Longitudinal Insonification

OD Surface

Pipe Support (or segment of the stiffener ring or some insulation or repair)

PA Probe – circumferential scanning along pipe support (or segment of the stiffener ring or some insulation or repair)

Every cross-section is insonified through sectorial scanning providing multi-skip coverage
Typical cross sectional indication obtained from one placement of the PA probe: 30 mm WT riser – scattered corrosion on the OD surface under stiffener ring.

The degree of corrosion damage may be evaluated through:

- A-Scan evaluation
- Setting measuring cursors above the true-to-geometry sectorial scan image, which may be obtained easily through setting nominal WT value, beam steering range, and number of skips to be implemented

The probe should be equipped with the CU-contoured contact face allowing stable coupling for the *longitudinal insonification*.
Typical C-Scan indication obtained through manipulating PA probe circumferentially: 30 mm WT riser – scattered corrosion on the OD surface under stiffener ring

At every position along the C-Scan the cross sectional data captured during the scanning may be stored into a separate file and evaluated as it is shown above.

The integrated degree of corrosion damage of the selected area may be evaluated statistically using POLYGON function applied to distance C-Scan (Top View)
Typical C-Scan indication obtained through manipulating PA probe circumferentially: 30 mm WT riser – scattered corrosion on the OD surface under stiffener ring

The length and width of the damage area may be evaluated through boxing with the appropriate cursors.

3D-presentation provides better understanding for the non-UT personnel.
Circumferential Insonification

Every cross-section is insonified through sectorial scanning providing multi-skip coverage.

PA Probe – circumferential scanning along pipe support (or segment of the stiffener ring or some insulation or repair)

OD Surface

Pipe Support (or segment of the stiffener ring or some insulation or repair)
Typical cross sectional indication from one placement of the PA probe: 42 mm WT pipe – scattered corrosion on the OD surface above the support

The degree of corrosion damage may be evaluated through:

- A-Scan evaluation
- Setting measuring cursors above the true-to-geometry sectorial scan image, which may be obtained easily through setting nominal WT and OD values, beam steering range, and number of skips to be implemented (Optional Inspection SW Package EXPERT CU)

The probe should be equipped with the CUC-contoured contact face allowing stable coupling for the circumferential insonification.
Typical C-Scan indication obtained through manipulating PA probe along the pipe: 42 mm WT pipe – scattered corrosion on the OD surface above the support

At every position along the C-Scan the cross sectional data captured during the scanning may be stored into the separate file and evaluated as it is shown above.

The integrated degree of corrosion damage of the selected area may be evaluated statistically using POLYGON function applied to distance C-Scan (Top View)
Typical C-Scan indication obtained through manipulating PA probe along the pipe: 42 mm WT pipe – scattered corrosion on the OD surface above the support.

The length and width of the damage area may be evaluated through boxing with the appropriate cursors.

3D-presentation provides better understanding for the non-UT personnel.