Case Study 12: Detection of Weld Defects

With the advanced interpretation tools such as frequency sweeping and C-Scan, welds can be screened for defects as part of the guided wave inspection.

Job Details

- 3" Gas line
- Painted surface

Main Findings

- Weld defect was positively identified using standard tools available in the Wavepro™ software
- Subsequent prove up using Radiographic Testing (RT) confirms a 85% lack of root penetration at positions reported in the unrolled pipe display

Equipment:

- Wavemaker® G3
- EFC Solid Ring

A close up view of the defected weld with lack of root penetration which is visually unobservable.

A radiograph of the defected weld with lack of root penetration confirmed by the dark circumferential line.