

NozzleScan

Radial nozzle scanner with probe skew



NozzleScan is a versatile, low-profile manual scanning solution developed for the inspection of nozzle welds in both set-through and set-on configurations, with the option of a motorised version for automated inspection.

Available in both two-axis and three-axis instrument configurations; the NozzleScan is adaptable to cover a wide range of 90 degree nozzle sizes, from 3" upwards, on ferritic and austenitic materials.

Benefits

- Low-profile design for use below adjoining nozzle flanges
- Transducer skew axis can be adjusted, encoded and locked
- Two-axis and three-axis instrument configurations available
- Modules for both set-through and set-on nozzle configurations
- Automated inspections possible with motorised NozzleScan unit
- Options for mounting to ferritic and non-ferritic parent material
- Adaptable to a wide range of 90 degree nozzle sizes, from 3" upwards
- Encoders incorporated for semi-automated inspection data recording

Attaching to the branch component, the innovative modular design of NozzleScan offers a variety of configurations to encode circumferential and weld offset positions as the scanner travels around the nozzle.

NozzleScan features an overhead gimballed probe holder which allows the operator to hold the transducer conventionally for a more tactile inspection. Probe skew orientation is changeable (a critical requirement for inspecting many nozzles) and can be free-running or accurately adjustable, with the additional option of being encoded as a third axis, if required.

Attaching NozzleScan to the branch pipe can be achieved with either magnetic wheels for a wide range of ferritic pipe sizes, or with fixed size clamping rings for supreme accuracy on any material. Developed to satisfy demand for a solution, NozzleScan offers exceptional versatility to meet the inspection needs of industry.

Features

- Magnetic wheel mounting module for ferritic nozzles, clamping ring mounting module for non-ferritic
- Adjustable probe skew axis, free-running or by screw adjustment
- Probe skew axis optionally encoded for inspection with suitable three-axis instrumentation
- Obstruction free probe mounting allowing the operator to hold the probe like a conventional inspection
- Encoders incorporate for semi-automated inspection data recording -
 - Axis: 467.4 pts/deg
 - Radial Axis: 202 pts/mm
 - Skew Axis: 908 pts/deg

Options and Accessories

- AE-CDS Couplant Delivery System
- Phased Array Probes
- Phased Array Wedges



Order Information

NozzleScan is available to order in a wide range of configurations. Select options from the tables below to create a product code for your specific requirement:

AE-NOZ - - - - -

- MAG** – Magnetic wheels (3" branch to flat)
RNG4 – Clamping ring (3" - 4" branches)
RNG8 – Clamping ring (6" - 8" branches)
RNG12 – Clamping ring (10" - 12" branches)

- RD100** – Radial axis module for set-through nozzles, 100mm stroke length
RD250 – Radial axis module for set-through nozzles, 250mm stroke length

OPTIONAL ACCESSORIES

- AXIAL** – Axial module for set-on nozzle configurations
AUTO – Motorised version for automated inspections

- 2AX** – 2 Encoded axes (Circumferential and Radial)
3AX – 3 Encoded axes (Circumferential, Radial and Skew)

- NONE** – No probe skew axis, probe radially aligned (2AX only)
ADJ – Adjustable probe skew axis with thumbscrew
FREE – Free-running probe skew axis

When ordering, please also specify:

- Probe wedge width
- Probe mounting type
- Cable termination