

# TANK ANCHOR BOLT SHELL INSPECTION



**ESCON DHVANI**  
HIDDEN CORROSION INSPECTORS

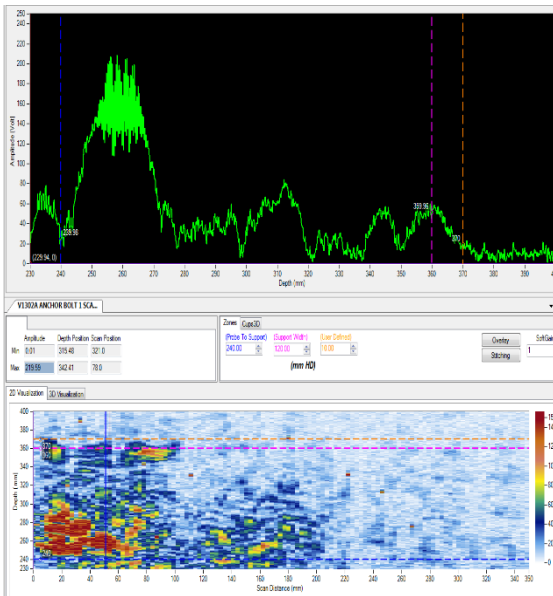


## INDUSTRY PROBLEM:

Anchor Bolts are common in Above Ground Storage Tanks.

The region behind the anchor bolt on the Shell plate is prone to corrosion. This can remain undetected or unestimated leading to failures.

Very often the extent of corrosion is unknown due to position of the defect. Estimating defect levels require intrusive inspection from the inside during tank outages.



## OUR SOLUTION:

A new concept for the improved inspection of corrosion at annular plate in the near shell wall region of storage tanks using a short-range ultrasonic guided wave technique that uses a collection of Higher Order Modes Clusters, called here as **HOMC\*** has been developed and verified at several field sites. Ultrasonic guided waves, once generated will be reflected from corrosion in the plate. Inspection can be carried out from outside the tank using the accessible portion of the plate. Presence of welds, uneven surfaces or coatings does not come in the way of inspection using HOMC technique. Reflections from corrosion are assessed and wall loss is estimated.

