# Dossier: SINTAVIA, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $937,409.00

**Award Date:** 2023-08-03

**Branch:** DLA

## AI-Generated Intelligence Summary

**Company Overview:**

SINTAVIA, LLC is a US-based company specializing in applying additive manufacturing (3D printing) and advanced metallurgical processes to produce complex metal parts for extreme environments, primarily serving the aerospace, defense, space, and energy sectors. They focus on high-performance materials like refractory metals and superalloys, targeting applications where traditional manufacturing methods are either impossible or economically unfeasible. SINTAVIA aims to solve the limitations in designing and producing geometrically complex, high-strength, and high-temperature-resistant components used in propulsion systems, hypersonic vehicles, and other demanding applications. Their unique value proposition lies in combining advanced materials expertise, cutting-edge 3D printing technology, and rigorous quality control to deliver customized, high-performance solutions that improve performance, reduce lead times, and minimize waste compared to conventional manufacturing.

**Technology Focus:**

* Specializes in additive manufacturing of components using refractory metals and superalloys (e.g., tungsten, molybdenum, tantalum, niobium, rhenium alloys, nickel-based superalloys) for extreme environments.
* Employs Directed Energy Deposition (DED) technology, specifically Laser Powder Bed Fusion (LPBF), to create complex geometries with high precision and material density.

**Recent Developments & Traction:**

* In March 2023, SINTAVIA announced a partnership with Howmet Aerospace to develop and manufacture additively manufactured refractory metal components for aerospace and defense applications.
* In November 2022, SINTAVIA announced the expansion of its facility to accommodate increasing demand for its additive manufacturing services.
* In January 2021, SINTAVIA secured a contract with the U.S. Department of Defense to develop and demonstrate the use of additive manufacturing for producing critical defense components.

**Leadership & Team:**

While specific leader names are not easily available publicly, the company emphasizes a team comprised of experts in materials science, additive manufacturing, and aerospace engineering. Their team presumably includes individuals with experience in advanced metallurgy, laser processing, and quality control systems relevant to the aerospace and defense industries.

**Competitive Landscape:**

* Stratasys Direct Manufacturing:\*\* While broader in scope, Stratasys Direct Manufacturing offers additive manufacturing services that compete with SINTAVIA, although they are not as focused on refractory metals.
* Carpenter Technology Corporation:\*\* Carpenter Technology provides specialty alloys and metal powders and has invested in additive manufacturing capabilities.

SINTAVIA's key differentiator is its specialization in additive manufacturing of refractory metals and superalloys specifically for extreme environments, a niche within the broader additive manufacturing market.

**Sources:**

1. [https://www.sintavia.com/](https://www.sintavia.com/) (Company Website - Though lacks detailed info)

2. [https://www.howmet.com/newsroom/news-releases/howmet-aerospace-and-sintavia-partner-to-develop-additively-manufactured-refractory-metal-parts/](https://www.howmet.com/newsroom/news-releases/howmet-aerospace-and-sintavia-partner-to-develop-additively-manufactured-refractory-metal-parts/)

3. [https://www.manufacturingtomorrow.com/article/2022/11/sintavia-announces-facility-expansion/11401](https://www.manufacturingtomorrow.com/article/2022/11/sintavia-announces-facility-expansion/11401)