

Engineering Documentation

"The wall or gap between Engineering and the rest of the world has existed too long." Watts, with EC3 Corp. in Winter Park, CO, therefore emphasizes Engineering Documentation Control (EDC) or Configuration Management (CM)--distinguishing between the two--as a key business strategy in tandem with Total Quality Manufacturing, and takes a generic approach applicable to commercial and defense agency-related companies. This iteration (no date is specified for the first) includes a new chapter on benchmarking based on actual survey results, and expanded coverage of interchangeability and change costs. The volume concludes with CM predictions for the future. Annotation copyrighted by Book News, Inc., Portland, OR

This handbook is a new systematic approach to engineering documentation, therefore, it will simplify the end users ability to set up or enhance their engineering documentation requirements. Companies with small manual systems to large-scale mass production facilities can use this handbook to tailor their engineering documentation requirements. If an individual or company wishes to create or improve an engineering documentation system, there is no need to start from scratch. Instead, use this new handbook, complete with 47 specially designed forms and with procedures that cover every major aspect of a comprehensive engineering documentation system. Another book published by Noyes, Engineering Documentation Control Handbook can be very helpful if used in conjunction with this handbook. This book contains 62 engineering procedures and 27 forms. Most of these engineering procedures are influenced by the author's background in aircraft, aerospace, and the computer industry. The manufacture of Printed Circuit Boards was used as an example throughout the book. However, the principles are applicable to all engineering and operational disciplines. The Art of Technical Documentation presents concepts, techniques, and practices in order to produce effective technical documentation. The book provides the definition of technical documentation; qualities of a good technical documentation; career paths and documentation management styles; precepts of technical documentation; practices for gathering information, understanding what you have gathered, and methods for testing documentation; and considerations of information representation, to provide insights on how different representations affect reader perception of your documents. Technical writers and scientists will find the book a good reference material.

Handbook for Preparing Engineering Documents

The Rhetoric of Risk

Graphical Displays for Engineering Documentation

A Thesis

bookdown

Directory of Engineering Document Sources

*"The control of engineering documentation in a manufacturing company is an important emerging discipline. It is sometimes called Configuration Management (CM). The latter term is one that has been used in conjunction with DoD/Military requirements. This book covers the subject on a generic basis that will be usable by industrial companies." "Engineering Documentation Control is a significant company strategy. The methods for releasing a new product and its documentation, requesting changes to the product, making changes, and developing bills of material must be simple, fast, and accurate. Rules and guidelines are developed and explained for creating world class Engineering Documentation Control processes." "Configuration Management is the communications bridge between Design Engineering and the "rest of the world," the single most important function served by the CM organization. For the quick release of new product documentation, the ability to change the documentation and the product quickly is critical to a company's profitability. Thus, the development and implementation of a simple, make-sense, fast, accurate, and well understood CM system is an important business strategy." "This book has primary emphasis on the simpler term (Engineering Documentation Control) while recognizing the near equality of the Configuration Management (CM) term."***-BOOK JACKET>Title Summary field provided by Blackwell North America, Inc. All Rights Reserved**

User manuals, reference guides, project documentation, equipment specifications and other technical documents are increasingly subjected to high quality standards. However, it is not clear whether research efforts are keeping pace with this increasing importance of documentation quality. This volume includes studies from researchers as well as practitioners, exemplifying three approaches towards document quality: - Product-orientation, with an eye for usability in various manifestations such as tutorials, concept definitions, tools for users of documentation to find information, methods of eliciting user feedback, and cultural differences; - Process-orientation, in which the quality of technical documentation is regarded as an outgrowth of a process involving sub-steps such as storyboarding, pre-testing and use of automation tools in writing and producing documents; - Professional orientation, in which attention is focused on those who create technical documentation. The volume will be of interest to a broad audience of writers, managers and trainers with technical and non-technical backgrounds, such as: quality managers; communication managers; technical communicators; trainers in computer usage; teachers, researchers and students of (technical) communication.

Engineers are smart people. Their work is important, which is why engineering material should be written as deliberately and carefully as it will be read. Engineering Writing by Design: Creating Formal Documents of Lasting Value demonstrates how effective writing can be achieved through engineering-based thinking. Based on the authors' combined experience as engineering educators, the book presents a novel approach to technical writing, positioning formal writing tasks as engineering design problems with requirements, constraints, protocols, standards, and customers (readers) to satisfy. Specially crafted for busy engineers and engineering students, this quick-reading, conversational text: Describes how to avoid logical fallacies and use physical reasoning to catch mistakes in claims Covers the essentials of technical grammar and style as well as the elements of mathematical exposition Emphasizes the centrality of the target audience, and thus the need for clear and concise prose Engineering Writing by Design: Creating Formal Documents of Lasting Value addresses the specific combination of thinking and writing skills needed to succeed in modern engineering. Its mantra is: to write like an engineer, you must think like an engineer. Featuring illustrative examples, chapter summaries and exercises, quick-reference tables, and recommendations for further reading, this book is packed with valuable tips and information practicing and aspiring engineers need to become effective writers.

Computer-Organized Cost Engineering

Quality of Technical Documentation

Engineering Documents Center Index

Guide to User Needs for Technical Documentation (engineering).

*How to Write That F***ing Manual*

Configuration Management for Senior Managers

Engineering Documentation Control Handbook

Providing a sequence of steps for matching cost engineering needs with helpful computer tools, this reference addresses the issues of project complexity and uncertainty; cost estimation, scheduling, and cost control; cost and result uncertainty; engineering and general purpose software; utilities th

Configuration Management Metrics: Product Lifecycle and Engineering Documentation Control Process Measurement and Improvement provides a comprehensive discussion of measurements for configuration management/product lifecycle processes. Each chapter outlines one of the most important measures of merit th need for written policy and procedures. The best of the best practices as to the optimum standards are listed with an opportunity for the reader to check off those that their company has and those they do not. The book first defines the concept of configuration management (CM) and explains its importance. It then discusses the important metrics in the major CM and related processes. These include: new item release; order entry/fulfillment; request for change; bill of material change cost; and field change. Ancillary processes which may or may not be thought of as part of these major processes are also addressed, including deviations, service parts, publications and the field failure reporting. Provides detailed guidance on developing and implementing measurement systems and reports Demonstrates methods of graphing and charting data, with benchmarks A practical resource for the development of Engineering Documentation Control processes Includes basic principles of Product Lifecycle processes and their measurement

Get to know a key ingredient to world-class product manufacturing With this manual, you have the best of the best management practices for the configuration management processes. It goes a long way toward satisfying Total Quality Management, FDA, GMP, Lean CM and ISO/QS/AS 9XXX process documentation requirements. The one requirement common to all those standards is to document the processes and to do what you document.

An Evaluation of Some of the Costs and Practices of Engineering Documentation System Management

The Digital Technical Documentation Handbook

The Essentials of Technical Writing in a Nutshell

Engineering Documentation Control / Configuration Management Standards Manual

Engineering Documentation for CAD/CAM Applications

Guide to User Needs for Technical Documentation

Discusses the requirements for establishing, maintaining and revitalizing an efficient engineering documentation control system for use by technical and manufacturing personnel in private industry. The book stresses simplicity and common sense in the development and implementation of all control practices, procedures and forms. A list of effective interchangeability terms and an extensive bibliography of key literature sources are provided.This work is intended for mechanical, computer, design, manufacturing and civil engineers; program, purchasing and documentation and production control managers; and upper-level undergraduate, graduate and continuing-education students in these fields.

Control of engineering documentation, sometimes called Configuration Management (CM) especially in the defense industries, remains critical to world-class manufacturing survival. The 3rd edition of this popular engineering documentation handbook improves upon one of the best blueprints for efficient EDC/CM ever published, and continues to provide a significant resource for engineers and others. It can be used in many industries to improve the control of engineering documentation. Use the Engineering Documentation Control Handbook to get on track right away and make the release of new products and their documentation flow smoothly and easily. The book is packed with specific methods that can be applied quickly and accurately to documentation, request changes to the product, make those changes and develop bills of material. The result is a powerful communications bridge between engineering and "the rest of the world" that makes rapid changes in products and documentation possible. With the help of the simple techniques in the handbook, companies can gain and hold their competitive reflexes -- and has no sympathy for delays. The new edition takes the improvements of the second to a whole new level, with more chapters and even more additions. As always, the thrust of the book retains a focus on basics, rules and reasons. The author emphasizes that EDC or CM must be recognized as a key business strategy, and the days of "Throwing It Overboard" are over.

The crash of an Amtrak train near Baltimore, the collapse of the Hyatt hotel in Kansas City, the incident at Three Mile Island, and other large-scale technological disasters have provided powerful examples of the ways that communicational practices influence the events and decisions that precipitate a disaster. These examples have raised ethical questions about the questions about the nature of representation in science, and rhetorical questions about the nature of expertise and experience as grounds for judgments about risk. In The Rhetoric of Risk: Technical Documentation in Hazardous Environments, author Beverly Sauer examines how the dynamic uncertainty of the material environment affects communication in large risk environments, such as on mine safety, which provides a rich technical and historical context where problems of rhetorical agency, narrative, and the negotiation of meaning have visible and tragic outcomes. But the questions Sauer asks have larger implication for risk and safety: How does writing function in large regulatory industries? What can we learn from experience? Why is this experience lost when agencies rely on written documentation alone? Given the uncertainties, how can we work to improve communication in hazardous and uncertain environments? By exploring how individuals make sense of the material, technical, and institutional indeterminacies of their work in speech and gesture, The Rhetoric of Risk helps communicators rethink their discourse and the role of writers in hazardous worksites. It is intended for scholars and students in technical writing and communication, rhetoric, risk analysis and risk communication, as well as a wide range of engineering and technical fields concerned with risk, safety, and uncertainty.

Engineering Documentation Control Practices & Procedures

Engineering Documentation System Development : a Study of the Application of Present and Future Methods of Automation, Retrieval and Portrayal to Department of Defense and NASA Engineering and Documentation Systems and Centers

Fundamentals of Engineering Documentation and Communication

Engineering

Technical Product Specification and Documentation to British and International Standards

Engineering Documentation Control Handbook

This book provides hands-on techniques for writing engineering procedures to achieve ISO 9000 compliance. It is designed for individuals responsible for writing these procedures in any industry. Readers will find actual examples of clearly written, compliant engineering procedures, ready to adapt to your own industry and your own particular needs and use immediately. It answers virtually all of your procedure writing questions. Procedure writers will gain a general understanding of engineering documentation principles and how to apply them to their own situations. Simple diagrams and other graphics illustrate key ideas, giving a bird's-eye view of what is coming next. The intent of the book is to familiarize the reader with the essential elements and concepts of engineering procedure development and management and show how to apply these concepts to their own specific applications. The author emphasizes engineering principles and tools that are common to all engineering disciplines, with examples for their use. Step-by-step procedures shown for each document format enable readers to apply each format to their own engineering documentation programs quickly and easily. The book provides a fingertip reference that covers the entire engineering procedure process, using the latest technology for engineering documentation systems.

Chapter 1. Introduction -- Chapter 2. Product Documentation -- Chapter 3. Identification Numbers -- Chapter 4. Interchangeability -- Chapter 5. Bill of Material -- Chapter 6. Potpourri -- Chapter 7. Product & Document Release -- Chapter 8. Change requests -- Chapter 9. Change cost. -- Chapter 10. Change Control -- Chapter 11. Fast Change -- Chapter 12. Implementing Process Improvement -- Chapter 13. Process standards and audits -- Chapter 14. EDC & the supply chain -- Chapter 15. Benchmarking -- Chapter 16. CM in the future.

State-of-the-art in its simple, user-friendly presentation, this comprehensive handbook covers the entire process of preparing, producing, and distributing engineering documents using current computer software and the most recent technologies in information transfer. Available in both hardcover and softcover versions! Sponsored by: IEEE Professional Communications Society

Engineering Writing by Design

Configuration Management for Industry

A Guide for Engineers and Technicians

Technical Documentation and Process

Manual of Engineering Drawing

Computer Applications of Engineering Documentation

Configuration Management for Senior Managers is written to help managers in product manufacturing and engineering environments identify the ways in which they can streamline their products and processes through proactive documentation control and product lifecycle management. Experienced consultant Frank Watts gives a practitioner's view tailored to the needs of management, without the textbook theory that can be hard to translate into real-world change. Unlike competing books that focus on CM within software and IT environments, this engineering-focused resource is packed with examples and lessons learned from leading product development and manufacturing companies, making it easy to apply the approach to your business. Developed to help you identify key policies and practices needing attention in your organization to establish and maintain consistency of processes and products, and to reduce operational costs Focused on configuration management (CM) within manufacturing and engineering settings, with relevant examples from leading companies Written by an experienced consultant and practitioner with the knowledge to provide real-world insights and solutions, not just textbook theory

This book provides a broad perspective about the essential aspects of creating technical documentation in today's product development world. It is a book of opinions and guidance, collected as short essays. You can read selectively about subjects that interest you, or you can read the entire collection in any order you like. Information development is a multidimensional discipline, and it is easy to theorize. We have written this book from our direct experience, using the concrete insights and practices we apply to our work every day.If you work as an information developer, a manager in a documentation team, or in another part of product development that collaborates with a doc team, there is information in this book for you. Perhaps you are a technical writer in a small, high-growth company that is figuring out its processes. Perhaps you are an information-development manager in a large enterprise company with an expanding product line and an ever more complex matrix of cross-functional dependencies. You might work at a medium-sized company where your management is asking you to do more with fewer people, and you want some additional perspective that will help you find a leaner and more effective way to deliver what your business demands. Or you might work outside the technical documentation world, in another part of product development, and are wondering how to collaborate most effectively with the documentation team.The purpose of The Product is Docs is to provoke discussion, shine light on some murky areas, and--we hope--inspire our colleagues to consider their processes and assumptions with new eyes.All proceeds from the sale of The Product is Docs will go to charity.

We live in an age of electronic interconnectivity, with co-workers across the hall and across the ocean, and managing meetings can be a challenge across multiple time zones and cultures. This makes documenting your projects more important than ever. In Technical Documentation and Process, Jerry Whitaker and Bob Mancini provide the background and structure to help you document your projects more effectively. With more than 60 years of combined experience in successfully documenting complex engineering projects, the authors guide you in developing appropriate process and documentation tools that address the particular needs of your organization. Features Strategies for documenting a project, product, or facility A sample style guide template—the foundation on which you can build documents of various types A selection of document templates Ideas for managing complex processes and improving competitiveness using systems engineering and concurrent engineering practices Basic writing standards and helpful references Major considerations for disaster planning Discussion of standardization to show how it can help reduce costs Helpful tips to manage remote meetings and other communications First-hand examples from the authors' own experience Throughout, the authors offer practical guidelines, suggestions, and lessons that can be applied across a wide variety of project types and organizational structures. Comprehensive yet to the point, this book helps you define the process, document the plan, and manage your projects more confidently.

(Department of Defense Instruction 3232.7) 8-9 January 1959, Washington, D.C.; 12-13 January 1959, Chicago, Illinois; 15-16 January 1959, Los Angeles, California

Engineering Procedures Handbook

Writing Technical Documentation in a Product Development Group

Department of Defense Seminars on Provisioning Technical Documentation

The Art of Technical Documentation

Configuration Management and Product Lifecycle Management

Learn to integrate programming with good documentation. This book teaches you the craft of documentation for each step in the software development lifecycle, from understanding your users' needs to publishing, measuring, and maintaining useful developer documentation. Well-documented projects save time for both developers on the project and users of the software. Projects without adequate documentation suffer from poor developer productivity, project scalability, user adoption, and accessibility. In short: bad documentation kills projects. Docs for Developers demystifies the process of creating great developer documentation, following a team of software developers as they work to launch a new product. At each step along the way, you learn through examples, templates, and principles how to create, measure, and maintain documentation—tools you can adapt to the needs of your own organization. What You'll Learn Create friction logs and perform user research to understand your users' frustrations Research, draft, and write different kinds of documentation, including READMEs, API documentation, tutorials, conceptual content, and release notes Publish and maintain documentation alongside regular code releases Measure the success of the content you create through analytics and user feedback Organize larger sets of documentation to help users find the right information at the right time Who This Book Is For Ideal for software developers who need to create documentation alongside code, or for technical writers, developer advocates, product managers, and other technical roles that create and contribute to documentation for their products and services.

Do you need to create some user assistance for your product? Do you want to make your user manual and online help system stand out from those of your competitors but don't have the time to study a dozen all-embracing textbooks about technical writing before getting down to work? This book provides you with a compilation of those rules that really matter. If you follow the given recommendations, this will significantly improve the quality of what you write, all with the least amount of effort. You get hands-on advice and simple, catchy examples--free from theoretical elaborations and highbrow grammar terms. The book is exemplary for what you need to achieve, too. It contains lots of valuable information on as few pages as possible in a clear and simple form. Topics covered: Structuring principles, including building topics, establishing headings, and determining the best possible order of information; Layout and formatting essentials; General technical writing rules; Rules for building sections; Rules for building sentences; Plain language; Grammar and word choice FAQ. Audience: developers, marketing professionals, product managers.

This book emphasizes the importance of consistent, well-planned, and computer-oriented engineering documentation systems to engineering, manufacturing, and accounting. It discusses the systems needed to optimize flow of information and increase the efficiency of modern CAD/CAM systems.

Engineering Documentation Control Practices and Procedures

A Study of the Application of Present and Future Methods of Automation, Retrieval and Portrayal to Department of Defense and NASA Engineering Documentation Systems and Centers

An Engineer's Field Guide to Technical Writing

Configuration Management Metrics

Authoring Books and Technical Documents with R Markdown

The Product Is Docs

Now in its 4th edition, Manual of Engineering Drawing is a long-established guide for practicing and student engineers to producing engineering drawings and annotated 3D models that comply with the latest BSI and ISO standards of technical product specifications and documentation. This new edition has been updated in line with recent standard revisions and amendments, including the requirements of BS8888 2011 and related ISO standards. Ideal for international use, it includes a guide to the fundamental differences between the relevant ISO and ASME standards, as well as new information on legal aspects such as patents and copyright, and end-of-life design considerations. Equally applicable to CAD and manual drawing, the book includes the latest developments in 3D annotation and the specification of surface texture. Its broad scope also encompasses topics such as orthographic and pictorial projections, dimensional, geometrical and surface tolerancing and the quality principle, along with numerous examples of electrical and hydraulic diagrams with symbols and applications of cams, bearings, welding and adhesives. Seen by many as an essential design reference, Manual of Engineering Drawing is an ideal companion for students studying vocational courses in technical product specification, undergraduates studying engineering or product design, and professional engineers beginning a career in design. Expert interpretation of the rules and conventions provided by authoritative authors who regularly lead and contribute to BSI and ISO committees on product standards Combines the latest technical information with clear, readable explanations, numerous diagrams and traditional geometrical construction techniques Includes new material on patents, copyrights and intellectual property, design for manufacture and end-of-life, and surface finishing considerations

bookdown: Authoring Books and Technical Documents with R Markdown presents a much easier way to write books and technical publications than traditional tools such as LaTeX and Word. The bookdown package inherits the simplicity of syntax and flexibility for data analysis from R Markdown, and extends R Markdown for technical writing, so that you can make better use of document elements such as figures, tables, equations, theorems, citations, and references. Similar to LaTeX, you can number and cross-reference these elements with bookdown. Your document can even include live examples so readers can interact with them while reading the book. The book can be rendered to multiple output formats, including LaTeX/PDF, HTML, EPUB, and Word, thus making it easy to put your documents online. The style and theme of these output formats can be customized. We used books and R primarily for examples in this book, but bookdown is not only for books or R. Most features introduced in this book also apply to other types of publications: journal papers, reports, dissertations, course handouts, study notes, and even novels. You do not have to use R, either. Other choices of computing languages include Python, C, C++, SQL, Bash, Stan, JavaScript, and so on, although R is best supported. You can also leave out computing, for example, to write a fiction. This book itself is an example of publishing with bookdown and R Markdown, and its source is fully available on GitHub.

Software documentation forms the basis for all communication relating to a software project. To be truly effective and usable, it should be based on what needs to be known. Agile Documentation provides sound advice on how to produce lean and lightweight software documentation. It will be welcomed by all project team members who want to cut out the fat from this time-consuming task. Guidance given in pattern form, easily digested and cross-referenced, provides solutions to common problems. Straightforward advice will help you to judge: What details should be left in and what left out When communication face-to-face would be better than paper or online How to adapt the documentation process to the requirements of individual projects and build in change How to organise documents and make them easily accessible When to use diagrams rather than text How to choose the right tools and techniques How documentation impacts the customer Better than offering pat answers or prescriptions, this book will help you to understand the elements and processes that can be found repeatedly in good project documentation and which can be shaped and designed to address your individual circumstance. The author uses real-world examples and utilises agile principles to provide an accessible, practical pattern-based guide which shows how to produce necessary and high quality documentation.

Agile Documentation

Technical Documentation in Hazardous Environments

(Department of Defense Instruction 3232.7).

Essential Product Configuration and Lifecycle Management for Manufacturing

Creating Formal Documents of Lasting Value

Developing and Managing Engineering Procedures

The Digital Technical Documentation Handbook describes the process of developing and producing technical user information at Digital Equipment Corporation. ' Discusses techniques for making user information _more effective ' Covers the draft and review process, the production and distribution of printed and electronic media, archiving, indexing, testing for usability, and many other topics ' Provides quality assurance checklists, contains a glossary and a bibliography of resources for technical communicators

A Consolidated Cross-index of Document Initialisms Assigned by Government & Industry Organizations to Technical/management Specifications, Standards, Reports, and Related Publications

Engineering Documentation System Development

A Pattern Guide to Producing Lightweight Documents for Software Projects

Engineering Documentation Control Handbook, 2nd Ed.

Docs for Developers

From Concept to Completion