

**IME 100 -ADDITIVE MANUFACTURING**

**BASIC CLASS NOTES**

**OCTOBER 26, 2015**

Reading Review and Class Preparation

This should be filled out prior to class.

Key Concepts to Be Discussed in Class:

Questions About Subject Matter for Class Session:

**IME 100 -ADDITIVE MANUFACTURING**

**BASIC CLASS NOTES**

**OCTOBER 26, 2015**

In-Class Question

- Describe the Big Picture of Additive Manufacturing in 50 Words or Less

IME 100 -ADDITIVE MANUFACTURING  
BASIC CLASS NOTES

OCTOBER 26, 2015

3-D Printers

- Turbine Blade Made in Single Machine



Wikimedia Commons



Wikipedia



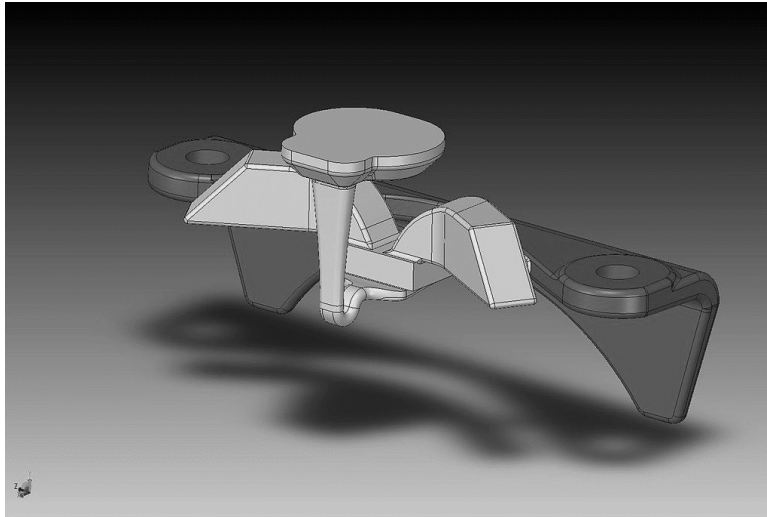
Wikipedia



Wikipedia

CAD File

- A Good CAD File
  - Is the First Step
- Sent to Machine



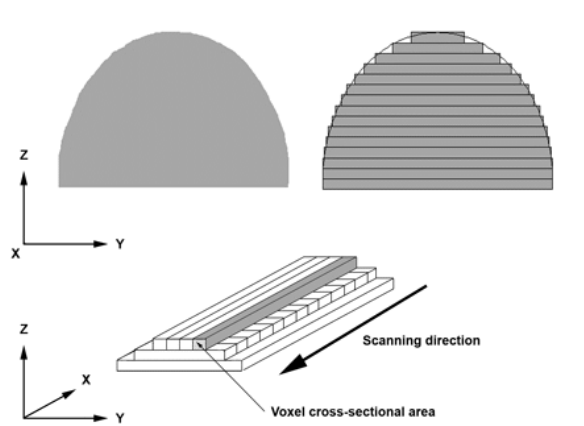
OKFoundry Company from Richmond, USA



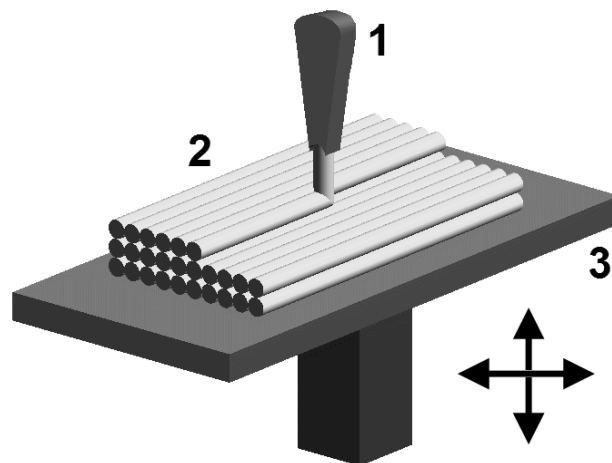
Wikimedia Commons

Layering

- Resin or Powder Blend



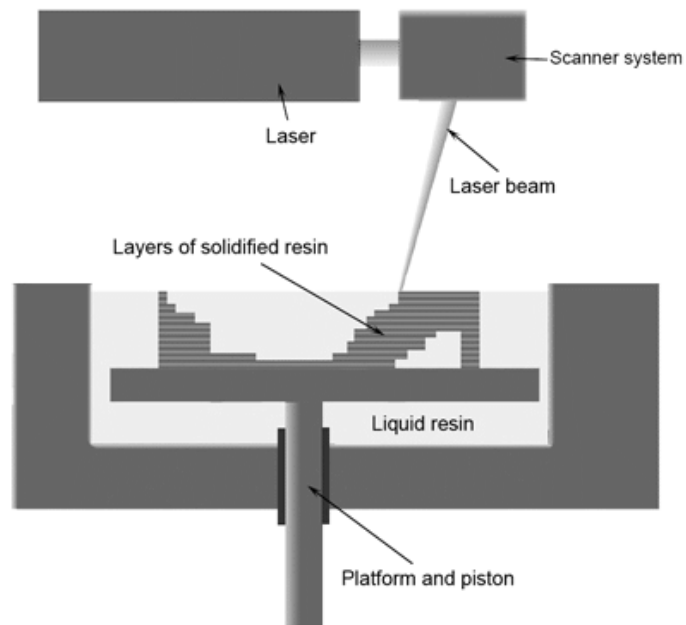
Materialgeez



Zureks via Wikipedia

StereoLithography

- Similar to Sintering



Materialgeeza

Summary

- A New Paradigm
- Old/Traditional
  - Make in Many Steps
  - Usually Bulk Forming/Casting Followed by Machining



Wikipedia

- New
  - One Machine Does Everything
  - Material Only Where We Want It



Wikimedia Commons



Wikipedia