1. Record Nr. UNINA9910299937003321 Autore Renilson Martin Titolo Submarine Hydrodynamics / / by Martin Renilson Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2018 3-319-79057-9 **ISBN** Edizione [2nd ed. 2018.] Descrizione fisica 1 online resource (243 pages) Disciplina 623.8257 Soggetti Fluid mechanics **Fluids** Control engineering **Engineering Fluid Dynamics** Fluid- and Aerodynamics Control and Systems Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto 1 Introduction -- 2 Hydrostatics and Control -- 3 Manoeuvring and Control -- 4 Resistance and Flow -- 5 Propulsion -- 6 Appendage Design -- Hydro-Acoustic Performance. This book covers specific aspects of submarine hydrodynamics in a Sommario/riassunto very practical manner. The author reviews basic concepts of ship hydrodynamics and goes on to show how they are applied to submarines, including a look at the use of physical model experiments. The book is intended for professionals working in submarine hydrodynamics, as well as for advanced students in the field. This revised edition includes updated information on empirical methods for predicting the hydrodynamic manoeuvring coefficients, and for predicting the resistance of a submarine. It also includes new material on how to assess propulsors, and includes measures of wake distortion, which has a detrimental influence on propulsor

include the latest material in the field. .

performance. Additional information on safe manoeuvring envelopes is also provided. The wide range of references has been updated to