Record Nr. UNINA9910878980103321 Autore Rakhmonov Ikromjon U. **Titolo** Electric Consumption by Industrial Enterprises: Modeling, Rationing and Forecasting / / by Ikromjon U. Rakhmonov, Vasiliy Ya. Ushakov, Foziljon A. Khoshimov, Numon N. Niyozov, Nurbek N. Kurbonov, Alexey V. Mytnikov Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031626760 9783031626753 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (179 pages) Collana Power Systems, , 1860-4676 Disciplina 333.79 Soggetti Electric power production Electric power distribution Power resources **Electrical Power Engineering Energy Grids and Networks** Natural Resource and Energy Economics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references. Nota di bibliografia Nota di contenuto INTRODUCTION -- ESTIMATION OF THE POWER SAVING POTENTIAL AND ECONOMIC EFFICIENCY OF ITS IMPLEMENTATION -- METHODS OF ESTIMATION POWER CONSUMPTION BY INDUSTRIAL ENTERPRISES --ENERGY BALANCES -- CLASSIFICATION OF INDUSTRIAL ENTERPRISES AND TECHNOLOGICAL EQUIPMENT -- FLUCTUATIONS IN ENERGY PARAMETERS OVER TIME -- ANALYSIS OF ENERGY INDICATORS --RATIONING OF POWER CONSUMPTION -- DIFFERENTIATED AND AGGREGATED SPECIFIC NORMS OF POWER cONSUMPTION --FORECASTING POWER CONSUMPTION -- ELECTRICITY SAVING RESERVES -- WAYS TO REDUCE ENERGY COSTS -- CONCLUSION. Sommario/riassunto This book comprises eleven chapters, consistently highlighting key aspects of addressing the challenge of enhancing electricity consumption efficiency within various industrial sectors. It delves into issues such as improving the accuracy of energy intensity calculations

for industrial products, estimating electricity consumption for internal

needs, and identifying key influencing factors. The methods for determining standard values through multifactor analysis and cost minimization are presented. Furthermore, it examines potential avenues for electricity savings and methods for assessing their impact on the technological and organizational operating conditions of industrial enterprises. The reduction of specific power consumption through optimization of raw materials and semi-finished products parameters is also explored. This book is intended for engineering professionals and researchers in the field of industrial energy management, as well as undergraduate and graduate students specializing in this area.