### Author's Accepted Manuscript

Simplified analytical model for adhesive-bonded tubular joints with isotropic and composite adherends subjected to tension

Sontipee Aimmanee, Preeda Hongpimolmas, Kitchanon Ruangjirakit



 PII:
 S0143-7496(18)30201-X

 DOI:
 https://doi.org/10.1016/j.ijadhadh.2018.08.010

 Reference:
 JAAD2256

To appear in: International Journal of Adhesion and Adhesives

Received date: 30 July 2018 Accepted date: 16 August 2018

Cite this article as: Sontipee Aimmanee, Preeda Hongpimolmas and Kitchanon Ruangjirakit, Simplified analytical model for adhesive-bonded tubular joints with isotropic and composite adherends subjected to tension, *International Journal of Adhesion and Adhesives*, https://doi.org/10.1016/j.ijadhadh.2018.08.010

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain. **ACCEPTED MANUSCRIPT** 

## Simplified analytical model for adhesive-

# bonded tubular joints with isotropic and composite adherends subjected to tension\*

Sontipee Aimmanee<sup>a</sup>\*, Preeda Hongpimolmas<sup>b</sup>, Kitchanon Ruangjirakit<sup>c</sup>

<sup>a</sup>Advanced Materials and Structures Laboratory (AMASS), Department of Mechanical Engineering, Faculty of Engineering, King Mongkut's University of Technology Thonburi, 126 Pracha Uthit Rd., Thung Khru, Bangkok, 10140, Thailand

<sup>b</sup>Advanced Materials and Structures Laboratory (AMASS), Department of Mechanical Engineering, Faculty of Engineering, King Mongkut's University of Technology Thonburi, 126 Pracha Uthit Rd., Thung Khru, Bangkok, 10140, Thailand

<sup>c</sup>Advanced Materials and Structures Laboratory (AMASS), Department of Mechanical Engineering, Faculty of Engineering, King Mongkut<sup>,</sup>s University of Technology Thonburi, 126 Pracha Uthit Rd., Thung Khru, Bangkok, 10140, Thailand

\*Corresponding author. sontipee.aim@kmutt.ac.th

×CC

#### ABSTRACT

Many studies have investigated adhesive tubular joints subjected to axial load. However, previous analytical studies were only limited to the joints with single-layer isotropic or orthotropic materials, and the corresponding mathematical models were highly complicated. Thus, the aim of this article is to develop a simplified but comprehensive model for studying adhesive-bonded tubular

<sup>&</sup>lt;sup>\*</sup> This paper is dedicated to the memory of Professor Dr. Michael W. Hyer, whose knowledge has instilled into the first author (SA) and the following generations of SA students.

Download English Version:

## https://daneshyari.com/en/article/9952783

Download Persian Version:

https://daneshyari.com/article/9952783

Daneshyari.com