

Preface

The present consumption models with short product life cycles result in an increasing number of used products that need to be collected and reused or disposed. Both legal regulations and consumers' concerns regarding these issues have led companies to include reverse material flows in their operations.

Remanufacturing gains recently more popularity among researchers and companies. It is the favourable scenario for the recovery of obsolete or end-of-use products. It allows to capture substantial part of the resources which were used in the primary production at lower cost, providing economic, environmental and social benefits. Remanufacturing is more complex than in traditional manufacturing, primarily because of the inherent uncertainty in the timing, quality and quantity of returns. Many companies face difficulties in organizing resource efficient remanufacturing operations. Small- and medium-size enterprises lack sufficient tools and methods for the monitoring and assessment of their operation with regard to the three dimensions of sustainability.

Implementation of the sustainability concept at a company level might create a chance for long-term economic success and for finding market niche. Remanufacturing companies help to close the material loops in the economy and contribute to the resource conservation.

This book focuses on the sustainability assessment in the remanufacturing operations. The authors in individual chapters present the methods, models and case studies for sustainability improvement in remanufacturing facilities.

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