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Titolo	History and Measurement of the Base and Derived Units // by Steven A. Treese
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ISBN	3-319-77577-4
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (1,125 pages)
Disciplina	530.809
Soggetti	Physical measurements Measurement Physics History Mathematics Measurement Science and Instrumentation History and Philosophical Foundations of Physics History of Science History of Mathematical Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Measurement Perspectives -- Interconversion of Units -- Metric and U.S. Customary/English Systems -- Historical Length or Distance -- Historical Area -- Historical Volume or Capacity -- Historical Weight and Mass -- Historical Time -- Historical Temperature -- Historical Angular Measurement -- Historical Electrical Charge and Current Measurement -- Historical Amounts of Substances -- Historical Luminous Intensity -- From Base Units to Derived Units -- Common Modern Conversions.
Sommario/riassunto	This book discusses how and why historical measurement units developed, and reviews useful methods for making conversions as well as situations in which dimensional analysis can be used. It starts from the history of length measurement, which is one of the oldest measures used by humans. It highlights the importance of area measurement, briefly discussing the methods for determining areas mathematically

and by measurement. The book continues on to detail the development of measures for volume, mass, weight, time, temperature, angle, electrical units, amounts of substances, and light intensity. The seven SI/metric base units are highlighted, as well as a number of other units that have historically been used as base units. Providing a comprehensive reference for interconversion among the commonly measured quantities in the different measurement systems with engineering accuracy, it also examines the relationships among base units in fields such as mechanical/thermal, electromagnetic and physical flow rates and fluxes using diagrams. .
