Cite this article

Cruickshank I (2018)

Book review.

Proceedings of the Institution of Civil Engineers – Maritime Engineering **171**(4): 184,
<https://doi.org/10.1680/jmaen.2018.33>

Book Review

Paper 201833

Published online 23/01/2019

ICE Publishing: All rights reserved

Book review

Port Designers' Handbook, 3rd edition

Carl A. Thoresen. ICE Publishing, London, UK, 2014,
ISBN 978-0727760043, £120, 638 pp.

It's always good to see useful publications staying current. Since its first edition, the *Port Designers' Handbook* has been the respected place to go to for knowledge of port layout, design and construction. It provides those involved in maritime works a definitive guidebook, giving a basic introduction for those new to the subject as well the 'go to' reference for experienced engineers and port planners.

The book guides users on all aspects of port planning and design, from the impact of the environment on harbours, health and safety, maintenance and repair of port structures and channel and harbour basins, advice on the impact of ships, including berthing requirements, ship dimension tables and container terminals, referencing the latest PIANC (the World Association for Waterborne Transport Infrastructure), maritime code (BS 6349) and Eurocodes. The handbook provides basic definitions and criteria and advice in clear concise language with helpful diagrams.

This newly revised third edition keeps it current for practitioners, with material updated to provide coverage of

- new design and construction methods for quay structures
- floating berth structures for large vessels
- detailed evaluation of the necessary mooring system
- evaluation of bollard systems and layout
- new design and evaluation of the fender system according to the new PIANC recommendation
- updated design of the erosion problem in front of the quay due to ship propellers
- concrete in port structures.

Getting the balance right between pulling in useful content from external references and simply providing a list of where to go is always challenging. Thoresen and the supporting contributors continue to get the balance right, providing useful information and external references where appropriate. Used in tandem with relevant codes and standards such as BS 6349 and Eurocodes, and other guides such as PIANC publications, the *CIRIA Rock Manual* and *EAU Port Handbook*, port design practitioners have almost all they need on a day-to-day basis.

Ian Cruickshank