

## PA-CAT

PA-CAT is a multi-angle ultrasonic phased array pitch and catch technique that provides a signal amplitude-based assessment to provide a minimum remaining thickness of inaccessible test locations. Inspection data is collected and processed through a cloud-based platform using specific algorithms derived from LIDAR and Machine Learning data processing.

### Advantages

- High POD and sizing capabilities
- Recordable and repeatable inspection
- Fast, accurate collection of inspection data
- Circumferential (COD) or axial (AOD) scan orientations

### Features

- Temperature up to 70° Deg C
- Diameter Range 2" to Flat
- Thickness Range 3.9mm to 15.9mm

### Applications

PA-CAT has been developed to perform ultrasonic phased array defect assessment of inaccessible locations such as:

- Corrosion Under Pipe Supports (CUPS)
- Contact Point Corrosion
- Vessel Saddle Supports
- Corrosion Scabs
- Trunnions

### Limitations

- PA-CAT cannot differentiate between OD and ID wall Loss
- Not applicable through attenuative or irregular coating systems
- Can undersize damage by ~20%

