

# integrated Additive Manufacturing Technologies (iAMT)

## iAMT – integrated Additive Manufacturing Technologies

### CAPABILITIES

Competencies include: engineering, design, analysis and fabrication services to the Aerospace and Medical industries.

- Design complex components without adding cost
- Surpass limitations of conventional technologies
- Change designs without hassle
- Skip investment in manufacturing tools
- Shorten time to market
- ProX 300: metal powder Bed Fusion – Direct Laser Melting
- Stratasys: thermoplastics and photopolymers
- Design for Additive Manufacturing,
- Optimization, and Certification

Feature Resolution, Dimensional Tolerances and Surface Roughness:

- ~ 100 microns features
- ~ 50 – 100 or better micron tolerances
- ~ 20 micron repeatability – 3 axes
- ~ 5 Ra surface finish or better (~ 200  $\mu$  inches)



iAMT is a national technology leader in additive manufacturing and exploits the use of direct laser melting for high temperature metals and ceramics (thermoplastics and photo-polymers available).

Additive Manufacturing is the future of product development and manufacturing with lower cost parts, assemblies and infrastructure. DLM 3D printing is a game changer, building parts directly from electronically designed files using layers of fine metal/ceramic powders and a high energy laser to melt and/or fuse corresponding layers. The result is a complex fully dense part that can be manufactured in a fraction of the time without waste. Moreover, intricate designs and shapes can be made unlike transitional subtractive manufacturing with no tooling costs and little to no post processing.

iAM Tech's team and its parent ZIN Technologies has decades of experience in aerospace design, product and systems development, optimized design solutions, materials engineering, and process verification and validation providing full life cycle development enabling an integrated value chain for additive manufacturing products and processes.

- ❑ iAM Tech (iAMT) is a subsidiary of ZIN Technologies a minority owned Small Business (SB) and is located in Middleburg Heights, Ohio
- ❑ iAM Tech manufactures unique fully dense parts with the precision and efficiency of traditional large scale subtractive and cast production methodologies
- ❑ iAMT is working with NASA, and Tier I/II OEMs to develop next generation propulsion, aero and space flight parts
- ❑ Expertise includes the process powder-to-part certification and validation for aerospace and space flight parts



## ZIN Technologies



Voyager Space External Use  
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