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| Autore | Altendorfer Klaus |
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| Soggetti | Manufactures Manufacturing industries |
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| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographic references. |
| Nota di contenuto | Introduction -- Literature Review -- Single-Stage Service Level and Tardiness Model -- Simultaneous Capacity and Planned Lead Time Optimization -- Optimal Composition of Number and Size of Machines -- Service Level Constraint Models -- Conclusion. |
| Sommario/riassunto | The book presents different models for the simultaneous optimization problem of capacity investment and work release rule parameterization. The overall costs are minimized either including backorder costs or considering a service level constraint. The available literature is extended with the integration of a distributed customer required lead time in addition to the actual demand distribution. Furthermore, an endogenous production lead time is introduced. Different models for make-to-order production systems with one or multiple serial processing stages are developed. Capacity investment is linked to the processing rates of the machines or to the number of the machines. Results are equations for service level, tardiness, and FGI lead time in such a production system. For special cases with M/M/1 and M/M/s queues explicit solutions of the optimization problems or optimality conditions concerning capacity investment and work release rule parameterization are provided. |