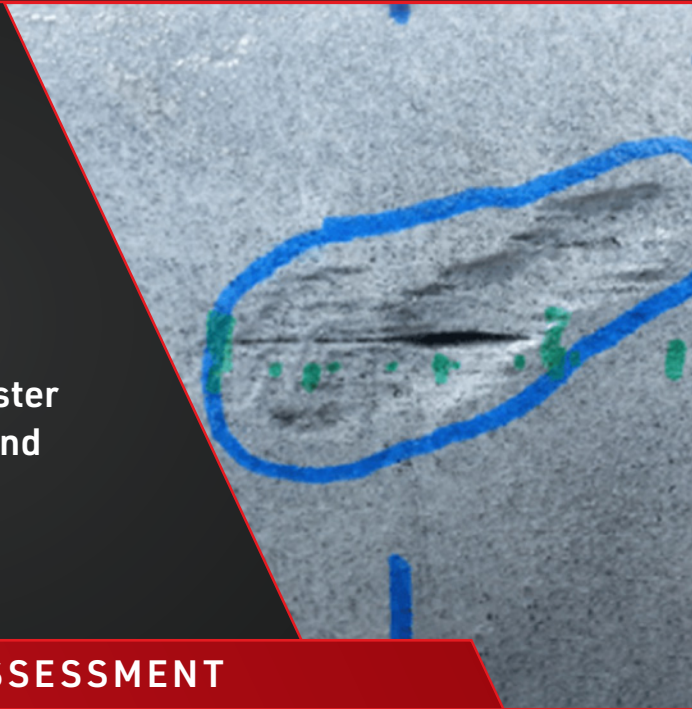


ARE YOU BURSTING AT THE SEAMS?

- ▶ **SELECTIVE SEAM ANOMALIES:** Selective seam weld corrosion can grow 2 to 4 times faster than other corrosion, exhibit low toughness and fail by bursting.



SELECTIVE SEAM WELD CORROSION ASSESSMENT

TDW utilizes the multiple dataset in-line inspection (ILI) platform to reliably detect and size selective seam weld corrosion. Using current industry methods, we can apply failure criteria based on plastic collapse, fracture mechanics and combined failure modes. Geometry is combined with material properties and loading, both static and cyclic, to gain the best understanding of the criticality of these complex defects.

APPROACH

Corrosion, crack or both

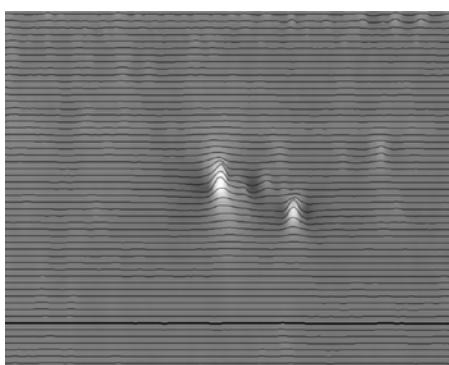
ILI gives us the current size. Back-calculating potential crack sizes also permits us to derive worst-case failure pressure, thus identifying those anomalies that need attention. This can be done using integrity mechanics or finite element modeling.

VALUE

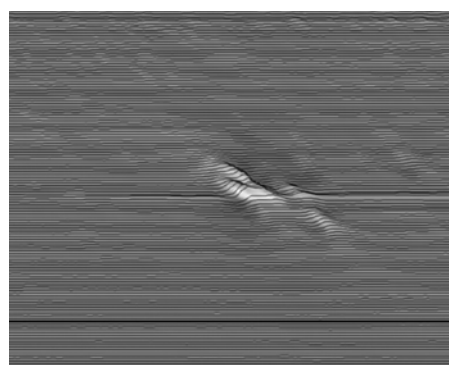
Focusing on what matters

We help prioritize what's critical. These defects may be repaired, a safe allowable operating pressure set and a re-inspection interval determined to monitor growth.

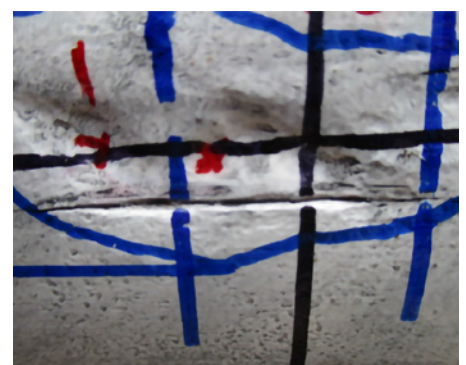
SELECTIVE SEAM WELD CORROSION (SSWC)



MFL



SMFL



Field

EXTENDING BEYOND INSPECTION

- ▶ Improving safety, efficiency and productivity throughout the life of your pipeline.

ASSESSMENT SERVICES



Immediate Integrity Assessment

IMMEDIATE THREATS:

- ▶ Metal loss
- ▶ Dent strain
- ▶ Bending strain
- ▶ Selective seam weld corrosion
- ▶ Cracks
- ▶ Mechanical damage



Future Integrity Assessment

TIME-DEPENDENT THREATS:

- ▶ Corrosion growth
- ▶ Line movement
- ▶ Crack growth
- ▶ Dent fatigue
- ▶ Other changes in pipeline conditions



Advanced Integrity Assessment

MORE COMPLEX THREATS:

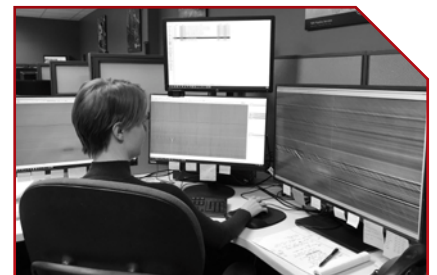
- ▶ Non-axial stress corrosion cracking
- ▶ Branch connection loading
- ▶ Wrinkle bends
- ▶ Hard spots
- ▶ Other threats requiring finite element analysis (FEA)

Using the right approach

The right assessment approach, consistent with codes, industry-accepted methods and operator mandates, ensures compliance and auditability.

Focus on the right decisions

By focusing on the anomalies that matter most, you can make the best integrity decisions for your pipeline.



Contact your TDW sales representative for more info.

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