

## Fitness For Service

Fitness for Service Evaluation Fitness for Service is defined as the ability to demonstrate the structural integrity of an in-service component containing a flaw. The rapidly becoming standard for conducting fitness-for-service assessments is API 579, Fitness for Service. API 579 describes standardized fitness-for-service techniques for pressurized equipment used in industry and supplements the inspection and assessment techniques in API 510, API 570 and API 653. Fitness-for-service assessments provide useful economic and safety benefits to end users and operators including:

- Ensuring the safety of plant personnel and the public while older equipment continues to operate
  
- Helping to optimize maintenance and operation of existing facilities to maintain the availability of older plants and enhance long term viability. The procedures can be used for evaluation and re-rating of pressure vessels designed and constructed to the ASME Boiler and Pressure Vessel Code; piping systems designed and constructed to the ASME B31.3 Piping Code and aboveground storage tanks designed and constructed to API 650 and API 620. Typical scenarios requiring a fitness for service assessment include:
  - Assessment of equipment for general metal loss;
  - Assessment of equipment for local metal loss;
  - Assessment of equipment for brittle fracture;
  - Assessment of equipment for pitting corrosion;
  - Assessment of equipment for blisters and laminations;
  - Assessment of equipment for crack-like flaws;
  - Assessment of fire damage;   Download Brochure