

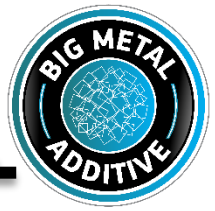
We produce large metal products:

- Making "impossible" parts
- Design, optimization, prototypes, production
- Quickly producing hard-to-source components
- Specializing in demanding structures such as pressure vessels

www.bigmetaladditive.com

Slade Gardner, PhD
President, Big Metal Additive
info@bigmetaladditive.com

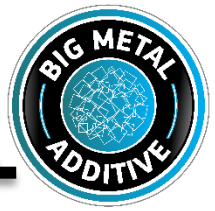
Hybrid Additive Manufacturing



- Finish Machined
 - Inside And Out
 - Ready To Go!
- Unsupported Overhangs
- Uniform Layers And Starts
- Isotropic Mechanical Properties
- Dimensionally Compliant
 - Tolerance Surfaces
 - Mating Surfaces
 - Fastener Holes
 - O-ring Grooves
 - Fluid Passages



Challenges and Opportunities



Technical

Product specific →→→→ mostly materials & feedstock

Market

Federal funding aligned with endless technology fascination (not mfg/production)

NRE is a big bet for customers

Need to elevate trust at manufacturing companies

Strategic material wire stockpiles (specialty steel, stainless, nickel, duplex)

Innovation

Materials / feedstock (pilot scale toll wire production)

Technical publication for preforms (casting, forging, billet replacement)

Contingent digital inventory / 2nd source qual – future supply readiness

Federally subsidized volumetric NDE

Lightning Round Session

Presentations are limited to 5 minutes, if using slides please try to keep to 3 slides max.

Please address the following questions during your session:

- What role does your organization play in the large near net shape market space?
- What do you see as current technical and/or market challenges in the US infrastructure for production of large-scale metal components
- What do you see the largest challenges and/or opportunities for future innovation in the large near net shape market space?

