1. Record Nr. UNINA9910483120403321 Techniques, tools and methodologies applied to quality assurance in Titolo manufacturing // Jorge Luis Garcia Alcaraz, Cuauhtemoc Sanchez-Ramirez, Alfonso Jesus Gil Lopez, editors Cham, Switzerland:,: Springer,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 3-030-69314-7 Edizione [1st ed. 2021.] 1 online resource (XXXVIII, 466 p. 301 illus., 245 illus. in color.) Descrizione fisica 670 Disciplina Soggetti Manufacturing processes - Quality control Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Concepts and quality philosophies -- Data analysis -- Statistical Nota di contenuto techniques in quality -- Six sigma and technologies -- Quality certification -- Human resource in quality assurance. This book presents a collection of real cases from industrial practices Sommario/riassunto that production system and quality managers implement to ensure a high quality as well as a low cost in products. This book is divided in sections that are focused on: The quality and philosophies implemented to production systems; starting from the product design as well as from the supply system. The principal statistical techniques applied to the quality assurance (statistical quality control, analysis of tests and failure, quality function deployment, accelerated life tests, among others), the process of gathering information, its validation, its reliability process, and techniques for data analysis. The techniques applied to the integration of human resources in the process of quality assurance, such as managers and operators' participation, training, and training processes. · Use of information and communications technologies, software, and programs implemented to guarantee the quality of the products in the production systems. ISO standards and policies that are used for quality management and monitoring.