



## Case Study

# Loading and Unloading Equipment of a Bulk Cement Carrier

Edited by on 6. Oct. 2023

[Published in bulk solids handling, Vol. 1 \(1981\) No. 1](#)

The transportation of bulk cement by sea utilizing an exclusive carrier with specially designed loading and unloading equipment and facilities was first undertaken some years ago by Onoda Cement Co. Ltd. (ONODA) in Japan. Since that time a number of similar exclusive carriers for the transport of bulk materials including cement clinker, alumina, calcium carbonate powder and limestone have been have been designed and built by ONODA, supported in this work by an extensive and broad based on going research and development programme.

The design and manufacturing work involved is undertaken by and is the specific responsibility of Onoda Engineering and Consulting Co. Ltd. (OEC) a subsidiary of ONODA Cement. To date OEC have successfully designed and commissioned 50 bulk material carriers, during which time they have amassed a wealth of experience and expertise.

The largest bulk carrier in ONODAs fleet is the Shuyo-Maru, which has a cement carrying capacity of 20,000 metric t (Fig 1).