



**PART 1: MEASURING AND IMPROVING AN EFFECTIVE AND  
EFFICIENT WARRANTY PROCESS**

*Presentation By:*

John Hagen, Global Quality Leader

**TRANE COMMERCIAL SYSTEMS**

**PART 2: HARNESSING AND COORDINATING WARRANTY  
BEST PRACTICES IN A GLOBAL DIVERSIFIED ENTERPRISE**

Terry Adams, Director of Technical Services & Reliability

**INGERSOLL RAND**

**PART 3: PANEL DISCUSSION**

Kjell Hammarstrom

Senior Warranty Cost Program Manager

**SUN MICROSYSTEMS**

and Representatives From:

**Sub-Zero Freezer Company**

**IBM**

(To Be Confirmed)

The presentation will include a case study of the approach used at Trane Commercial Systems to improve the warranty process as a critical part of a larger Quality Management initiative. Key areas of focus will include evaluation and prioritization of warranty process improvement, reserves management, organization structure, system enhancements, policy and procedure, transforming data into information, and gaining management support. The presentation



highlights lessons learned during a 3 year improvement process and recent acquisition by Ingersoll Rand.

Ingersoll Rand began a journey 2 years ago to create a global business operating system which harnesses the best practices and successes across its entire diversified sectors;

Climate Control Technologies, Industrial Technologies, Security Technologies & Trane.

The presentation will provide a case study on the following;

- Creation of a cross sector warranty council and Enterprise Focus Area
- Defining a strategy around process, technology and quality culture
- Construction and deployment of a global maturity based evaluation tool to drive coordinated improvement action plans.

The presentation will be followed by a panel discussion with members from previous years' warranty conference presentations on how to improve both warranty efficiency and effectiveness.

Participants will learn the following:

- How to balance efficiency and effectiveness in a warranty process.
- Key considerations for prioritizing warranty improvements through maturity based evaluation tools.
- Ways to engage senior management in warranty process improvement.
- Answers to questions they ask the panel.