

# Entrepreneur India

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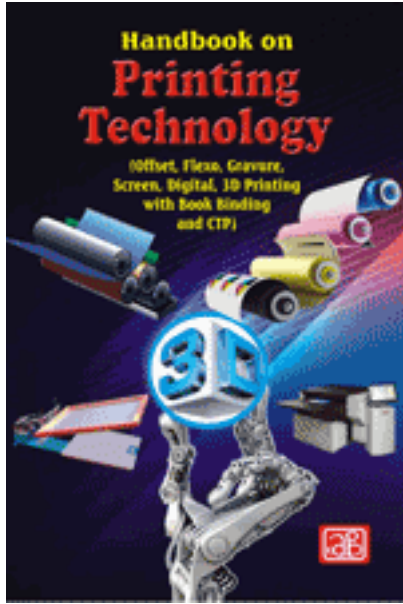
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Handbook on Printing Technology (Offset, Flexo,  
Gravure, Screen, Digital, 3D Printing with Book Binding and CTP) 5th  
Revised Edition



|                      |                                  |
|----------------------|----------------------------------|
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Printing is a process for reproducing text and image, typically with ink on paper using a printing press. It is often carried out as a large-scale industrial process, and is an essential part of publishing and transaction printing. Modern technology is radically changing the way publications are printed, inventoried and distributed. Printing technology market is growing, due to technological proliferation along with increasing applications of commercial printing across end users.

In India, the market for printing technology is at its nascent stage; however offers huge growth opportunities in the coming years. The major factors boosting the growth of offset printing press market are the growth of packaging industry across the globe, increasing demand in graphic applications, the wide range of application in various industry, and industrialization. 3D printing market is estimated to garner \$8.6 billion in coming years. The global digital printing packaging market is expected to exceed more than US\$ 40.02 billion by 2026 at a CAGR of 13.9%. Computer-to-plate systems are increasingly being combined with all digital prepress and printing processes.

This book is dedicated to the Printing Industry. In this book, the details of printing methods and applications are given. The book throws light on the materials required for the same and the various processes involved. This popular book has been organized to provide readers with a firmer grasp of how printing technologies are revolutionizing the industry.

The major content of the book are principles of contact (impression), principles of noncontact printing, coated grades and commercial printing, tests for gravure printing, tests for letterpress printing, tests for offset printing, screen printing, application of screen printing, offset lithography, planography, materials, tools and equipments, sheetfed offset machines, web offset machines, colour and its reproduction, quality control in printing, flexography, rotogravure, creative frees printer, shaftless spearheads expansion, digital printing, 3D printing, 3D printing machinery, book binding, computer-to-plate (ctp) and photographs of machinery with suppliers contact details.

A total guide to manufacturing and entrepreneurial success in one of today's most printing industry. This book is one-stop guide to one of the fastest growing sectors of the printing industry, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on the commercial production of printing products. It serves up a feast of how-to information, from concept to purchasing equipment.

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3. Quicker Product Launches
4. Competitive Advantage
5. Reduction in Manufacturing Errors
6. Complex Geometries
7. Mass Customization
8. Less Tooling
9. Fewer Costs
10. Environmentally Friendly

Benefits of 3D Printing in Healthcare

What Materials do 3D Printers Use?

1. Plastics

(a) *Nylon (Polyamide)*

Features

(b) *PLA Filament*

Features

(c) *ABS Filament*

Features

(d) *PVA Filament*

2. Powders

3. Resins

Features

4. Other Materials

How do the Different 3D Printing Technologies Work?

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How does FDM Work?

Materials for FDM

ABS (Acrylonitrile Butadiene Styrene)

ABSi (Acrylonitrile Butadiene Styrene – Biocompatible)

ABS-M30 (Acrylonitrile Butadiene Styrene)

ABS-M30i (Acrylonitrile Butadiene Styrene – Biocompatible)

PC (Polycarbonate)

ABS-ESD7 (Acrylonitrile Butadiene Styrene – Static-Dissipative)

PC-ABS (Polycarbonate ABS)

PC-ISO (Polycarbonate ISO)

Ultem 9085

2. Stereolithography and Digital Light Processing (SLA & DLP)

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4. Material Jetting (PolyJet and MultiJet Modeling)

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Realistic Finish

Greater Choices

Multiple Materials and Colors

Polyjet Materials

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2. Digital ABS

3. High Temperature

Wide Range of Applications

4. Transparent

3D Print Clear and Tinted Prototypes

3D Printing With Transparent Material

3D Print Translucent Shades and Patterns

Wide Range of Applications

5. Rigid Opaque

6. Polypropylene-like

3D Print Tough, Flexible Models

7. Bio-compatible

3D Print Medical Devices

3D Printing With Bio-compatible Material

8. Rubber-like

3D Print Flexible, Soft-touch Models

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3D Printing Machine

Makerbot Replicator

Dual Head 3D Printer

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Sheetfed Offset Machine  
Mini Offset Printing Machine  
Flexographic Printing Machine  
Label Master Flexographic Printing Press  
Poly Offset Printing Machines  
Prepress Equipments  
Flip Top Printing Down Frame Single/Double Sided Machine  
Instant Start Metal Halide Plate Exposure  
Plate Coating Whirler  
Plate Curing Equipment  
Damper Roller Washer  
Vertical Process Camera  
3M Plate Processor  
Computer-to-Screen Exposure System  
IGP Plate Processor  
Screen CTP System  
Inkjet CTP System (Computer to Plate Machine)

Rotogravure Printing Machine  
4 Hi Tower (Automatic)  
3 Colour + Stack Unit (Manual)  
Finishing System  
UV Inkjet Digital Printing System  
Perfecting Production System  
Tape Binder  
High Light Color System  
Color Printer  
Digital Press  
Digital Color Press  
Manual Offset Printing Machine  
Rotogravure Printing Machine  
Black and White Digital Print Production System  
Digital Printing Machine  
Paper Binding Machine

### Sample Chapter:

NIIR Project Consultancy Services (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. Its various services are: Pre-feasibility study, New Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Preparation of Project Profiles and Pre-Investment and Pre-Feasibility Studies, Market Surveys and Studies, Preparation of Techno-Economic Feasibility Reports, Identification and Selection of Plant and Machinery, Manufacturing Process and or Equipment required, General Guidance, Technical and Commercial Counseling for setting up new industrial projects and industry. NPCS also publishes various technology books, directory, databases, detailed project reports, market survey reports on various industries and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by Indian and overseas professionals including project engineers, information services bureau, consultants and consultancy firms as one of the input in their research.

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