

Springer 3662349124

# Instruction Manual: Die-Casting Technology Handbook

A Comprehensive Guide to Metal Alloy Processing

## 1. INTRODUCTION AND OVERVIEW

This manual provides an overview of the "Druckgieß-Technik: Handbuch Für Die Verarbeitung Von Metall-Legierungen" (Die-Casting Technology: Handbook for the Processing of Metal Alloys). This comprehensive handbook, authored by Gustav Lieby and Leopold Frommer, serves as a foundational text for understanding the principles and practices of die-casting technology, specifically focusing on the processing of various metal alloys. It is designed to be a valuable resource for professionals, researchers, and students in the fields of engineering, manufacturing, and metallurgy.

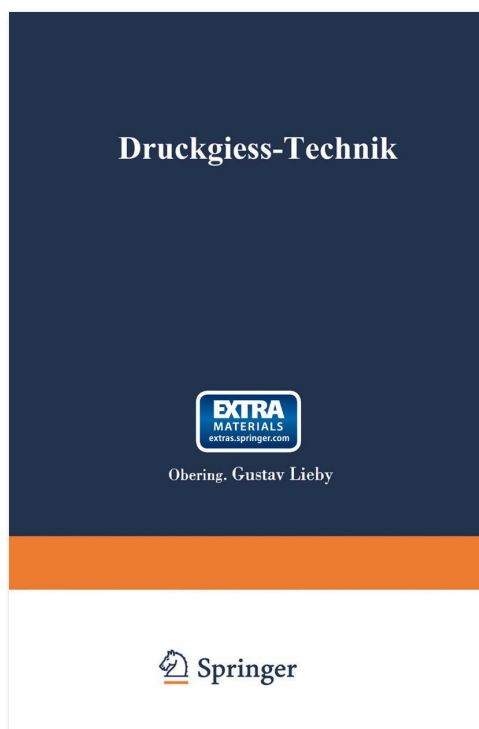


Image 1.1: Front cover of the "Die-Casting Technology Handbook". This image displays the title "Druckgiess-Technik" prominently, along with "EXTRA MATERIALS" and the publisher's name, Springer.

## 2. INTENDED USE AND AUDIENCE

---

This handbook is intended for individuals seeking in-depth knowledge of die-casting processes and metal alloy characteristics. It is particularly suitable for:

- Engineering students and academics specializing in materials science, mechanical engineering, or manufacturing.
- Industry professionals involved in foundry operations, product design, quality control, or research and development within the metal processing sector.
- Researchers and scientists exploring advanced topics in metallurgy and casting techniques.

The content assumes a foundational understanding of basic engineering and material science principles.

## 3. NAVIGATING THE HANDBOOK

---

The handbook is structured to guide readers through various aspects of die-casting technology. While specific chapter details are not provided here, typical sections in such a comprehensive manual include:

1. **Fundamentals of Die-Casting:** Introduction to the process, its history, and basic principles.
2. **Metal Alloys for Die-Casting:** Detailed properties and characteristics of various alloys used.
3. **Die Design and Construction:** Information on mold design, materials, and manufacturing.
4. **Process Parameters and Control:** Optimization of temperature, pressure, and other variables.
5. **Defect Analysis and Prevention:** Identification and resolution of common casting defects.
6. **Post-Casting Operations:** Finishing, heat treatment, and quality assurance.
7. **Applications and Case Studies:** Real-world examples of die-casting applications.

Readers are encouraged to utilize the book's internal structure, including its index and any provided glossaries, for efficient navigation and reference.

## 4. CARE AND MAINTENANCE

---

To ensure the longevity and preservation of your physical handbook, please observe the following guidelines:

- Store the book in a cool, dry place away from direct sunlight and excessive humidity to prevent paper degradation and mold growth.
- Avoid bending or creasing the spine excessively to maintain its structural integrity.
- Handle pages with clean hands to prevent smudges and stains.
- Do not use sharp objects or excessive force when turning pages.
- For cleaning, gently wipe the cover with a dry, soft cloth. Do not use liquid cleaners.

## 5. TROUBLESHOOTING AND SUPPORT

---

This section addresses common inquiries or issues related to the handbook.

### 5.1. Content Clarification

If you encounter concepts that require further clarification, it is recommended to:

- Refer to the glossary or index within the book for definitions and related topics.
- Consult supplementary academic resources or reputable online databases for additional context.
- For academic use, discuss with instructors or peers.

5.2. Physical Book Issues

For issues such as missing pages, binding defects, or printing errors, please contact the retailer from whom the book was purchased. Provide details of the defect and your purchase information for assistance.

5.3. Publisher Support

For general inquiries regarding the publication or to report potential errata, you may contact the publisher, Springer. Please refer to their official website for contact information.

6. SPECIFICATIONS

Attribute	Detail
Title	Druckgieß-Technik: Handbuch Für Die Verarbeitung Von Metall-Legierungen
Authors	Gustav Lieby, Leopold Frommer
Publisher	Springer
Publication Date	January 1, 1965
Edition	Softcover reprint of the original 1st ed. 1965
Language	German
Print Length	596 pages
ISBN-10	3662349124
ISBN-13	978-3662349120
Item Weight	1.81 pounds
Dimensions	6.1 x 1.35 x 9.25 inches

7. WARRANTY INFORMATION

Specific warranty information for this publication is not provided within the scope of this manual. For details regarding returns or replacements due to manufacturing defects, please refer to the purchase terms and conditions of the retailer from whom the book was acquired.

