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## Laboratory screening of thermo-mechanically densified and thermally modified timbers for resistance to the marine borer *Limnoria quadripunctata*

#### <u>Malte Janus<sup>1</sup></u>, Simon Cragg<sup>2</sup>, Christian Brischke<sup>1</sup>, Linda Meyer-Veltrup<sup>1</sup>, Jörg Wehsener<sup>3</sup>

<sup>1</sup> Leibniz University Hannover, Faculty of Architecture and Landscape Sciences, Germany
<sup>2</sup> University of Portsmouth, Institute of Marine Sciences Laboratories, United Kingdom
<sup>3</sup> Technical University Dresden, Institute of Steel and Timber Construction, Germany



#### Cooperation with the University of Portsmouth



### Institute of Marine Sciences Professor Simon Cragg



References: http://www.re-format.co.uk/institute-of-marine-sciences/; https://www.qw88nb88.wordpress.com/2010/03/11/not-tribble-gribble/

#### **Materials**

- Wood species: English oak, European ash, European beech, Norway spruce, Poplar
- Degree of densification: 43 % / 50 %
- Sample dimensions: 20 x 2.5 x 4 mm<sup>3</sup>
- Thermal modification:
  - A: 230 °C, 20 % Vacuum
  - B: 230 °C, 80 % Vacuum
  - C: 240 °C, 20 % Vacuum

20 parameter combinations

240 specimens



#### Laboratory screening





#### Laboratory screening





#### Laboratory screening



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#### Further investigations

Seawater-trials in Sweden started June 2016





#### Further investigations







#### Further investigations







# Thank you for listening and COST FP1303 for granting me a STSM!