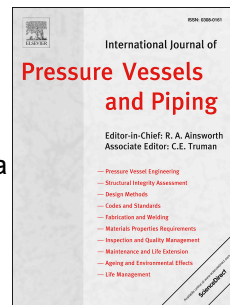


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‘Mind the Gap’ in Fitness-For-Service Assessment Procedures-Review and Summary of a Recent Workshop.

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Abstract

‘Mind the gap’ in Fitness-for-Service (FFS) assessment procedures was a workshop held at The University of Manchester in June 2015. The goal of the workshop was firstly to identify ‘knowledge gaps’ or areas for improvement in FFS assessment procedures and, secondly, to present methodologies that have been developed to narrow these gaps. It was intended that identification of these ‘gaps’ would allow an understanding of the current development needs for defect tolerance arguments in the FFS assessment procedures. The following questions were addressed: 1) What are the main ‘knowledge gaps’ in current FFS assessment procedures and methodologies? 2) What are the main barriers that need to be overcome in order to narrow these ‘gaps’? 3) What are the current procedures (if any) and why are these not useful, over- or under-conservative and what needs to be improved? 4) What research is currently ongoing in order to narrow the gaps? This paper summarises the presentations and discussions at the workshop on subjects such as environmentally assisted cracking mechanisms, creep, welding residual stresses and fracture mechanics.

Key words: Fitness-for-service, Assessment procedures, Knowledge gaps, Creep, Fracture, Corrosion fatigue, Environmentally assisted fatigue, Welding Residual Stresses

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