

# Fit-for-service Evaluation

Material failures and defects within industrial facilities can cause permanent damage, unplanned shutdowns, dangerous accidents and loss of public confidence. Our fitness-for-service assessments can determine the safety and integrity of a client's equipment, helping to prevent catastrophic failure and maintain safe and reliable operations.



## THE Applus+ SOLUTION

Applus+ offers cost-effective, practical and timely solutions that improve the safety and reliability of a client's assets by:

- Determining if structural components, such as pressure vessels, tanks or piping, are safe and fit for continued operation.
- Assessing how reliable assets will be over a set period of time (for example, until the next planned shutdown) because material failures and defects within industrial facilities can cause permanent damage, unplanned shutdowns, dangerous accidents and loss of public confidence.
- Making informed decisions about whether to run, repair, re-rate, alter or retire equipment.
- Assessing the remaining life of equipment in order to set future inspection intervals and assist with budgeting for capital expenditure.
- Comparing the actual pressure-cycle spectrum to our benchmark cycles in order to evaluate if it is aggressive or non-aggressive in terms of likelihood of producing fatigue crack growth.
- Reducing shutdown time and gaining more effective remediation.
- Offering expert recommendations about any necessary corrective action.

Our fitness-for-service assessments include:



- Customised and cost-effective assessments.
- Finite element analysis to assess equipment.
- Solution-based recommendations.
- Identification of alternative service options, with enhanced equipment performance.
- Recommendations of effective approaches to remediation and repair.
- Equipment assessment.
- Corrosion evaluation.
- Data analysis and risk assessment.
- Evaluation of damage mechanisms.
- Materials testing.
- Non-destructive testing (NDT).
- Stress analysis.
- Visual inspection.

Applus+ is in a unique position to offer worldwide multi-disciplinary resources, extensive experience and highly qualified staff.

## Target customers

Fitness-for-service assessments provide companies with an insight into the current condition of their assets as well as their future operability.

## Key customer benefits

The Applus+ fitness-for-service assessment helps companies evaluate the remaining life of pressure vessels, storage tanks, pipelines and other equipment in order to optimise future inspection intervals and maintenance schedules.