



Special Issue Reprint

Subsea Pipelines

www.mdpi.com/books/reprint/8606

Edited by Baiqiao Chen Carlos Guedes Soares

ISBN 978-3-0365-9921-2 (Hardback) ISBN 978-3-0365-9922-9 (PDF)



A subsea pipeline (also known as an offshore pipeline or submarine pipeline) is a pipeline that is laid on the seabed or inside a specially constructed trench. The use of pipelines represents a reliable mode of transport of oil and gas. The prevention of failure scenarios, such as improper pressurization, localized buckling, fatigue failure and instability, the limit strength, internal/external pressure, corrosion-resistant material selection, and stability management, is the main concern in the design, installation, and operation of submarine pipelines.

Fifteen recent research studies broadly covering the structural design and analysis of subsea pipelines or risers are featured in this reprint. The applications of the digital twin in subsea pipelines are highlighted. Classic structural topics including collapse strength, burst strength, tensile performance, buckling, fatigue, and bending are investigated in this reprint using numerical and experimental methods. Computational fluid dynamics (CFD) simulations and proportional integral derivative (PID) control of the pipelines and risers are also included.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/8606

MDPINBOOKS Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



ᆔ

High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

