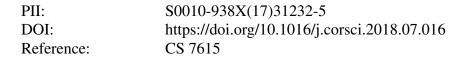
### Accepted Manuscript

Title: Atmospheric Chloride-Induced Stress Corrosion Cracking of Laser Engraved Type 316L Stainless Steel

Authors: Benjamin Krawczyk, Paul Cook, Jeff Hobbs, Dirk L. Engelberg



To appear in:

 Received date:
 26-7-2017

 Revised date:
 22-6-2018

 Accepted date:
 6-7-2018

Please cite this article as: Krawczyk B, Cook P, Hobbs J, Engelberg DL, Atmospheric Chloride-Induced Stress Corrosion Cracking of Laser Engraved Type 316L Stainless Steel, *Corrosion Science* (2018), https://doi.org/10.1016/j.corsci.2018.07.016

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 proof before it is published in its final 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

## Atmospheric Chloride-Induced Stress Corrosion Cracking of Laser Engraved Type 316L Stainless Steel

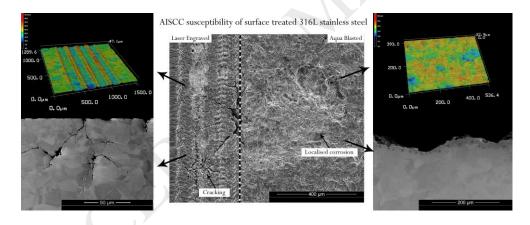
Benjamin Krawczyk<sup>a</sup>, Paul Cook<sup>b</sup>, Jeff Hobbs<sup>b</sup>, Dirk L. Engelberg<sup>a</sup>

<sup>a</sup> Corrosion & Protection Centre, School of Materials, The University of Manchester, Manchester, UK

<sup>b</sup> Sellafield Ltd, Seascale, Cumbria, CA28 7PB, UK

Contact: benjamin.krawczyk@manchester.ac.uk & dirk.engelberg@manchester.ac.uk

#### **Graphical Abstract**



### Highlights

- Aqua blasted surfaces contained compressive surface residual stresses, with no evidence of AISCC.
- Laser engraving introduced tensile surface residual stresses, with AISCC observed after two weeks of exposure.
- U-bend samples had crack growth similar to laser engraved coupons.

Download English Version:

https://daneshyari.com/en/article/8955329

Download Persian Version:

https://daneshyari.com/article/8955329

Daneshyari.com