1. Record Nr. UNINA9910145267203321

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Titolo	Improving production with lean thinking / / Javier Santos, Richard Wysk, Jose Manuel Torres
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2006 ©2006
ISBN	1-119-03112-5 1-118-98403-X 1-60119-940-6
Edizione	[1st edition]
Descrizione fisica	1 online resource (264 p.)
Classificazione	85.35
Disciplina	658.5
Soggetti	Production engineering Manufacturing processes Lean manufacturing
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 at the end of each chapters and index.
Nota di contenuto	Cover; Title Page; Copyright; Contents; Preface; 1. Continuous Improvement Tools; Continuous Improvement; Improvement Philosophies and Methodologies; Just-in-Time (JIT); Thinking Revolution; Lean Manufacturing; 20 Keys to Workplace Improvement; Measuring and Prioritizing the Improvements; Book Structure; Recommended Readings; 2. Material Flow and Facilities Layout; Layout Improvements; Signs and Reasons for a Need to Change the Layout; Theoretical Basis; One-Piece Flow; Main Types of Industrial Companies; Layout Types; Characteristic of the Traditional Layouts; Layout Design Methodology Step 1: Formulate the ProblemStep 2: Analysis of the Problem; Step 3: Search for Alternatives; Step 4: Choose the Right Solution; Step 5: Specification of the Solution; Step 6: Design Cycle; Tools for Layout Study; Muther's Eight Factors; Summary; Recommended Readings; 3. Material Flow and the Design of Cellular Layouts; The Assembly Line; Theoretical Basis; Mass Production; Flow or Assembly Lines; Cell Layout Design Justification; Basic Cell Design Nomenclature; Cell Design

Methodology; Cell Design Tools; Line-Balancing; Group Technology; Time Study; Leveling Production
Multifunctional WorkersWorkforce Optimization; Summary; Recommended Readings; 4. Equipment Efficiency: Quality and Poka-Yoke; Poka-Yokes; Theoretical Basis; Inspection and Statistical Quality Control (SQC); From SQC to Zero Defects; Poka-Yoke Design Methodology; Poka-Yoke Examples; Summary; Recommended Readings; 5. Equipment Efficiency: Performance and Motion Study; Motion Study; Theoretical Basis; Motion Economy Principles; Motion Study Tools; Value Analysis; 5W2H and 5-Why Methods; Worker-Machine Diagram; Machine-Worker Ratio; Machine-Machine Diagram; Summary; Recommended Readings
6. Equipment Efficiency: Availability, Performance, and MaintenanceEquipment Maintenance; Theoretical Basis; Types of Maintenance; Maintenance Program Implementation; Getting Started; Corrective Maintenance Implementation; Preventive Maintenance Implementation; Autonomous Maintenance; TPM: Total Productive Maintenance; RCM: Reliability-Centered Maintenance; Maintenance Tools; FMEA for Equipment; Reliability; P-M Analysis; Maintenance Management; Summary; Recommended Readings; 7. Equipment Efficiency: Availability, Quality, and SMED; Setup Process; Theoretical Basis
Basic Steps in a Setup ProcessTraditional Strategies to Improve the Setup Process; SMED Methodology; Preliminary Stage; Stage 1: Separating Internal and External Setup; Stage 2: Converting Internal Setup to External Setup; Stage 3: Streamlining All Aspects of the Setup Process; SMED Tools; First-Stage Tools; Second-Stage Tools; Third-Stage Tools; Zero Changeover; SMED Effects and Benefits; Easier Setup Process; On-Hand Stock Production; Workplace Task Simplification; Productivity and Flexibility; Economic Benefits; Summary; Recommended Readings
8. Environmental Improvements and the 5S Methodology

Sommario/riassunto

Unique coverage of manufacturing management techniques--complete with cases and real-world examples.Improving Production with Lean Thinking picks up where other references on production processes leave off. It is increasingly important to integrate and systematize lean thinking throughout production/manufacturing and the supply chain because the market is becoming more competitive, products are becoming more complex, and product life is getting shorter and shorter. With a practical focus, this book encompasses the science and analytical background for improving manufacturing, control, and desi