



**Society of Naval Architects and Marine Engineers
2009 Annual Meeting and Expo**

Title: Motion Simulation of Container Stacks on Deck

SNAME PS#: 014.R4

Authors: V. Wolf, Helge Rathje

Contact: helge.rathje@gl-group.com

Abstract: This paper deals with a numerical approach for time domain simulation of deck container stacks subject to sea induced loads. Essentials of the finite element approach and model validation employing full-scale test data are presented. Further, first results of numerical sensitivity studies regarding sea induced stack motions are outlined and preliminary comparison results with classification rules are given.

Keywords: Container loss and damage; container stack dynamics; lashing loads; twistlock; finite element (FE) simulation, classification rules