



Additive Manufacturing Evaporative Casting (AMEC) Merges the Best of Both Processes

Metal Additive Manufacturing

Still Not Competitive for Mass Production



AMEC Solves with Paradigm Shift

Printing Volume → To Printing Surface



Volume \propto Time, \$

AMEC is cheaper, faster, with better properties

Key Benefits:

- Up to 200 lbs.
- 1 day or less
- Complex geometry
- Tight tolerances
- No tooling, 1 piece flow
- As cast microstructure
- Safer (no explosive powders)
- 1000's of ferrous & nonferrous alloys available

AMEC merges 3D printing with lost foam casting.

Superheated molten metal vaporizes the polymer print to get an exact replica.



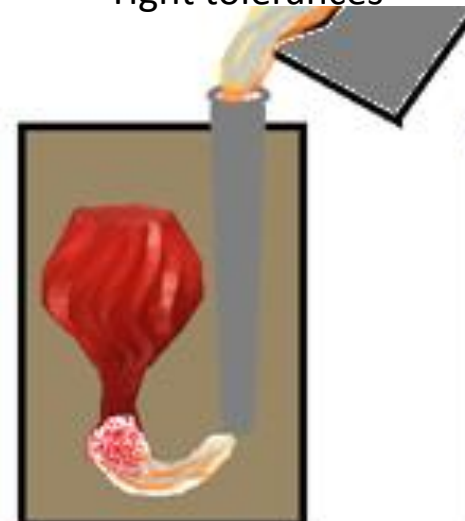
Print PLA & Glue to foam Gating



Apply Ceramic Coating



Melt Metal



Pack in Loose Sand & Pour Metal to Vaporize PLA
(Cutaway View)



Allow to Cool & Solidify



Obtain Metal Replica same shape as PLA