

Preface

At this moment in time, it is difficult to obtain an exact definition of green manufacturing. It is common relate green manufacturing as “*a methodology for manufacturing that minimizes waste and pollution*”. In others words, green manufacturing is developing energy-efficient manufacturing processes and systems to transform materials in products with reduced emission of greenhouse gases, reduced use of toxic materials, and reduced the generation of waste. The main objective of green manufacturing is to support future generations by attaining sustainability.

The [Chap. 1](#) of the book provides Sustainable Manufacturing Through Environmentally-Friendly Machining. [Chapter 2](#) is dedicated to Environmentally-Friendly Machining: Vegetable Based Cutting Fluids. [Chapter 3](#) describes environmentally-friendly joining of tubes. [Chapter 4](#) contains information on Concepts, Methods, and Strategies for Zero-Waste in Manufacturing. Finally, [Chap. 5](#) is dedicated to Application of Hybrid MCDM Approach for Selecting the Best Tyre Recycling Process.

The present book can be used as a research book for final undergraduate engineering course or as a topic on sustainable manufacturing at the postgraduate level. Also, this book can serve as a useful reference for academics, manufacturing and materials researchers, manufacturing, mechanical, materials, industrial and environmental engineers, professionals in green manufacturing and related industries. The interest of scientific in this book is evident for many important centers of the research, laboratories and universities, as well as industry. Therefore, it is hoped this book will inspire and enthuse others to undertake research in this field of green manufacturing.

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J. Paulo Davim



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