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.

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