## **Accepted Manuscript**

A methodology for the multi-objective shape optimization of thin noise barriers

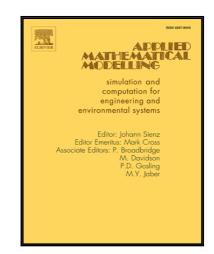
R. Toledo, J.J. Aznárez, D. Greiner, O. Maeso

PII: \$0307-904X(17)30412-2 DOI: 10.1016/j.apm.2017.06.020

Reference: APM 11824

To appear in: Applied Mathematical Modelling

Received date: 21 July 2016 Revised date: 16 May 2017 Accepted date: 14 June 2017



Please cite this article as: R. Toledo, J.J. Aznárez, D. Greiner, O. Maeso, A methodology for the multi-objective shape optimization of thin noise barriers, *Applied Mathematical Modelling* (2017), doi: 10.1016/j.apm.2017.06.020

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

#### Highlights

- Numerical procedure for the multi-objective optimization of thin noise barriers.
- Applies the coupled use of NSGA-II and Dual Boundary Elements formulation
- Maximization of noise efficiency and minimization of material used in the barrier.
- Initial population with random individuals and with the best single-objective solution
- More effective solutions than the 3m vertical screen but with similar erection costs.

### Download English Version:

# https://daneshyari.com/en/article/5470709

Download Persian Version:

https://daneshyari.com/article/5470709

<u>Daneshyari.com</u>