



teletest

## TELETEST™ FOCUS+ IN PIPELINE INSPECTION AND ASSESSMENT APPLICATIONS

Eddyfi Technologies inspected and assessed the integrity of the Menzel Lejmat North (MLN) oil field 20.3cm (8in) and 30.5/45.7 cm (12/18 in) trunkline pipelines for ConocoPhillips-Sonatrach in Algeria.



FOCUS+ guided wave ultrasonic test equipment used to inspect an 45.7cm (18in) trunkline of the MLN field in Algeria

A risk-based review was performed to confirm the likely damage mechanisms in the lines to ensure the inspections were effectively targeted. External corrosion in areas where sand covered the lines (especially where water was present) was confirmed to be the mechanism of concern for the lines.

Teletest™ FOCUS+ guided wave ultrasonic testing was used to screen the lines and identify areas for detailed follow-up

inspection. FOCUS+ is an externally applied inspection tool that can screen pipelines and process piping for internal and external corrosion. Pipelines can be tested in service, avoiding the need to shut down and stop production for inspection. A wide range of pipe sizes can be inspected, from 5.1 cm to 121.9 cm (2–48 in) nominal diameters.



Ultrasonic wall thickness scans performed at FOCUS+ tool locations and at corroded areas to confirm internal corrosion was not present

Manual ultrasonic testing combined with profile pit gauging was used to confirm and size anomalies identified by the FOCUS+ screening inspections. These

follow-up inspections confirmed the presence of corrosion and sized the corroded areas at the required resolution for engineering assessment.



Characterizing external pitting corrosion using pipe pit depth gauges (lever type and dial gauge)

A fitness-for-service (FFS) engineering assessment was performed by integrity engineers, using the inspection results and relevant background data collected by the Teletest project team. The FFS assessment report estimated the remaining life of the lines based on the available information and identified areas requiring remedial action to achieve the desired minimum safe run length. The FFS assessment report also included recommendations for managing the integrity of the lines and for future inspections.

