



Underwater noise generated by gentle pile driving

PhD candidate: Ir. Timo Molenkamp
Section: Offshore Engineering
Supervisor: dr. ir. A. Tsouvalas
Promotor: Prof.dr. A.V. Metrikine

Description:

Multiple models are known to predict noise generated by pile driving, spreading from FEM models to semi-analytical models based on the modal solution. However all of these models mainly predict the noise generated by impact pile driving. The interest of this research will be in noise generated by gentle pile driving, a technique that contains a combination of both torsional and axial vibratory driving. Furthermore, the state of art models and codes do not describe the penetration process. For impact piling, this might be a suitable assumption, although for vibratory pile driving this assumption is questionable.

Goal:

The goal of this project is therefore to develop a model which will be able to predict underwater noise taking into account the penetration process.

Sponsors:



Contact Details:

E-mail: t.molenkamp@tudelft.nl
Phone: +31 (0)6 53506487
Room: 3.52