

# Quantitative Measurement of Corrosion Under Support



# Quantitative Short Range - QSR



Guided Ultrasonics are currently working on an innovative testing system QSR to quantitatively measure corrosion at supports.

QSR stands for “Quantitative Short Range” scanning.

QSR automatically measures the size of corrosion to the depths of up to half of the pipe wall thickness.

QSR also automatically measures pipe diameter and pipe wall thickness around the pipe circumference from a single location in a fraction of a second.



# QSR - Practical Performance Test

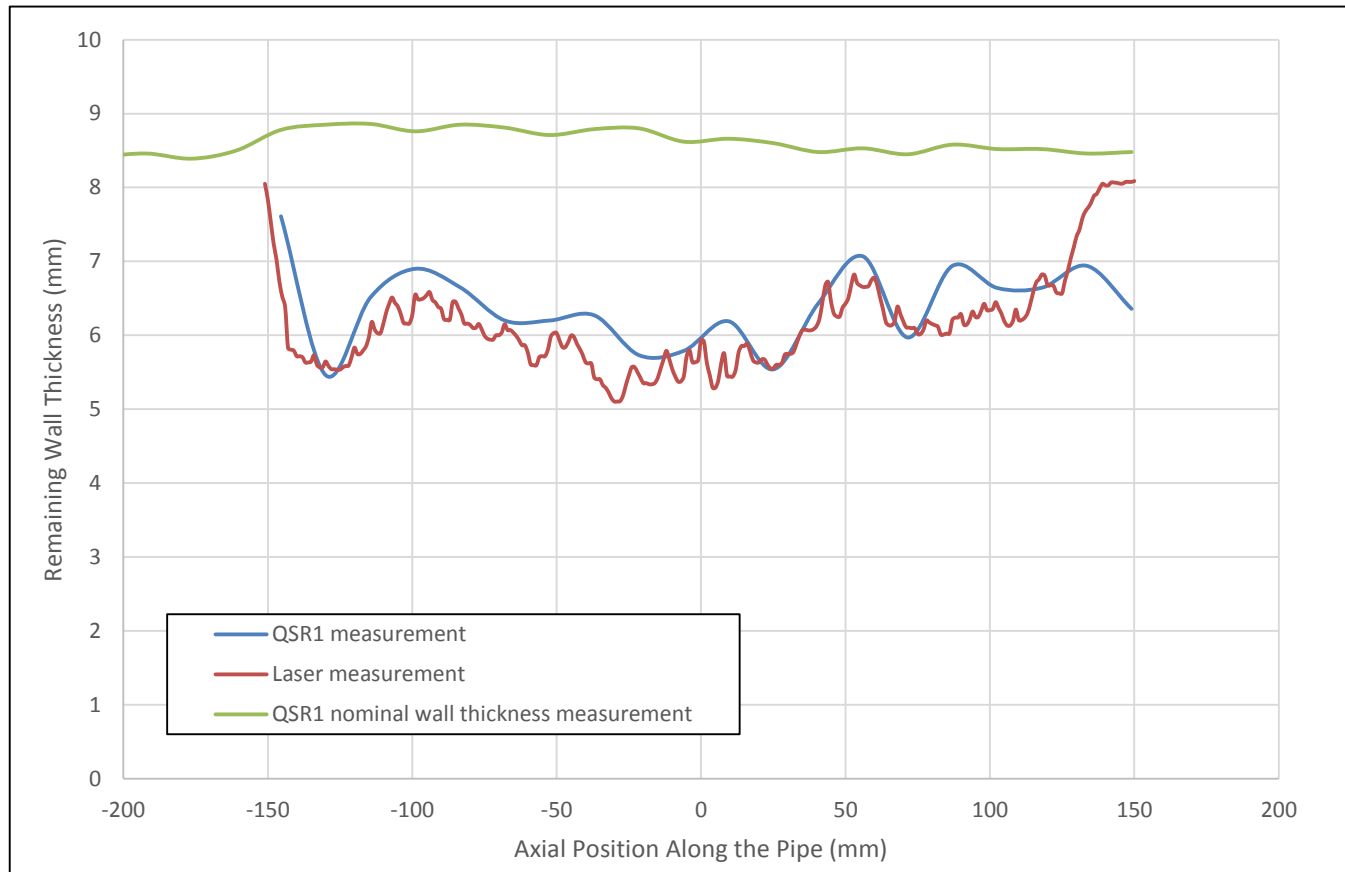
Ex-service 12 inch pipe with the hidden Corrosion Under Pipe Support (CUPS) type defect was scanned by the QSR1 device in order to obtain the profile of the area.



# QSR1 - Test Results



Very good agreement was achieved between the laser scan of the defected area (red line) and the QSR1 measurements (blue line).

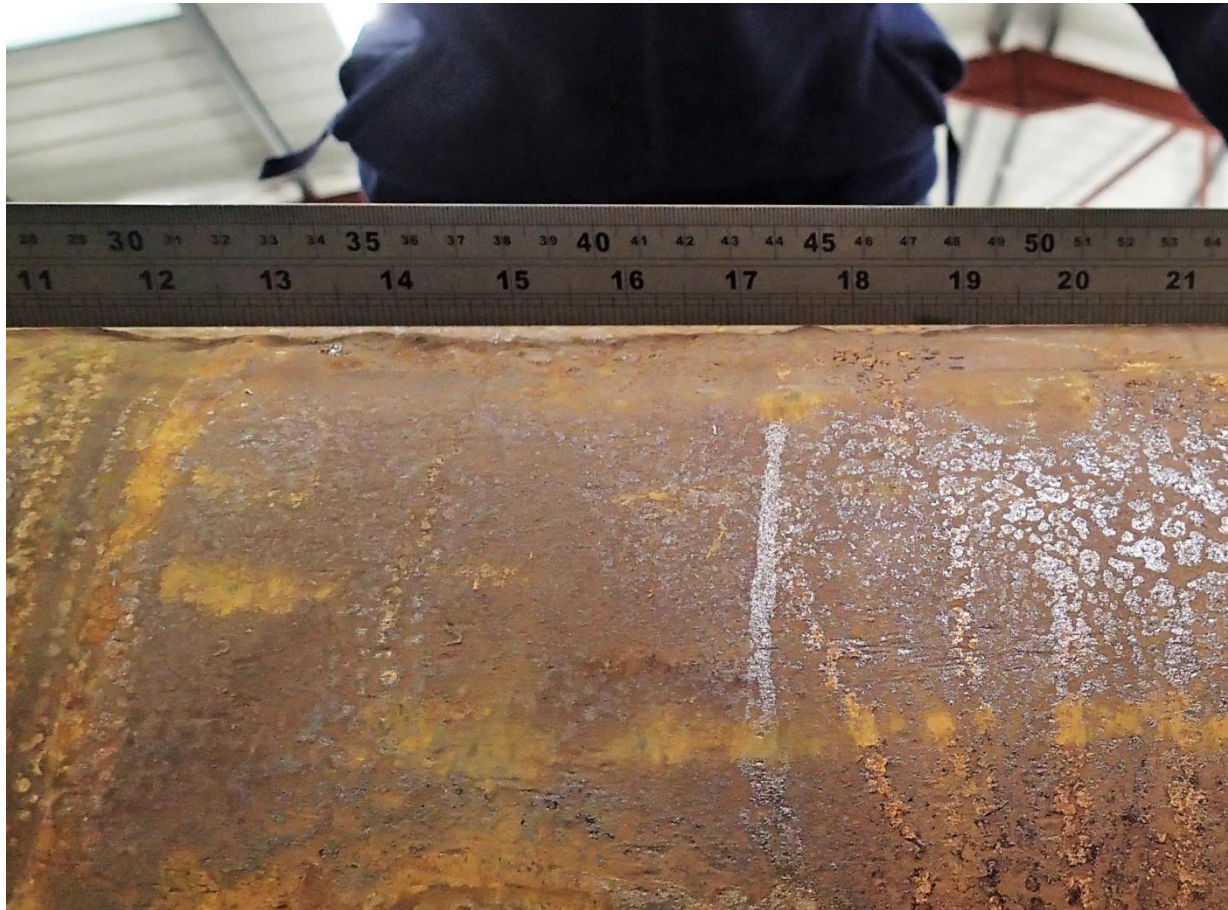




# QSR1 - Test Results



Visual examination of the corroded area shows close agreement with the scan obtained by the QSR1 device and the laser scan.





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