



# SINTAVIA

## Sintavia Capabilities

### Vertical Integration of the AM Supply Chain

Sintavia is an innovator in the design, additive manufacturing, and material testing of optimized metal parts for the global Aerospace & Defense industry. The Sintavia facility is self-sufficient with respect to design, fabrication, quality testing, and post-processing. Every capability listed below is done within the Sintavia facility and under the exacting standards required of these precision industries we serve.

### Metal Printing

- Electron Beam Powder Bed Fusion
  - 1 x Arcam Q20+
  - 1 x A2X
- Laser Powder Bed Fusion
  - 2 x SLM Solutions 280HL Dual
  - 1 x SLM Solutions 280HL Single
  - 5 x EOS M290
  - 2 x EOS M400-1
  - 4 x EOS M400-4
  - 1 x Concept Laser M2 Dual
  - 1 x TRUMPF TruPrint 3000
- Materials include Nickel, Aluminum, Stainless Steel, and Titanium Alloys

### Non-Destructive Testing

- CT Scanning
- Radiographic Scanning
- Blue Light Scanning
- Fluorescent Penetrant Inspection
- Eddy Current
- Ultrasonic X-Ray
- Magnetic Particle
- Shop X-Ray, Magnaflux
- Welding Inspection

### Surface Finishing

- Blasting (wet/dry)
- Polishing

### Machining

- CNC and Manual Milling
- CNC and Manual Lathe Turning
- Wire EDM Cutting
- Support Removal
- 5 and 3 Axis VMC

### Thermal Processing

- Vacuum Heat Treatment
- Hot Isostatic Pressing
- Aluminum Box Oven

### Mechanical Testing

- Ambient and High Temperature Fatigue
  - LCF and HCF
- Crack Propagation Growth
- Fracture Toughness
- Ambient and High Temperature Tensile
- Impact

### Lab Services

- Chemistry
  - ICP-OES
  - Interstitial Element N, O, H, C, S
  - Sub-ppm Elemental Analysis
- Flow Test
- Tap Density Test
- True Density Test
- Morphology Evaluation
- Failure Analysis
- Metallographic Evaluation
  - Preparation
  - Grain Size
  - Microstructure
  - Macro Etch/Micro Etch
  - Porosity/Density Evaluation
- Particle Size Distribution
- SEM w/EDS
- Hardness
  - Rockwell
  - Superficial
  - Microhardness
  - Vickers