

B31 Code Week Workshops – Norfolk, VA

TITLE: Impact and Application of ASME Performance Test Code PTC 19.3TW (2010) on Thermowell Design
DATE: September 17, 2012, Monday, 2:00 pm - 4:00 pm
LOCATION: Norfolk Waterside Marriott
PRESENTER: Mitch Johnson and Allan Gilson, Committee Members, ASME PTC 19.3TW

DESCRIPTION / LEARNING OBJECTIVES:

The ASME Performance Test Code PTC 19.3 TW-2010 is a completely new standard that establishes the practical design considerations for thermowell installations in power and process piping. As a response to changing industry demands for a more comprehensive set of thermowell evaluations, this new code is an expanded version of the thermowell section contained in PTC 19.3-1974, and incorporates the latest theory in the areas of natural frequency, Strouhal frequency, in-line resonance and stress evaluation.

This workshop will review the impact of a number of changes in the new ASME standard and provide a case where the new PTC 19.3TW accurately predicted a thermowell failure that was not predicted by the previous method. It will also describe the impact of this design change in terms of stem conduction error and response time.

Participants should expect to gain a good understanding of:

- What falls within and outside the scope of the ASME thermowell standard.
- Why running a thermowell calculation is important and what issues are being assessed by 19.3TW
- The history of wake frequency calculations, what past standards were and why they have been changed.
- What one needs to know in order to perform a wake frequency calculation.
- The impact of design changes on thermowell strength, accuracy and responsiveness.

AUDIENCE: This workshop is an essential resource for I&C design engineers, materials engineers, fabrication, installation and construction engineers. It is also extremely useful for operation and maintenance engineers, engineering supervisors, project engineers and cost engineers, mechanical engineers, educators, integrators, project managers, research, quality assurance, safety systems and anyone involved in the use, design, specification or procurement of thermowells.

SPEAKER BIO:

Mitch Johnson is currently President of JMS Southeast, Inc., manufacturer of thermocouples, RTDs, protection tubes and thermowells, and has thirty years' experience working with temperature measurement applications in power and industrial applications. Mitch developed SwiftyCalc, a free software capable of providing an immediate pass/fail result for a thermowell design per the ASME PTC 19.3TW 2010. He is a recipient of Leaders Under 40 Award from Control Engineering; Co-author of Practical Thermocouple Thermometry (2nd Ed. ISA 2012); and current Member of the ASME PTC 19.3TW-2010 Committee.