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Titolo	Low-Loss Storage and Handling of Cryogenic Liquids [[electronic resource]] : The Application of Cryogenic Fluid Dynamics / / by Thomas D. Bostock, Ralph G. Scurlock
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Nota di contenuto	1. Introduction -- 2 Evaporation of cryogenic liquids -- 3 Heat flows into a cryogenic storage system: overall picture -- 4 Insulation: the reduction of 'A' and 'B' heat in-flows -- 5 Multi-component liquids -- 6 The handling and transfer of cryogenic liquids -- 7 Design: some comments on the design of low-loss storage vessels, containers and tanks -- 8 Safe handling and storage of cyrogenic liquids -- Index.
Sommario/riassunto	The revised second edition of this practical book reviews the fundamentals of cryogenic liquid behaviour in small and large scale storage systems. The text is based on research findings on the

convective and evaporative behaviour of cryogenic fluids, aimed at improving the design, construction and operation of low-loss cryogenic liquid storage systems, with a view to minimising cost and improving operational safety. Since the first edition was published in 2006, the breadth of cryogenic applications and the modelling of cryogenic fluid dynamics (CFD) have expanded in several directions. In this second edition, most chapters have been extended to introduce discussions of these new applications and their safety and energy economy. These include advances in the modelling of CFD required in, for example, the design of miniature cryocoolers and condensers and reboilers, large-scale cryogenic liquid mixture properties and their stability, and the understanding that hazards and safety problems in the public domain increase with the scaling up of cryogenic systems. With helpful summaries at the end of each chapter, the book is an essential reference for anyone working on the design and operation of cryogenic liquid storage and transportation systems.