# Dossier: Elmet Technologies LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,798,852.00

**Award Date:** 2023-08-30

**Branch:** DLA

## AI-Generated Intelligence Summary

**Company Overview:**

Elmet Technologies LLC is a vertically integrated US-based manufacturer specializing in the production of high-performance refractory metals, specifically tungsten, molybdenum, and their alloys. Their primary business is supplying these materials in various forms, including mill products (rod, sheet, wire), machined parts, and specialty materials (e.g., heavy metal alloys) for critical applications in aerospace, defense, medical, and industrial markets. Elmet aims to solve the supply chain vulnerability and quality control issues associated with sourcing these materials from foreign suppliers, offering a domestic, reliable, and high-quality alternative. Their unique value proposition centers on providing vertically integrated manufacturing, from raw material powder production to finished parts, ensuring complete control over material properties, quality, and lead times, allowing for highly customized and application-specific solutions for demanding end-users.

**Technology Focus:**

* Manufacturing of high-density tungsten alloys for kinetic energy penetrators, radiation shielding, and balancing applications, achieving densities exceeding 18 g/cc through advanced powder metallurgy processes.
* Production of molybdenum and TZM (Titanium-Zirconium-Molybdenum alloy) components for high-temperature furnace elements, aerospace structures, and semiconductor manufacturing, offering exceptional creep resistance and high melting points.

**Recent Developments & Traction:**

* Elmet Technologies announced an expansion of their Lisbon, Maine manufacturing facility in 2022, to increase capacity for tungsten and molybdenum products in response to growing demand from aerospace and defense customers. This expansion included investment in new powder metallurgy equipment and advanced machining capabilities.
* Elmet received AS9100D certification in 2021, demonstrating their commitment to quality management systems required for aerospace and defense applications.
* Elmet continues to expand their online presence with improved material datasheets and technical resources aimed to help engineers understand material properties and their appropriate applications.

**Leadership & Team:**

* Brian Mercer (President): Extensive experience in manufacturing and materials engineering, including senior leadership roles within Elmet.

**Competitive Landscape:**

* ATI Specialty Materials: Competes in the refractory metals market, but Elmet's focus on vertical integration and application-specific solutions differentiates it.
* Global Tungsten & Powders (GTP): Large global supplier of tungsten powders and products. Elmet focuses more heavily on finished parts manufacturing and quick turn capabilities.

**Sources:**

* [https://elmettechnologies.com/](https://elmettechnologies.com/)
* [https://elmettechnologies.com/about-elmet/](https://elmettechnologies.com/about-elmet/)
* [https://www.metal-am.com/metal-additive-manufacturing-of-tungsten-a-review/](https://www.metal-am.com/metal-additive-manufacturing-of-tungsten-a-review/) (Referenced for General Tungsten Alloy Usage)