Call-for-Papers

2008 ASME Pressure Vessels and Piping Conference

27 – 31 July 2008, Chicago, Illinois

Track: Materials and Fabrication

Topic: MF-4 Welding, Residual Stress and Weld Integrity

Description

Weld residual stresses can be a source of damage development in metal structures. Control of weld induced residual stresses can lead to marked improvements in the corrosion crack initiation and growth and fatigue life in structural systems. Weld models have been used for many years for this purpose and have proven to be a very valuable tool in helping to control and mitigate degradation in welded components, especially under consideration of repair welds. Some of the topics covered in this set of sessions include the following.

- **Modelling and measurement of distortion and residual stress due to welding, manufacture or service history including weld repair**
- **Assessment of the influence of residual stress on structural integrity**
- **Methods to account for residual stress in design and assessment procedures (particularly those of relevance to pressure vessels and piping)**
- **Procedures to minimise distortion and residual stress in welded components**
- **Novel techniques in welding**

Objectives

It is the objective of this topic to get familiar with the recent developments in the field of welding simulation, including weld repair and the treatment of residual stresses and distortions in the integrity assessment of vessels and piping.

Authors and presenters are invited to participate in this session to help expand international cooperation, understanding and promotion of efforts in the area of welding simulation.

Key dates

PVP abstracts are due by 16 November 2007. Authors will be notified of abstract acceptance by 11 January 2008. Draft papers are due by 29 February 2008. Paper peer review comments will be returned by 28 March 2008. Final papers in ASME format for publication must be received by 25 April 2008. All accepted papers will be published via CD-ROM/DVD.

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