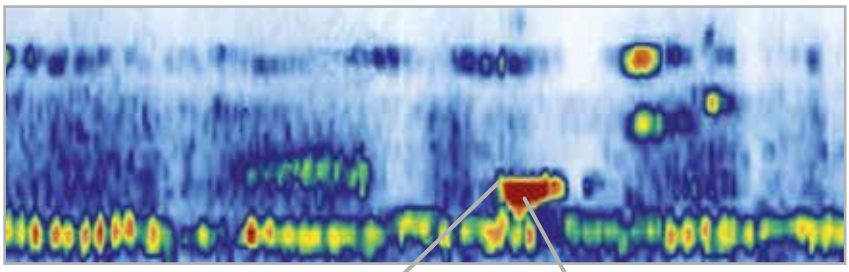
The Bracelet is available in a single-sided configuration making it suitable for pipe-to-fitting inspections, as well as straight welds. A dual-sided configuration is also available with bridging plates and two phased array probes for complete weld inspection in one scan.

The scanner comprises a series of links to make a flexible belt which easily wraps around the pipe, past neighbouring obstructions to provide 360° inspection when only half the pipe is accessible. The belt links can easily be added or removed for resizing the scanner to use on different pipe diameters.

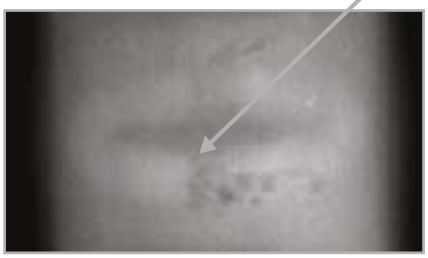
The scanner is compatible with industry standard miniature phased array transducers and incorporates a miniature encoder so the data can be recorded referenced to its location around the pipe.

Bracelet Scanner

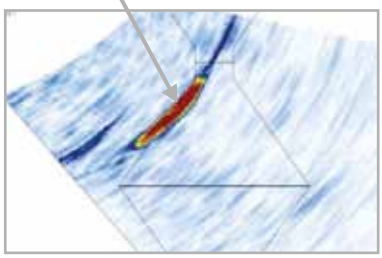
Phased array data collected using the Bracelet Scanner (compared with Radiography)



Smooth root data indicates minimal axial drift



Radiograph showing lack of fusion



PAUT S-Scan showing lack of fusion

Data courtesy of Oceaneering International Services Limited

Features

- Scans pipes ranging from 0.5" to 12" NPS
- Holds single or dual phased array probe configurations
- Radial height from pipe surface of 13mm
- Belt links added or removed with thumb-screws
- Durable rubber wheels provide smooth circumferential movement around pipe
- Probes and wedges are easily inter-changeable
- Miniature splash-proof encoder provides 38 quad counts/mm

Accessories

- **PA-WBRA-7.5L16** Phased array probes
- **AE-BRLT-W** Phased array wedges (countoured to your specification)
- BTB Calibration Block
- **AE-CDS** Couplant Delivery System

Bracelet Scanner Kit

- Belt links and wheels
- Wedge attachment link
- Adjustable clasp
- Former rings
- Low profile phased array probe
- Sealed encoder with 2.5m cable
- Hook and loop strap
- Contoured irrigated wedges
- Irrigation tubing and accessories
- Protective carry case

Order Information

Order Code	Configuration	Inspection Range NPS	No. Contoured Wedges	Flat Wedges
AE-BRLT-S-1.5-4	Single	1.5” - 4”	6	
AE-BRLT-S-0.5-4	Single	0.5” - 4”	10	
AE-BRLT-S-0.5-6	Single	0.5” - 6”	11	
AE-BRLT-S-1.5-6	Single	1.5” - 6”	7	
AE-BRLT-D-1.5-4	Dual	1.5” - 4”	12	2
AE-BRLT-D-1.5-6	Dual	1.5” - 6”	14	2
AE-BRLT-D-0.5-4	Dual	0.5” - 4”	20	2
AE-BRLT-D-0.5-6	Dual	0.5” - 6”	22	2

Phoenix Inspection Systems Limited, Dalton House, 40 Hardwick Grange, Warrington, WA1 4RF, United Kingdom

t: +44 (0) 1925 826000 | **f:** +44 (0) 1925 838788 | **e:** sales@phoenixisl.com | **www.phoenixisl.com**

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