

Informa Connect

Academy

Fitness for Service Assessment

Fitness for Service Assessment FFS training will help engineers develop a complete method for analysing, evaluating and monitoring the operation, design and maintenance of pressurised equipment.

LIVE ONLINE TRAINING | 28 - 31 May 2024 | 15 - 18 October 2024



Live Digital

REGISTER NOW

www.informaconnect.com/academy

Course Information

Live Online Training

May 2024

Part 1 28 May Part 2 29 May Part 3 30 May Part 4 31 May 1pm - 5pm AEST

October 2024

Part 1 15 Oct Part 2 16 Oct Part 3 17 Oct Part 4 18 Oct 1pm - 5pm AEDT

Key Learning Objectives

- Review the sections of API 579-1/ASME FFS-1 2016 used for assessing brittle fracture, crack-like defects, corrosion and creep
- Understand and apply background information on FFS assessment
- Analyse, evaluate and monitor pressurised equipment for continued operation
- Discuss damage mechanisms and the importance of identification
- Solve example problems on the practical application of the techniques incorporated in API 579-1/ASME FFS-1 2016
- Understand the relationship between API 579-1/ASME FFS-1 2016 and other FFS standards
- Appreciate the remaining life assessment, remediation, and methods to extend the life of damaged equipment

Who Will Benefit

This Fitness for Service Assessment FFS training course is highly technical. As such, it will benefit engineers and engineering management engaged in the operation, design, analysis, and maintenance of pressurised plants or equipment in industry. Job titles include plant, mechanical, civil, structural, reliability and project engineers.

Metallurgists and maintenance employees who design or operate pressurised plants or equipment that may develop cracks in service or at the time of manufacture will also benefit.

About the Course

Fitness-For-Service (FFS) assessment is a multi-disciplinary quantitative engineering approach to determine whether equipment is suitable for continued operation.

The pressurised structure or component of interest may contain flaws or other damage or may be subjected to more severe operating conditions than anticipated by the original design.

The outcome of an FFS assessment is a decision to run the component as is, alter it, repair it, or replace it. A remaining life assessment may be performed as part of an FFS evaluation in order to determine how long the asset can be operated safely or to define appropriate inspection intervals.

This Fitness for Service Assessment FFS training course provides training on the application of API 579-1/ ASME FFS-1, a standard jointly published by the American Petroleum Institute (API) and the American Society for Mechanical Engineers (ASME).

Example problems will be worked through to provide participants with a detailed understanding of the various FFS calculations.



"Understanding the principals behind the FFS code and recognising this presents an excellent way of quantifying remaining lives."

Principal Mechanical Engineer, BHP Billiton

Meet Your Course Director



Annette Karstensen

Annette Karstensen is working in Becht's High Temperature and Fracture Group as a FFS and Structural Integrity specialist. She is a registered licensed engineer in Australia and United Kingdom with more than 25 years' experience in Structural Integrity.

She has extensive experience with client work covering assessments of engineering components relating to hydro power, fossil power and petrochemical plants. Her main expertise is the application of crack assessment and remaining life assessment procedures such as BS7910 and API 579 to develop allowable crack sizes and/or time for failure for components subjected to cyclic loads or high temperature exposure. Prior to joining Becht, Annette worked 18 years with Quest Integrity in Asia Pacific and 7 years with TWI in the UK predominantly focused on projects relating to Structural Integrity. The last 12 years Annette has conducted more than forty API 579 training courses in Asia, Australia, New Zealand, and Europe.



"Annette has a phenomenal amount of knowledge and experience. It was an absolute pleasure to be taught by her."

Engineer, AWS Global

Course Outline

This course examines the fundamentals of Fitness for Service Assessment FFS. It offers step-by-step and in detail the contents of the API/ASME standard. The sessions are not necessarily equal in length. The main focus will be on some of the more commonly used sections in API579.

The level of detail examined will be dependent on the requirements and experience of the participants.

Most case studies examined throughout the course will be pre-worked to improve productivity and maximise learning transfer through group discussion. However, there will be opportunities for participants to work through a number of limited problems individually and in group work.

Participants are encouraged to bring specific problems of interest to them to discuss during the course to assist with problem-solving and benchmarking against best practices and lessons learnt.

ASSESSMENT OF BRITTLE FRACTURE

- Levels 1 and 2
- Case study examination
- Participant questions/problems/discussion

ASSESSMENT OF PITTING CORROSION

- Level 1, 2, and 3 assessment
- Case study examination
- Participant questions/problems/discussion

ASSESSMENT OF GENERAL METAL LOSS

- Level 1, 2, and 3 assessment
- Case study examination
- Participant questions/problems/discussion

ASSESSMENT OF CRACK-LIKE FLAWS

- Level 1, 2, and 3 assessment
- Case study examination
- Participant questions/problems/group discussion

ASSESSMENT OF LOCAL METAL LOSS

- Level 1, 2, and 3 assessment
- Case study examination
- Participant questions/problems/discussion

ASSESSMENT OF CREEP DAMAGE

- Level 1, 2, and 3 assessment
- Case study examination
- Participant questions/problems/group discussion

Fitness for Service Assessment

LIVE ONLINE TRAINING

28 - 31 May 2024 | 15 - 18 October 2024

Easy Ways to Register



www.informaconnect.com/academy



+61 (02) 9080 4399



training@informa.com.au

Fitness for Service Assessment

Course Code	Location/ Format	Course Parts	Course Dates	Standard Price		Great Savings: When you book 4 or more participants! Call us today on +61 (2) 9080 4399 or email training@informa.com.au to take advantage of the discount offer.
P24GE07AUV	Live Digital	All 4 Parts	28 - 31 May 2024	\$2,595 + \$259.50 GST	\$2,854.50	
P24GE07AU02V	Live Digital	All 4 Parts	15 - 18 October 2024	\$2,595 + \$259.50 GST	\$2,854.50	

Terms, Privacy Policy & Updating Your Details: Please visit us at www.informaconnect.com/terms-and-policies for terms and conditions and privacy policy.

Database amendments can be sent to database@informa.com.au or call **+61 (2) 9080 4399**.

ABOUT INFORMA CONNECT ACADEMY

Informa Connect

Academy

Informa Connect Academy is a premier provider of global education and training solutions that caters to a diverse range of professionals, industries, and educational partners. We are dedicated to promoting lifelong learning and are committed to offering learners expert guidance, training, and resources to help them stay competitive in a rapidly changing world.

Our comprehensive range of courses and programmes are tailored to meet the needs of all professionals, from aspiring specialists to seasoned experts. We partner with elite academic organisations and industry leaders with unmatched expertise in their respective fields to deliver an exceptional learning experience.

ON-SITE & CUSTOMISED TRAINING

Informa Connect Academy has a long-standing track record of delivering very successful customised learning solutions achieving real and measurable value for our clients through our senior training consultants. If you have 8+ interested people, an on-site course can be the ideal solution – giving you the opportunity to customise our course content to your specific training needs, as well as attracting significant savings compared to public course costs.

WHY CHOOSE ON-SITE WITH INFORMA CONNECT ACADEMY?

- 1. Custom design** – Together, we will identify the best blended learning solution for your culture, your people and your training objectives.
- 2. Quality assured** – We design market-leading training programs, concepts and methodologies, with a 400+ course portfolio. Our rigorously selected 900+ instructor faculty are recognised experts in their field. Quality of their content and delivery methods is assured through continuous monitoring and evolution.
- 3. On-site training** is a cost effective way to train your people and achieve your defined outcomes.

Speak with **Sushil Kunwar** on **+61 (2) 9080 4370** to discuss your customised learning solution, or email inhouse@informa.com.au



+61 (02) 9080 4399



training@informa.com.au



www.informaconnect.com/academy