



OTC 20027

## Meeting the Future Challenges of Flexible Pipe Technology - Advances in Industry Standards

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This paper was prepared for presentation at the 2009 Offshore Technology Conference held in Houston, Texas, USA, 4-7 May 2009.

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### Abstract

The Flexible Pipe Technology JIP (*FPT JIP*), being managed by MCS, is tasked with the first major revision of the API and ISO standards for unbonded flexible pipes since they were written in the mid-90's. The outcome of the JIP will be completely revised versions of API Spec 17J and RP 17B, and their ISO equivalents, based on the current state-of-the-art of flexible pipe technology.

These new versions of the standards will incorporate new industry experience and learning on design criteria, materials selection, qualification and prototype testing, life-cycle integrity management and manufacturing requirements for flexible pipes. Furthermore, a design philosophy will be developed by the JIP to provide a mechanism for reappraising design criteria in future standard revisions, in response to constantly increasing operational experience, improved understanding of limit states and the opportunities presented by new enabling materials and manufacturing technology.

In so doing the standards will ensure that flexible pipes remain a competitive, enabling solution for the challenges of future offshore Exploration and Production in deepwater and harsh environments.

As the *FPT JIP* completes its work, this paper considers some of the activities of the JIP since its inception in 2005, focusing on investigations in key technical areas and provides an overview of some of the revisions to be proposed for the next generation of the API and ISO standards.