

Aiag Standards

For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

For more than 20 years, Network World has been the premier provider of information, intelligence and insight for network and IT executives responsible for the digital nervous systems of large organizations. Readers are responsible for designing, implementing and managing the voice, data and video systems their companies use to support everything from business critical applications to employee collaboration and electronic commerce.

Operational Excellence, Second Edition – Breakthrough Strategies for Improving Customer Experience and Productivity brings together leading-edge tools, methods, and concepts to provide process improvement experts a reference to improve their organization's quality, productivity, and customer service operations. Its major topics include alignment of strategy to the design of supporting systems to meet customer expectations, manage capacity, and improve performance. It provides a concise and practical reference for operational excellence. Its fourteen chapters lead a reader through the latest tools, methods, and concepts currently used to capture "voice of" customers, partners, and other stakeholders, new strategies for the application of Lean, Six Sigma, as well as product and service design across diverse industries, including manufacturing to financial services. This book operates from three premises: Organizations can increase competitiveness in an era of globalization through the application of "voice-of" applications, Design Thinking, the integration of the Information Technology Ecosystem's new tools and methods integrated with proven Lean and Six Sigma applications Operational performance correlates to an organization's financial, operational, and resultant productivity, as well as with shareholder economic value add (EVA) metrics and can be measured and improved using the methods in this book Value-adding activities and disciplines discussed are global and applicable to every organization A PRACTICAL TOOL FOR REAL-WORLD APPLICATION New topics are introduced in the second edition. These include Design Thinking, the "voice-of" Information Technology Ecosystems, Big Data applications, and Robotic Process Automation. Key topics from the first edition remain. These include Design-for-Six-Sigma (DFSS), Lean and Six Sigma methods, productivity analysis, operational assessments, project management, and other supporting topics. Each chapter contains tools and methods that will help readers identify areas for operational improvements. It contains ~300 figures, tables, and checklists to help increase organizational productivity. Practical examples are integrated through the book.

Der Einsatz von Informationstechnologie spielt für die Umsetzung von Supply Chain Management-Konzepten eine zentrale Rolle. Ulrich Schulze stellt einen Erklärungsansatz für die Erfolgswirkungen des IT-Einsatzes vor.

Schritt für Schritt Anleitung zum Selbststudium und als Begleitung zu unseren Kursen mit konkreten FMEA-Moderator Fragen. Diese Schritt für Schritt Anleitung haben wir speziell für Selbstlern-Kurse nach Stand der Technik und der Wissenschaft erstellt. Wir gehen mit Ihnen Schritt für Schritt durch alle 7 Phasen eines FMEA Projektes. Wenn Sie dieses Arbeitsbuch systematisch durcharbeiten, haben Sie am Ende eine komplette FMEA erstellt. Sie sind dann in der Lage eigene FMEAs zu erstellen.

This revised edition of the Artech House bestseller, RFID Design Principles, serves as an up-to-date and comprehensive introduction to the subject. The second edition features numerous updates and brand new and expanded material on emerging topics such as the medical applications of RFID and new ethical challenges in the field. This practical book offers you a detailed understanding of RFID design essentials, key applications, and important management issues. The book explores the role of RFID technology in supply chain management, intelligent building design, transportation systems, military applications, and numerous other applications. It explains the design of RFID circuits, antennas, interfaces, data encoding schemes, and complete systems. Starting with the basics of RF and microwave propagation, you learn about major system components including tags and readers. This hands-on reference distills the latest RFID standards, and examines RFID at work in supply chain management, intelligent buildings, intelligent transportation systems, and tracking animals. RFID is controversial among privacy and consumer advocates, and this book looks at every angle concerning security, ethics, and protecting consumer data. From design detailsOC to applicationsOC to socio-cultural implications, this authoritative volume offers the knowledge you need to create an optimal RFID system and maximize its performance."

"This book presents a wide range of the most current issues related to the planning, design, maintenance, and management of telecommunications and networking technologies and applications in organizations"--Provided by publisher.

Funktionale Sicherheit im Automobil Die 2. Auflage dieses Fachbuchs hat einen ganz anderen Schwerpunkt als die erste Auflage, die sich noch eng am Scope der ISO 26262 orientierte. Der Grund dafür sind die Vorboten eines sich rasant verändernden Automobilmarktes. Die Elektromobilität ist im Kommen, die Tage des Verbrennungsmotors scheinen gezählt. Selbst die Rolle des Fahrers wird neu definiert oder gar infrage gestellt werden müssen. Das vollständig überarbeitete Buch beschäftigt sich mit vielen Fragen um die Sicherheit, die diese Veränderungen mit sich bringen: - Welche Gesetze sind auf welchem Markt und für welche Mobilitätskonzepte sind diese relevant? - Welche Veränderungen werden von der Gesellschaft akzeptiert? - Welche Methoden und Best Practices gibt es? - Was ist der Stand von Wissenschaft und Technik? - Was ist relevant und wie kann man es für zukünftige Konzepte adaptieren? - Welche Erfahrungen gibt es in anderen Industrien? Sind wir am Ende alle nur noch Passagiere in rollenden oder fliegenden Personentransportsystemen? Alle diese Fragen gehen weit über den Sicherheitsbegriff der ISO 26262 hinaus. Im vorliegenden Buch werden zahlreiche Aspekte aufgezeigt, die Hersteller, Betreiber und Service-Anbieter in Betracht ziehen sollten, wenn sie für das Post-Automobilzeitalter sichere Mobilität anbieten wollen.

This work examines the evolution and rationale of the ISO 9000 series of standards, their structure, interpretation and relationship to other quality systems. Theory and applications are provided, and the author explains how to put the standards into place and achieve quality. Specific methods and tools for the implementation of the ISO standards that lead to certification and certification maintenance are supplied.

"This book presents the use of semantic interoperability for a variety of applications ranging from manufacturing to tourism, e-commerce, energy Grids' integration, geospatial systems interoperability and automated agents interoperability for web services"--Provided by publisher.

With the success of the widely acclaimed first volume of this series (Success and Pitfalls of IT Management), comes the second volume, Organizational Achievement and Failure in Information Technology Management. This book is a collection real-life cases

that focus on both achievements attained with the successful utilization of information technology as well as failures suffered as a result of substandard use and management of IT resources in organizations. Cases deal with issues that affect a wide variety of organizations--large and small businesses, government organizations and educational institutions. This book also appeared as the journal, *Annals of Cases on Information Technology: Applications and Management in Organizations*, Volume 2.

Martin Strassner untersucht das Mehrwertpotential von RFID im Supply Chain Management. Folgende Fragen stehen im Mittelpunkt: Wie unterstützt RFID die Koordination im SCM? Welchen Nutzen hat die Verwendung von RFID? Wo liegen die Grenzen für den wirtschaftlichen Einsatz? Welche für den Erfolg kritischen Faktoren müssen die Unternehmen bei der Einführung beachten?

In January 2000, Mercedes-Benz started to implement the Mercedes-Benz Production System (MPS) throughout its world-wide passenger car plants. This event is exemplary of a trend within the automotive industry: the creation and introduction of company-specific standardised production systems. It gradually emerged with the introduction of the Chrysler Operating System (COS) in the mid-1990s and represents a distinct step in the process towards implementing the universal principles of lean thinking as propagated by the MIT-study. For the academic field of industrial sociology and labour policy, the emergence of this trend seems to mark a new stage in the evolution of the debate about production systems in the automotive industry (Jürgens 2002:2), particularly as it seems to undermine the stand of the critics of the one-best way model (Boyer and Freyssenet 1995). The introduction of company-level standardised production systems marks the starting point of the present study. At the core of it is a case study about the Mercedes Benz Production System (MPS).

Intelligent Transport Systems Standards Artech House

Get the expert advice you need to shrink handling costs, reduce downtime and improve efficiency in plant operations! You'll use this comprehensive handbook during post design, process selection and planning, for establishing quality controls, tests, and measurements, to streamline production, and for managerial decision-making on capital investments and new automated systems. The newest edition of an insightful and practical statistical approach to quality control and management In the newly revised and thoroughly updated Fifth Edition of *Fundamentals of Quality Control and Improvement*, accomplished academic, consultant, and author Dr. Amitava Mitra delivers a comprehensive and quantitative approach to quality management techniques. The book demonstrates how to integrate statistical concepts with quality assurance methods, incorporating modern ideas, strategies, and philosophies of quality management. You'll discover experimental design concepts and the use of the Taguchi method to incorporate customer needs, improve lead time, and reduce costs. The new edition also includes brand-new case studies at the end of several chapters, references to the statistical software Minitab 19, and chapter updates that add discussions of trending and exciting topics in quality control. The book includes access to supplementary material for instructors consisting of a new instructor's solutions manual and PowerPoint slides, as well as access to data sets for all readers. Readers will also benefit from the inclusion of: A thorough introduction to the evolution of quality and definitions of quality, quality control, quality assurance, quality circles, and quality improvement teams An exploration of customer needs and market share, as well as the benefits of quality control and the total quality system Practical discussions of quality and reliability, quality improvement, product and service costing, and quality costs A concise treatment of how to measure quality costs, the management of quality, and the interrelationship between quality and productivity Perfect for upper-level undergraduate and graduate students in quality control and improvement, the Fifth Edition of *Fundamentals of Quality Control and Improvement* will also earn a place in the libraries of business students and those undertaking training programs in Six Sigma.

Quality Function Deployment ist ein sehr nützliches Management-Werkzeug: Es versetzt Unternehmen in die Lage, Kundenwünsche besser zu erkennen und Produkte schneller zu entwickeln. Die vorliegende dritte, vollständig aktualisierte und erweiterte Auflage vermittelt Anwendern in Produktions- und Dienstleistungsunternehmen ein solides Grundwissen über QFD. Die Autorin zeigt anschaulich, wie die "Stimme des Kunden" im gesamten Unternehmen hörbar gemacht und in innovative Produkte und Dienstleistungen umgesetzt wird. QFD fördert nicht nur die Kreativität der Mitarbeiter, sondern belebt auch deren Innovationsgeist und das Zusammenwirken aller am Produktentwicklungsprozess beteiligten Mitarbeiter. Auf diese Weise rücken Marketing, Entwicklung, Produktion, Einkauf, Vertrieb und Service enger zusammen. Der systematische, detailreiche und zugleich praxisnahe Aufbau des Buches vermittelt dem Leser nicht nur methodische Grundkenntnisse, sondern befähigt ihn, QFD im eigenen Unternehmen einzuführen und anzuwenden.

Many companies have asked suppliers to begin using RFID (radio frequency identification) tags by 2006 RFID allows pallets and products to be scanned at a greater distance and with less effort than barcode scanning, offering superior supply-chain management efficiencies This unique plain-English resource explains RFID and shows CIOs, warehouse managers, and supply-chain managers how to implement RFID tagging in products and deploy RFID scanning at a warehouse or distribution center Covers the business case for RFID, pilot programs, timelines and strategies for site assessments and deployments, testing guidelines, privacy and regulatory issues, and more

This is the third revised edition of the established and trusted RFID Handbook; the most comprehensive introduction to radio frequency identification (RFID) available. This essential new edition contains information on electronic product code (EPC) and the EPC global network, and explains near-field communication (NFC) in depth. It includes revisions on chapters devoted to the physical principles of RFID systems and microprocessors, and supplies up-to-date details on relevant standards and regulations. Taking into account critical modern concerns, this handbook provides the latest information on: the use of RFID in ticketing and electronic passports; the security of RFID systems, explaining attacks on RFID systems and other security matters, such as transponder emulation and cloning, defence using cryptographic methods, and electronic article surveillance; frequency ranges and radio licensing regulations. The text explores schematic circuits of simple transponders and readers, and includes new material on active and passive transponders, ISO/IEC 18000 family, ISO/IEC 15691 and 15692. It also describes the technical limits of RFID systems. A unique resource offering a complete overview of the large and varied world of RFID, Klaus Finkenzeller's volume is useful for end-users of the technology as well as practitioners in auto ID and IT designers of RFID products. Computer and electronics engineers in security system development, microchip designers, and materials handling specialists benefit from this book, as do automation, industrial and transport engineers. Clear and thorough explanations also make this an excellent introduction to the topic for graduate level students in electronics and industrial engineering design. Klaus Finkenzeller was awarded the Fraunhofer-Smart Card Prize 2008 for the second edition of this publication, which was celebrated for being an outstanding contribution to the smart card field.

Introduction Vision, Mission and Strategy Maintenance Basics Planning and Scheduling Parts, Materials and Tools Management Reliability Operational Reliability M&R Tools Performance Measure - Metrics Human Side of M&R Best Practices/Benchmarking Maintenance Excellence Appendices

Before you spend any money on physical prototypes, learn how a systems engineering can help you bring new products to market faster and at less cost! The Virtual Engineer explains how a company can incorporate advanced processes into their existing systems, integrating the product development, manufacturing, marketing and costing functions. Howard Crabb, the pioneer of the visual engineering concept, draws on his 30 years of experience as a manager of Technical Computing at Ford Motor Company. There he integrated solids modeling with traditional CAD to produce a solid representation of a design, opening up the potential for leapfrogging the competition. He explains in clear and effective language: Steps required to reinvent the current new product development process, How change benefits the organization, in terms of reduced cycle time, reduced engineering changes, reduced number of physical prototypes and improved product quality, Developments in the semiconductor industry and their impact on the desktop computing environment, and Best practices of existing firms

Historically, the integration of manufacturing methodologies into the office environment has proven to be problematic. Part of the difficulty lies in the fact that process workflows tend to be globally dispersed and thus rely heavily on information technology. But in complex service systems that contain a mix of employees, consultants, and technology, standardized protocols have been shown to reduce cycle time and transactional cost as well as improve quality. The successful application of Lean methodologies to improve process workflows is an efficient way to simplify operations and prevent mistakes. In Lean Six Sigma for the Office, Six Sigma guru James Martin presents proven modifications that can be deployed in offices, particularly those offices involved with global operations. Making use of Kaizen and Six Sigma concepts, along with Lean manufacturing principles, this book instructs managers on how they can improve operational efficiency and increase customer satisfaction. The author brings experience gleaned from his application of these methodologies in a myriad of industries to create a practical and hands-on reference for the office environment. Using a detailed sequence of activities, including over 140 figures and tables as well as checklists and evaluation tools, he demonstrates how to realize the rapid improvement of office operations, and how to eliminate unnecessary tasks through value stream mapping (VSM). The book also emphasizes the importance of strategic alignment of Kaizen events and the impact of organizational culture on process improvement activities. Latter chapters in the book discuss key elements of a change model in the context of transitional improvements as they relate to the process owner and local work team. By applying the proven principles found in this book, effective and sustainable organizational change can be accomplished, efficiency can be improved, and mistakes can be eliminated.

This book addresses the essentials of an automotive audit which is required by all automotive suppliers world-wide. They are based on customer specific requirements, ISO standards, and Industry specifications. This book covers both the mandated documents and records that are necessary for compliance, with an extensive discussion on Layered Process Audits and distance auditing. The book addresses the six standards for certification in one volume. It explains "why" and "how" an effective audit should be carried out. It identifies the key indicators for a culture change with an audit, explains the "process audit" at length, discusses the rationale for Layered Process audits and summarizes all the mandatory documents and records for all standards and requirements. The book covers the issue of risk in auditing and emphasizes the role of a "checklist" in the preparation process. This book is for those that conduct audits, those that are interested in auditing, and those being audited. It specifically addresses automotive OEMs and their supplier base but is also of interest to anyone wanting information on auditing.

Klaus Krämer präsentiert eine systematische und ganzheitliche Darstellung der Automatisierungstechnik im Rahmen von Materialfluss und Logistik aus der Sicht der Information. Im Mittelpunkt stehen der Einsatz von Identifikationstechniken, das Verknüpfen von Daten über verschiedene Ebenen im System, die Logistik der Information und die Anbindung von Geräten über Bussysteme an übergeordnete Stellen.

This book defines, develops, and examines the foundations of the APQP (Advanced Product Quality Planning) methodology. It explains in detail the five phases, and it relates its significance to national, international, and customer specific standards. It also includes additional information on the PPAP (Production Part Approval Process), Risk, Warranty, GD&T (Geometric Dimensioning and Tolerancing), and the role of leadership as they apply to the continual improvement process of any organization. Features Defines and explains the five stages of APQP in detail Identifies and zeroes in on the critical steps of the APQP methodology Covers the issue of risk as it is defined in the ISO 9001, IATF 16949, the pending VDA, and the OEM requirements Presents the role of leadership and management in the APQP methodology Summarizes all of the change requirements of the IATF standard

This ground-breaking text brings together advances in the field of purchase order management (POM) and offers a comprehensive framework for lowering costs, improving efficiency, eliminating non-value activities, and optimising the POM process.

Der Einsatz von Radio Frequency Identification (RFID) birgt erhebliches Innovationspotenzial im Hinblick auf die zukünftige Gestaltung der automobilen Supply Chain. Derzeit werden logistische Prozesse überwiegend mit Barcodes oder vergleichbaren AutoID-Technologien unterstützt. Diese Arbeit beschreibt eine Vorgehensweise, um bestehende AutoID-Lösungen mit Hilfe von RFID zu ergänzen und schrittweise abzulösen. Ausgangspunkt ist eine detaillierte Beschreibung der Grundlagen und Rahmenbedingungen des RFID-Einsatzes in der automobilen Logistik sowie damit verbundener Herausforderungen. Darauf aufbauend wird ein unternehmens- und prozessübergreifender Ansatz für die Einführung der RFID-Technologie entwickelt. Die Ergebnisse basieren auf konkreten Implementierungsbeispielen aus dem Kontext der Volkswagen Aktiengesellschaft. Auf diese Weise gibt die Arbeit Einblick in den Status Quo des RFID-Einsatzes in der automobilen Logistik. Weiterführend beinhaltet sie einen praxisorientierten und wissenschaftlich fundierten Vorschlag zur zukünftigen Umsetzung und Priorisierung von RFID-Projekten.

Interoperability: the ability of a system or a product to work with other systems or products without special effort from the user is a key issue in manufacturing and industrial enterprise generally. It is fundamental to the production of goods and services quickly and at low cost at the same time as maintaining levels of quality and customisation. Composed of 40 papers of international authorship, Interoperability of Enterprise Software and Applications ranges from academic research through case studies to industrial experience of interoperability. Many of the papers have examples and illustrations calculated to deepen understanding and generate new ideas. A concise reference to the state of the art in software interoperability, Interoperability of Enterprise Software and Applications will be of great value to engineers and computer scientists working in manufacturing and other process industries and to software engineers and electronic and manufacturing engineers working in the academic environment.

With a detailed discussion on the preparation and tools needed for an automotive process audit, this book addresses the fundamental issues and concerns by focusing on two objectives: explaining the methods and tools used in the process for the organization, and provide a reference or manual for dealing with documenting quality issues. This book addresses the fundamental issues and concerns for a successful automotive process audit and details specifically how to prepare for it. It presents a complete assessment of what an organization must do to earn certification in ISO standards, industry standards, and customer-specific requirements. It also focuses on the efficiency of resources within an organization so that an audit can be successful and describes the methodologies to optimize the process by knowing what to do, what to say, and how to prove it. A road map is offered for the "process audit" and the "layered audit," and defines a clear distinction between the preparation details for each. This book is intended for those that conduct audits, those who are interested in auditing, and those who are being audited. It specifically addresses how to prepare for an automotive process audit for readers who are involved in quality, manufacturing, and operations management, and those who work with suppliers.

These IMechE conference transactions examine how major improvements have been made in product delivery processes by the effective use of both statistical and analytical methods, as well as examining the problems that can occur as a result of under utilization of information. This volume will be of great interest to managers, engineers, and statisticians at all levels, engaged in project management or the design and development of motor vehicles, their subsystems, and components. CONTENTS INCLUDE Applications of advanced modelling methods in engine development Application of adaptive online DoE techniques for engine ECU calibration Radial basis functions for engine modelling Designing for Six Sigma reliability Dimensional variation analysis for automotive hybrid aluminium body structures Reliability-based multidisciplinary design optimization of vehicle structures

This book examines information technology standards and discusses what they are, what they do, how they originate, and how they evolve. While standards are important in improving system interoperability and thereby increasing economic productivity, they are unlikely to achieve their full potential due to a variety of factors, chief of which is the politics of the standard process itself. Libicki points out that the government is not likely the best source for designing and promoting standards. He does an excellent job of breaking down many complex technical issues and presenting them in a fashion that technical people can enjoy and policy makers can understand.

To list, summarize, and categorize intelligent transportation standards (ITS). Reviews best practices and provides listings for standards developing organizations at national and international levels. Provides guidance as to where to look in the future to find relevant standards for ITS. Presents strategies for integrating standards in IRS planning, deployment, and operation.

This practical cookbook covers a broad range of topics in an easy-to-understand manner. Step-by-step instructions guide you through even the most complicated of tools in Minitab. This book is great for anyone who is familiar with statistics and who wants to learn how Minitab works. Whilst you do not need to be an expert in all areas of statistics, you should understand the basics of the chapters you are interested in.

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