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Nota di contenuto	Cover; Title Page; Contents; Introduction and Presentation; Chapter 1. An Estimation of Distribution Algorithm for SolvingFlow Shop Scheduling Problems with Sequence-dependent FamilySetup Times; 1.1. Introduction; 1.2. Mathematical formulation; 1.3. Estimation of distribution algorithms; 1.3.1. Estimation of distribution algorithms proposed in the literature; 1.4. The proposed estimation of distribution algorithm; 1.4.1. Encoding scheme and initial population; 1.4.2. Selection; 1.4.3. Probability estimation; 1.5. Iterated local search algorithm; 1.6. Experimental results; 1.7. Conclusion 1.8. BibliographyChapter 2. Genetic Algorithms for Solving Flexible Job ShopScheduling Problems; 2.1. Introduction; 2.2. Flexible job shop scheduling problems; 2.3. Genetic algorithms for some related sub-problems; 2.4. Genetic algorithms for the flexible job shop problem; 2.4.1. Codings; 2.4.2. Mutation operators; 2.4.3. Crossover operators; 2.5. Comparison of codings; 2.6. Conclusion; 2.7. Bibliography;

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6.1. Introduction

Sommario/riassunto

This book describes the potentialities of metaheuristics for solving production scheduling problems and the relationship between these two fields. For the past several years, there has been an increasing interest in using metaheuristic methods to solve scheduling problems. The main reasons for this are that such problems are generally hard to solve to optimality, as well as the fact that metaheuristics provide very good solutions in a reasonable time. The first part of the book presents eight applications of metaheuristics for solving various mono-objective scheduling problems. The sec
