



Journal of the Japan Society of
Naval Architects and Ocean Engineers
The Japan Society of Naval Architects and Ocean Engineers

[Available Volumes](#) | [Japanese](#) >> [Publisher Site](#)

Author: [ADVANCED](#) | Volume Page
Keyword:



[TOP](#) > [Available Volumes](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1881-1760

PRINT ISSN : 1880-3717

Journal of the Japan Society of Naval Architects and Ocean Engineers

Vol. 1 (2005) pp.63-69

[\[Image PDF \(1214K\)\]](#) [\[References\]](#)

Physical Burden of Wheelchair Helper at Getting on/off a Car Ferry

[Yasuhisa Okumoto](#) and [Katsutoshi Takashiba](#)

(Accepted January 25, 2005)

Summary: Recently, the user-friendly and human-based thoughts have been emphasized in design and development for many kinds of products. This idea is spreading widely in the social welfare system, and “universal design” or “barrier free” is taken into the product design. On ship design, the law of “traffic barrier free” is instituted, and the application of the barrier free standard based on this has been imposed for the passenger ships of 5 gross tonnage and over. Hence, the authors have investigated the car ferries sailing in Seto Inland Sea from the viewpoint of this barrier free, and it was concluded that the physical burden was especially high for old or handicapped people when passing on the slope of a boarding bridge, especially for the helper of a wheelchair user. Since the slope may incline steeply by the tide of sea, the body burden of the wheelchair helper is anticipated to be larger. This paper carried out the biomechanical analysis using the virtual human model at that situation, and showed the body burden of a wheelchair helper in this slope of boarding bridge.

[\[Image PDF \(1214K\)\]](#) [\[References\]](#)

Download Meta of Article [\[Help\]](#)

[RIS](#)

[BibTeX](#)

To cite this article:

Yasuhisa Okumoto and Katsutoshi Takashiba: Physical Burden of Wheelchair Helper at Getting on/off a Car Ferry , Journal of the Japan Society of Naval Architects and Ocean Engineers, (2005), Vol. 1, pp.63-69 .



[Japan Science and Technology Information Aggregator, Electronic](#)

