Pipeline Repair, Hot Tapping & In-Service Welding Course

Avoid Shutdowns & Service Interruptions. Realise Economic & Environmental Benefits.

The objective of this course is to provide an in-depth overview of the various aspects of pipeline modification and repair (full encirclement sleeves, hot taps and so on) and to address the concerns associated with welding onto in-service pipelines.

A thorough understanding of the factors that affect welding onto in-service pipelines helps avoid pipeline shutdowns and interruptions of service, thereby bolstering both economic and environmental benefits for operators and welders alike. Plus, repairs can be undertaken efficiently, effectively and with full confidence.

Who Should Attend?

Pipeline engineers, designers, operators and service professionals who are involved with the maintenance, design, inspection and repair of oil and gas pipelines.

"A must attend course for pipeline repair personnel. Excellent course material."

Course Overview

The course includes a review and critical analysis of available thermal analysis models, including the original Battelle model, the heat sink capacity method and the PRCI thermal model for Hot Tap Welding.

Course attendees will learn why these models, while useful as planning tools, should not be regarded as 'magic bullets' against hydrogen cracking in hot tap welding by utilising comparative examples.

This course will give an unbiased analysis of the best strategies for avoiding burn through and the development of crack susceptible weld microstructures. It will also cover the latest defect assessment methods for pipeline engineers and managers, from simple, quick assessments through to more detailed 'fitness for purpose' analysis.

The course will dispel a number of misconceptions that have developed pertaining to operating practices required to safely weld onto an in-service pipeline.

It will demonstrate that the application of industry best practices for pipeline repair, hot tapping and in-service welding can help:

- Ensure the safety of workers
- Reduce the probability of a shutdown, failure or service interruption
- Extend the lifecycle of pipeline systems

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About the Presenter

William A. Bruce

William (Bill) A. Bruce is Senior Principal Consultant, Welding Technology at DNV. With a career in pipeline welding research and its practical application spanning more than 40 years, Bill’s areas of interest include repair welding, inspection techniques and failure analysis.

He has carried out numerous projects pertaining to safety and integrity aspects of repair and modification of in-service pipelines by welding. Bill is an American Welding Society representative on the American Petroleum Institute API 1104 Committee and is the Chairman of the Maintenance Welding Subcommittee. He has received numerous awards, including a Distinguished Researcher Award from the Pipeline Research Council International.

Bill holds a Bachelor of Science in Welding Engineering and is a Registered Professional Engineer, an IIW International Welding Engineer (IWE) and an AWS Certified Welding Engineer (CWEng).

Course Details

Date: 22 and 23 May 2024

Time:
- Registration 8.30am on day one for 9.00am start
- Ends 4.30pm daily

Morning tea, lunch and afternoon tea provided.

Venue: The Sebel Brisbane
95 Charlotte Street
Brisbane QLD 4000

How to Register

To register for the course, simply contact: Danielle Pennington (Corporate Engagement Manager) on 493 024 505 or d.pennington@weldaustralia.com.au

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Course Content

The course will cover:

- ✓ Pipeline Repair Hot Tapping and In-Service Welding
- ✓ Defect Assessment Prior to Repair
- ✓ Welding Processes, Discontinuities and Defects
- ✓ Burn Through and Related Safety Concerns
- ✓ Hydrogen Cracking Concerns
- ✓ Full Encirclement Repair Sleeves
- ✓ Hot Tap Branch Connections
- ✓ Pipeline Repair by Weld Deposition
- ✓ Non-Welded Repairs
- ✓ Selecting an Appropriate Repair Method
- ✓ Code and Regulatory Requirements
- ✓ Procedure Selection for Hot Tap and Repair Sleeve Welding
- ✓ Practical Aspects of Hot Tap and Repair Sleeve Welding
- ✓ Alternative Welding Processes for In-Service Welding
- ✓ Lessons from Past Pipeline Repair Incidents

Register Today

Weld Australia Members: $3,410 inc GST

Non Weld Australia Members: $3,718 inc GST

Payment is required at the time of booking. Cancelation two weeks prior to the start date will not be refunded.