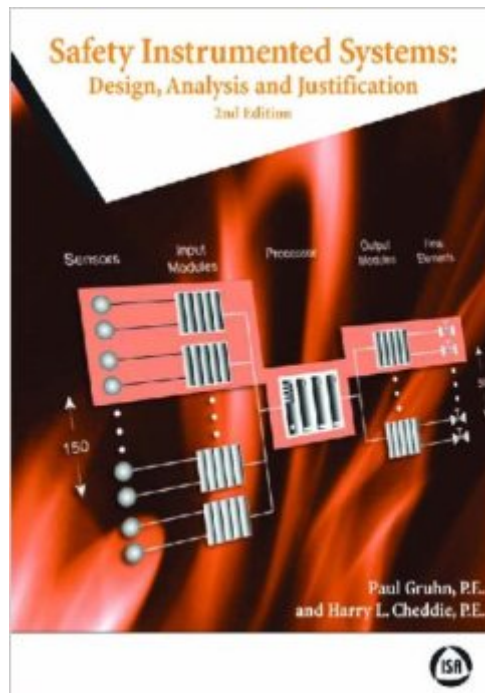


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# Safety Instrumented Systems: Design, Analysis, And Justification, 2nd Edition



## Synopsis

This newly revised best-seller is ideal for instrumentation and control system engineers in the process industries who are responsible for designing, installing, and maintaining safety instrumented systems. Engineers, managers, technicians, and sales professionals employed by end users, engineering firms, systems integrators, and consultants can all benefit from the material presented here. This book addresses the increased realization that today's engineering systems and the computers used to control them are capable of large-scale destruction. When even a single accident could be disastrous, the luxury of learning from experience no longer exists. This book is a practical how-to text on the analysis, design, application and installation of safety instrumented systems.

## Book Information

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## Customer Reviews

This is truly an excellent introductory book on Safety Shutdown Systems, that will give you an overview on all the fundamentals, concepts, and specific aspects that need to be considered when designing an emergency shutdown system for a new facility or when evaluating an existing one. The text is written in a clear and readable way that makes even easier to understand topics that often can be confusing. The style of the book reminds of the self-study guides published by ISA as the Independent Learning Modules (but this is not part of the ILM series). This book is primarily intended for the thousands of instrumentation and control systems engineers in the process industries (e.g. ,

refining, chemical, petrochemical, offshore, etc.) who are responsible for designing, installing, and maintaining safety instrumented systems (SIS). The kind of people usually employed by end-users, engineering firms, systems integrators, and consultants. Additionally managers and sales individuals will also benefit from a basic understanding of this subject. The book is organized as follows:- Design life cycle.- Risk.- Process control versus safety control.- Protection layers.- Developing the safety requirement specifications.- Determining the safety integrity level.- Choosing a technology.- Initial system evaluation.- Issues relating to field devices.- Engineering a system.- Installing a system.- Functional testing.- Managing changes to a system.- Justification for a safety system.- Safety Instrumented System (SIS) design checklist.- Case study. I am an Industrial Practitioner of Process Control. I have been working for more than 16 years as an Instrumentation, Automation, and Process Safety and Control Engineer for the Oil & Gas Industry. I have found this book to be an useful refresher in my day to day activities.

Book closely parallels Paul Gruhn's ISA course. I finished the book over a long weekend. Written in conversational, easy-to-digest style. The book minimizes jargon, uses real-world examples and humor (and cartoons drawn by Gruhn) to improve comprehension. An excellent overall reference for management or the non-safety engineer who needs to understand SIS, the life cycle concept, SILs, etc.

well worth every penny even for beginners. Easy explanations of complex issues. Good worked out examples. Used it to learn the subject. Only missing is a pro former for SRS

Great book - Extremely helpful and detailed

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