The Production Manager's Complete Guide to: 3D Printing with Metals

Description:

Metal additive manufacturing (AM) is revolutionizing the manufacture of many products in aerospace, medical and dental, and jewelry to name a few.

Over the next decade, the implementation of metal additive manufacturing (AM) will complete the transition from a purely R&D activity to a full distributed manufacturing process. Understanding the advantages and challenges that this will present, and knowing the companies, and materials that will make it possible is imperative for any process and production manager that wants to take full advantage of this evolution.

This Guide is an accessible entry point for production managers into the world of metal additive manufacturing and is focused specifically on the requirements and practical aspects of implementing metals printing including providing direction on equipment choice, process integration and materials selection.

Written for manufacturing and operations managers who are called to develop and deploy a precise strategy for AM implementation in their company's process workflow, this Guide provides an immediately accessible resource for information on 3D metals printing.

By providing a complete overview of the current state of play in metals AM, this Guide seeks to simplify the decision process and obtain the best production results, limiting trial and error implementation of metals AM to a minimum.

Questions on Metal AM Answered:

This Guide answers important questions such as:
- Which are the technologies that you should implement?
- Which materials should you use to obtain optimal price/speed/quality ratios?
- Should you use metal 3D printing just for functional prototyping or for short-run production?
- What are the characteristics that make a particular product fit to be 3D printed in metal?
- Which prototypes, tools and parts can already be 3D printed?

The reader of this Guide will discover what each metal AM technology can offer in terms of size, speed, costs, production capabilities and automation. It analyzes each of the most commonly used materials to expose advantages and challenges in their utilization. Finally, it explores both the dominant current and near future applications in which metal AM can offer unrivaled manufacturing advantages.

From the Leading 3DP Industry Analyst Firm

This is the first of a series of “Complete Guides” that SmarTech Publishing will be bringing to market. They will cover a host of vital topics in AM that all production managers must come to understand, if they are to better able to utilize and deploy this revolutionary advanced manufacturing technology. These Guides take the strategic insider perspective that the author has achieved and directs them to the needs of the production manager.
Since 2014, the author has published dedicated, in-depth market studies focused on additive manufacturing opportunities in the metals sector.

Contents:

Chapter One: Introduction and Overview
1.1 Prologue
1.2 Why we are Publishing this Guide and Who is It for?
1.3 Is Metal Printing the Right Choice? Five Important Questions
1.3.1 Which Metals are Printable?
1.4 Adopting Industries
1.4.1 Metals, AM and Aerospace
1.4.2 Medical AM and Metals
1.4.3 Metal Printers for Cars
1.4.4 Other Metal AM Users
1.4.5 Evolution of the Metal AM Plant
1.4.6 Five Metal AM Processes: What they are Good for
1.5 The Future of Metals Printing: What to Expect
1.6 Coda

Chapter Two: Uses and Abuses of Metal 3D Printing: Parts and Prototypes
2.1 Prototyping with Metals
2.1.1 3D Printed Metal Molds
2.2 Short Series in Metal: The Additive Factory
2.3 Additive Manufacturing for Large Metal Component and Parts
2.4 Surveying Today's 3D Printed Metals by Industry
2.4.1 Aerospace
2.4.2 Dentistry
2.4.3 Medical
2.4.4 Automotive
2.5 When and Where Not to Use 3D Printed Metals
2.6 Four Major Takeaways from this Chapter

Chapter Three: Types of Metals that Can Be 3D Printed
3.1 3D Printability Criteria
3.2 Steels and Steel Alloys
3.2.1 Steel Uses in Additive Manufacturing
3.3 Cobalt Chrome Alloys
3.3.1 CoCr Uses in Additive Manufacturing
3.4 Titanium and Titanium Alloys
3.4.1 Titanium uses in Additive Manufacturing
3.4.2 Trabecular Titanium
3.4.3 Use of Titanium vs. Other Metals in AM
3.5 Nickel Alloys
3.5.1 Uses in Additive Manufacturing
3.6 Aluminum
3.6.1 Uses in Additive Manufacturing
3.7 A Brief Note on 3D Printed Precious Metals
3.7.1 Types of Precious Metals that can be 3D Printed Today
3.8 Sources of Metal Powders for Additive Manufacturing
3.8.1 Leading Third-Party Metal Powder Suppliers
3.8.2 Largest Raw Metal Supplier
3.9 Price Trends for Metal Powders Used In Additive Manufacturing
3.10 Four Major Takeaways from This Chapter

Chapter Four: Additive Manufacturing Processes Suitable for Metal Printing: Pros and Cons
4.1 Powder Bed Fusion
4.1.1 Laser-based Powder Bed Fusion
4.1.2 Electron Beam Powder Bed Fusion
4.2 Directed Energy Deposition Systems
4.2.1 Blown-powder Based DED
4.2.2 Metal-wire Based DED
4.3 Binder Jetting
4.4 Future Technologies for Metal Printing
4.4.1 Metal Jetting
4.5 Quality Assurance and Process Control for Metal Printers
4.5.1 Problems
4.5.2 Solutions
4.6 Owning a Metal 3D Printer versus Using a Service Bureau
4.7 Some Thoughts on Software
4.7.1 Topological Optimization
4.7.2 Parametric Design
4.7.3 Leading Publishers of Software for AM
4.8 Four Major Takeaways from This Chapter

Appendix A: A Brief Guide to Metal 3D Printer Manufacturers and Metal 3D Printers
A.1 3D Systems (Phenix)
A.2 Additive Industries
A.3 Arcam Metals
A.4 Concept Laser
A.5 DMG Mori
A.6 EOS
A.7 ExOne
A.8 Fabrisonic
A.9 Matsuura
A.10 Optomec
A.11 ReaLizer
A.12 Renishaw
A.13 Sciackey
A.14 Sisma
A.15 SLM Solutions
A.16 Trumpf
A.17 XJet

About the Analyst
Acronyms and Abbreviations Used In this Report

List of Exhibits
Exhibit 1-1: Five Questions for a Potential Metal AM User
Exhibit 1-2: Summary of Top Powder Bed Fusion Markets and Materials
Exhibit 1-3: Review of Available Metal AM Technologies
Exhibit 2-1: Which Technologies to Use for Prototyping
Exhibit 2-2: Which Technologies to Use for Short Series Production
Exhibit 3-1: Most Common Available Steel Powders for Additive Manufacturing
Exhibit 3-2: Most Common Available Cobalt Chrome Powders for Additive Manufacturing
Exhibit 3-3: Most Common Available Titanium Powders for Additive Manufacturing
Exhibit 3-4: Most Common Available Nickel Alloy Powders for Additive Manufacturing
Exhibit 3-5: Most Common Available Aluminum Powders for Additive Manufacturing
Exhibit 3-6: Most Common Available Nickel Alloy Powders for Additive Manufacturing
Exhibit 4-1: Summary of Powder Bed Fusion Markets and Materials
Exhibit 4-2: Laser Metal Powder Bed Fusion System Parameters
Exhibit 4-3: Electron-Based Powder Bed Fusion System Parameters
Exhibit 4-4: Powder-Based Directed Energy Deposition System Parameters
Exhibit 4-5: Notable AM Software Publishers and Products

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