Record Nr. UNINA9910299743503321 Autore Nakagawa Toshio Titolo Random Maintenance Policies / / by Toshio Nakagawa London:,: Springer London:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4471-6575-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (270 p.) Springer Series in Reliability Engineering, , 1614-7839 Collana Disciplina 620.0045 Soggetti Manufactures Quality control Reliability Industrial safety Facility management Mechanical engineering Manufacturing, Machines, Tools, Processes Quality Control, Reliability, Safety and Risk **Facility Management** Mechanical Engineering 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 at the end of each chapters and index. Nota di contenuto Ch 1 Introduction -- Ch 2 Random Age Replacement Policies -- Ch 3 Random Periodic Replacement Policies -- Ch 4 Random Preventive Maintenance Policies -- Ch 5 Random Inspection Policies -- Ch 6 Random Redundant Systems -- Ch 7 Random Backup Policies -- Ch 8 Random Scheduling -- Ch 9 Cumulative Damage Models -- Ch 10 Random Models. Sommario/riassunto Exploring random maintenance models, this book provides an introduction to the implementation of random maintenance, and it is one of the first books to be written on this subject. It aims to help readers learn new techniques for applying random policies to actual reliability models, and it provides new theoretical analyses of various models including classical replacement, preventive maintenance and

inspection policies. These policies are applied to scheduling problems.

backup policies of database systems, maintenance policies of cumulative damage models, and reliability of random redundant systems. Reliability theory is a major concern for engineers and managers, and in light of Japan's recent earthquake, the reliability of large-scale systems has increased in importance. This also highlights the need for a new notion of maintenance and reliability theory, and how this can practically be applied to systems. Providing an essential guide for engineers and managers specializing in reliability maintenance and quality control, this book provides a useful resource for those with doubts carrying out maintenance of new and large systems. It is also intended for graduate students and researchers interested in operations research, statistics, industrial engineering and management science.