

Fitness For Service (FFS) Analysis

Fitness For Service (FFS) is considered as the best practice and standard usually employed by the oil and gas industries for determining its condition for continued service. FFS acts as an analytical basis to define flaw acceptance limits and enables the industry experts to differentiate between acceptable and unacceptable flaws and damage in accordance with the industry-recognized and widely accepted good engineering practices.

At Velosi, fitness for service assessments are usually measurable engineering appraisals that are conducted to demonstrate the structural integrity of an in-service component that may comprise a flaw or damage. Our FFS assessments are performed in compliance with international standards such as ASME B31G, BS 7910, API 579-1/ASME FFS-1 etc.

Benefits of FFS

- Detailed report with run-repair/replace decision.
- Remaining plant life estimation.
- Assessment of the equipment.

FFS Deliverables

- Identifies the main damage mechanisms based on the best approach and applicable standards (API 579, BS 7910, and others).
- Provides the current integrity of the asset given a current state of damage and the projected remaining life.
- Allows operating the damaged component safely for a particular period of time.
- Offers mitigation plans to run the equipment/plant safely.
- Provides recommendations in terms of remedial actions.



FFS Deliverables

- Brittle Fracture
- General Metal Loss
- Local Metal Loss
- Pitting Corrosion
- Blisters and HIC/SOHIC Damage
- Weld Misalignment and Shell Distortions
- Crack-Like Flaws
- High-Temperature Operation and Creep
- Fire Damage
- Dent, Gouge and Dent Gouge Combinations
- Laminations

