

1. Record Nr.	UNINA9910459058203321
Autore	Siddiqui K. U
Titolo	Mechanical system design [[electronic resource] /] / Prof. K.U. Siddiqui, Er. Manoj Kumar Singh
Pubbl/distr/stampa	New Delhi, : New Age International, c2007
ISBN	1-282-45037-9 9786612450372 81-224-2935-1
Descrizione fisica	1 online resource (382 p.)
Altri autori (Persone)	SinghManoj Kumar
Soggetti	Machine design Mechanical engineering Electronic books.
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	""Cover ""; ""Preface ""; ""Contents ""; ""Chapter-1 Introduction of Design of Systems ""; ""1.1 Introduction ""; ""1.2 Concept of Systems ""; ""1.3 General Model of A System ""; ""1.4 Application of A System ""; ""1.5 Elements/Components of a System ""; ""1.6 Classification of a System in Mechanical Systems Design ""; ""1.7 A Case Study of a Mechanical System Design ""; ""Exercise-1 ""; ""A. Case Study ""; ""Chapter 2 Engineering Processes and the System Approach ""; ""2.1 Introduction (System Approach) ""; ""2.2 Application of Systems Concepts in Engineering "" ""2.3 Identification of Engineering Functions of Systems """"2.4 The Characteristics of a System in ""MSD"" ""; ""2.5 Engineering Activities Matrix ""; ""2.6 Defining the Proposed Effort ""; ""2.7 Role of Engineer in ""Mechanical System Design"" ""; ""2.8 Engineering Problem Solving ""; ""2.9 Concurrent Engineering (CE) ""; ""2.10 A. Case Study: Viscous Lubrication System in Wire Drawing ""; ""Exercise-2 ""; ""A Case Study ""; ""Chapter 3 Design and Problem Formulation ""; ""3.1 Introduction ""; ""3.2 Nature of Engineering Problem ""; ""3.3 Needs Statement "" ""3.4 Identification and Analysis of Need """"3.5 Hierarchical Nature of System and Hierarchical Nature of Problem Environment ""; ""3.6

Problem Scope and Constraints ""; ""3.7 A Case Study: Heating Duct Insulation System ""; ""3.8 A Case Study: High-Speed Belt Drive System ""; ""3.9 Chain Drives ""; ""Exercise-3 ""; ""A Case Study ""; ""Chapter 4 System Theories ""; ""4.1 Introduction ""; ""4.2 System Analysis View Point ""; ""4.3 Black Box or Decision Process Approach ""; ""4.4 State Theory Approach ""; ""4.5 Component Integration Approach "" ""4.6 A Case Study: Automobiles Instrumentation Panel System "" ""Exercise-4 ""; ""A Case Study ""; ""Chapter 5 System Modelling ""; ""5.1 Introduction ""; ""5.2 Need For Modelling ""; ""5.3 Modelling Types and Purposes ""; ""5.4 Linear Graph Modelling Concepts ""; ""5.5 Mathematical Modelling Concepts ""; ""5.6 Mathematical Modelling and System Behavior ""; ""5.7 Modelling and Simulation ""; ""5.8 A Case Study: Compound Bar System ""; ""Exercise 5 ""; ""A Case Study ""; ""Chapter 6 Linear Graph Analysis ""; ""6.1 Introduction ""; ""6.2 Graph Modelling and Analysis Process "" ""6.3 Linear Graph Analysis, A Path Problem "" ""6.4 Linear Graph Analysis Network Flow Problem ""; ""6.5 Goal Programming ""; ""6.6 A Case Study: Material Handling System ""; ""Exercise-6 ""; ""A. Case Study ""; ""Chapter 7 Optimization Concepts ""; ""7.1 Introduction ""; ""7.2 The Optimization Process ""; ""7.3 Motivations and Freedom of Choice ""; ""7.4 Goals and Objectives-Criteria ""; ""7.5 Methods of Optimization ""; ""7.6 A Case Study: Aluminium Extrusion System ""; ""Exercise-7 ""; ""A Case Study ""; ""Chapter 8 System Evaluation ""; ""8.1 Introduction "" ""8.2 Feasibility Assessment ""
