

1. Record Nr.	UNINA9910465849603321
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Titolo	An introduction to LNG bunkering [[electronic resource] /] / by Nigel Draffin ; foreword by Mogens Schröder Bech
Pubbl/distr/stampa	Oxfordshire, : Published by Petrosport Ltd., 2013
ISBN	1-908663-17-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (100 p.)
Soggetti	Ships - Fuel Petroleum as fuel Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	<p>""Dedication""; ""Foreword""; ""Preface""; ""About the author""; ""Acknowledgements""; ""Contents""; ""List of Tables and Figures ""; ""Figure 1. A lean burn gas engine""; ""Figure 2. Low pressure gas injection""; ""(Photograph courtesy of Wertsile Corporation)""; ""Figure 3. High pressure gas injection""; ""(Photograph courtesy of Wertsile Corporation)""; ""Figure 4. Principle of LU/DF register burner"" ""Figure 5. An illustration of how the top layer becomes heavier and the bottom level lighter. When the equilibrium point is passed, the bottom layer will try to move very quickly to the top"" ""Figure 6. As the upper layer gets heavier, the lower level gets lighter until..!""; ""Figure 7. As the rupture decreases the internal pressure, the liquid in the container starts to evaporate very rapidly and the volume of gas then overcomes any relief valve capacity""; ""Figure 8. Sea NG's patented Coselle for carrying CNG on ships""; ""Figure 9. LNG fuel tank on board the MF Boknafjord"" ""(Photograph courtesy of Multi Maritime Ship Design & Engineering)"" ""Figure 10. Containerised Type C tanks""; ""(Photograph courtesy of Marine Service GmbH)""; ""Figure 11. Bi-lobe Type C tank design""; ""(Image courtesy of TGE Marine Gas Engineering GmbH)""; ""Figure 12. Small LNG carrier loading at Zeebrugge""; ""(Photograph courtesy of TGE Marine Gas Engineering GmbH)""; ""Figure 13. Halhjem ferry terminal in Norway""; ""Figure 14. Wertsile LNG Pac fuel system</p>

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"(Photograph courtesy of Wertsile Corporation)""Figure 16. Rolls-Royce Bergen 35:40 gas engine"; "(This photograph is reproduced with the permission of Rolls-Royce plc, copyright Rolls-Royce plc 2012)"; "Figure 17. Wertsile 50DF engine"; "(Photograph courtesy of Wertsile Corporation)"; "Figure 18. MW-GI engine"; "(Photograph courtesy of MAN Diesel & Turbo)"; "Figure 19. Saacke Type GCU 300"; "(Diagram courtesy of Saacke GmbH)"; "Figure 20. Re-Liquefaction process"; "Figure 21. Hamworthy Wertsile re-liquefaction system"
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Sommario/riassunto

Liquefied natural gas is poised to become a viable and widely used marine fuel. As port authorities and ship owners work together on the creation of bunkering infrastructures, and stringent environmental regulations limit the use of high sulphur fuels, there is a clear global impetus for making the switch to LNG. In An Introduction to LNG Bunkering, industry expert Nigel Draffin answers the key questions about LNG bunker fuel in his usual informative and lucid style. He looks at the properties of methane, gas and dual fuel engines, tank design, fuel and safety systems, as well as onboard and onshore storage and safety issues. Potential problem areas in the use of LNG, such as weathering, sloshing and methane slip, are flagged up and clearly analysed. Draffin takes a close and informed look at bunkering procedures, including delivery methods, transfer equipment, connections, and loading operations. He also reviews the on-going work of maritime organisations, such as the International Maritime Organization, in codifying LNG bunkering operations. He looks at the current LNG-fuelled fleet and outlines future trends in the use of LNG-fuelled vessels. Most importantly, as the price of conventional marine fuels remains at high levels, he addresses the complex issue of pricing LNG as a bunker fuel. As the global shipping industry begins to see LNG as a 'conventional' rather than an 'alternative' fuel, An Introduction to LNG Bunkering goes a long way to filling the 'knowledge gap' which still exists across the maritime sector. It is an invaluable primer on its subject and should be read by everyone who wants keep ahead of the curve in the sale, provision, handling and analysis of marine fuels.
