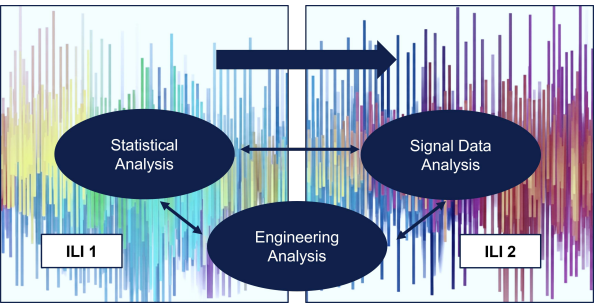
CGREAL: REALISTIC CORROSION GROWTH RATES

Reducing inherent variation for more realistic run comparison CGRs

Supporting customers in making the right integrity management decisions for their assets is fundamental to DNV's approach. When comparing two inline inspection data sets, especially when different technologies and/or vendors are used for subsequent ILI inspections, our CGReal process enables Pipeline integrity professionals to make more confident excavation decisions by reducing the impact of inherent variability in ILI surveys to provide more realistic corrosion growth rates and more accurate reinspection interval calculations.



Case example: smarter excavation examples with lower cost and lower risk.

CGReal sharpens criticality decisions so pipeline professionals can focus excavation resources where they create the most value.

Criteria	# Joint Excavations	Results	Savings
Joints with time to criticality <6 yrs Pre-CGReal	62	Spreadsheet Comparison	Low
Joints with time to criticality ≤6 yrs Post-CGReal	10	Positive-Positives	High
Joints removed from 6-yr dig list post-CGReal	**52 avoided**	**False Positives**	High
New joints discovered where criticality changed from > 6 yrs to ≤6 yrs post-CGReal	2	False Negatives	High

VALUE AT A GLANCE

The analysis reduced the six-year excavation list from 62 joints to 10, removing 52 lower-priority digs while identifying 2 newly critical joints that could otherwise have been missed. Source: DNV

Operator value

- Supports IM resource optimization
- Minimizes unnecessary digs
- Supports identification of new, necessary digs
- Ensures maximum online service time
- Enables defensible, data-driven decision making
- Agnostic to vendor or metal-loss technology type

CGReal engineering process

- Accurate data alignment & preparation
- Statistical screening (SAC) & initial CGRs ILI signal-to-signal review by industry SMEs
- Bias assessment & application
- Final realistic CGRs (per joint or anomaly)
- Derive more accurate reinspection intervals
- (Optional): Probability of Exceedance (POE)

Contact DNV today

Connect with one of our experts today for more information or a in-depth presentation to see how CGReak can help you optimize your pipeline integrity program at contact.energysystems@dnv.com.