

1. Record Nr.	UNINA9910830218003321
Titolo	Human factors methods for improving performance in the process industries [[electronic resource] /] / Center for Chemical Process Safety ; Dan Crowl, editor ; authors, Dennis Attwood ... [et al.]
Pubbl/distr/stampa	[New York], : CCPS, Center for Chemical Process Safety Hoboken, N.J., : Wiley-Interscience, c2007
ISBN	1-280-74162-7 9786610741625 0-470-11884-9 1-60119-886-8 0-470-11883-0
Descrizione fisica	1 online resource (246 p.)
Altri autori (Persone)	AttwoodDennis A CrowlDaniel A
Disciplina	363.11967 660.2804 660/.2804
Soggetti	Chemical plants - Safety measures Chemical processes - Safety measures Human-machine systems Industrial productivity
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 and index.
Nota di contenuto	HUMAN FACTORS METHODS FOR IMPROVING PERFORMANCE IN THE PROCESS INDUSTRIES; Contents; Preface; Acknowledgments; Abbreviations and Acronyms; 1 Introduction; 1.1 Purpose of This Book; 1.2 Human Factors; 1.3 Human Error; 1.4 Structure of This Book; 1.5 Linkage to Other CCPS Publications; 1.6 References; 2 The Case for Human Factors; 2.1 Why is Human Factors Needed?; 2.2 Past Incidents; 2.3 Business Value/Justification; 2.4 Human Factors in the Life Cycle of a Chemical Plant; 2.5 Needs Driven Program; 2.6 References; 3 Performance Measurement and Improvements 3.1 Building Improvements into Existing Systems 3.2 Measures of

Performance; 3.3 Roles and Responsibilities; 3.4 Continuous Improvement; 3.5 References; HUMAN FACTORS TOOL KIT Facilities and Equipment; 4 Process Equipment Design; 4.1 Introduction; 4.2 Tools; 4.3 References; 4.4 Additional References; 5 Process Control Systems; 5.1 Introduction; 5.2 Issues/Example; 5.3 Tools; 5.4 Additional References; 6 Control Center Design; 6.1 Introduction; 6.2 Tools; 6.3 References; 6.4 Additional References; 7 Remote Operations; 7.1 Introduction; 7.2 Tools; 7.3 Reference
8 Facilities and Workstation Design8.1 Introduction; 8.2 Tools; 8.3 References; 8.4 Additional References; 9 Human/Computer Interface; 9.1 Introduction; 9.2 Human Interactions with Control System Software; 9.3 Tools; 9.4 References; 9.5 Additional References; 10 Safe Havens; 10.1 Introduction; 10.2 Human Factors Issues; 10.3 Tools; 10.4 References; 11 Labeling; 11.1 Introduction; 11.2 Tools; 11.3 References; People; 12 Training; 12.1 Introduction; 12.2 Guidelines for Training Programs; 12.3 Guidelines for Designing and Delivering Training; 12 4 Tools; 12.5 References; 13 Communications 13.1 Introduction13.2 Issues/Examples; 13.3 Tools; 13.4 References; 14 Documentation Design and Use; 14.1 Introduction; 14.2 Converting to Electronic Documentation; 14.3 Use of Documents; 14.4 Tools; 14.5 References; 14.6 Additional References; 15 Environmental Factors; 15.1 Introduction; 15.2 Noise; 15.3 Vibration; 15.4 Temperature and Relative Humidity; 15.5 Air Quality; 15.6 Lighting; 15.7 References; 16 Workloads and Staffing Levels; 16.1 Introduction; 16.2 Issues/Examples; 16.3 Tools; 16.4 References; 17 Shiftwork Issues; 17.1 Introduction; 17.2 Tools; 17.3 References
17.4 Additional References18 Manual Materials Handling; 18.1 Introduction; 18.2 Manual Materials Handling Guidelines; 18.3 References; 18.3 Additional References; Management Systems; 19 Safety Culture; 19.1 Introduction; 19.2 What is Safety Culture?; 19.3 Tools; 19.4 Safety Culture: A Process Industry Case Study; 19.5 Benefits; 19.6 References; 19.7 Additional References; 20 Behavior Based Safety; 20.1 Introduction; 20.2 Tools; 20.3 Expected Results; 20.4 References; 20.5 Additional References; 21 Project Planning, Design, and Execution; 21.1 Introduction
21.2 Human Factors Tools for Project Management

Sommario/riassunto

Human Factors Methods for Improving Performance in the Process Industries provides guidance for managers and plant engineering staff on specific, practical techniques and tools for addressing forty different human factors issues impacting process safety. Human factors incidents can result in injury and death, damage to the environment, fines, and business losses due to ruined batches, off-spec products, unplanned shutdowns, and other adverse effects. Prevention of these incidents increases productivity and profits. Complete with examples, case histories, techniques, and implementation
