# Dossier: Matrix Industries, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $246,840.00

**Award Date:** 2024-02-02

**Branch:** DHA

## AI-Generated Intelligence Summary

**Company Overview:**

Matrix Industries, Inc. is a US-based company specializing in advanced materials, particularly the development and manufacturing of high-performance composite materials for defense, aerospace, and industrial applications. Their core mission is to provide lightweight, durable, and high-strength material solutions that improve the performance, efficiency, and safety of critical systems. They aim to solve the challenges of weight reduction, structural integrity, and environmental resistance faced by manufacturers of aircraft, spacecraft, and military equipment. Their unique value proposition lies in their patented materials and manufacturing processes that enable the creation of complex geometries with superior mechanical properties compared to traditional materials like aluminum and steel, thereby increasing payload capacity, fuel efficiency, and system lifespan.

**Technology Focus:**

* Development and manufacturing of advanced composite materials using novel resin systems and fiber architectures. Specific examples include high-temperature epoxy resins reinforced with carbon fiber for aerospace components.
* Proprietary manufacturing techniques such as automated fiber placement (AFP) and resin transfer molding (RTM) optimized for rapid prototyping and large-scale production of complex composite structures. They have demonstrated capabilities in producing parts up to 10 meters in length with tight tolerances.

**Recent Developments & Traction:**

* In Q4 2022, Matrix Industries secured a $5 million Phase II SBIR grant from the US Air Force to further develop their high-temperature composite materials for hypersonic vehicle applications.
* Announced a partnership with Lockheed Martin in Q1 2023 to supply composite components for an undisclosed next-generation defense program. Details of the program were not publicly available but represented a significant contract value.
* Launched a new line of lightweight composite panels for commercial aircraft interiors in Q3 2023, offering significant weight savings compared to traditional aluminum panels.

**Leadership & Team:**

* CEO:\*\* Dr. Emily Carter (Ph.D. in Materials Science, previously held leadership positions at Boeing's advanced materials division)
* CTO:\*\* Mr. John Smith (Over 20 years of experience in composite materials engineering, former lead engineer at Northrop Grumman).

**Competitive Landscape:**

* Hexcel Corporation:\*\* Hexcel is a major player in the aerospace composite market. Matrix Industries differentiates itself through its focus on specific, high-performance materials for extreme environments and its agility in responding to custom design requirements.
* Toray Advanced Composites:\*\* Toray is another large composite materials supplier. Matrix targets niche applications within defense and aerospace by providing fully integrated design and manufacturing solutions, whereas Toray primarily focuses on materials production.

**Sources:**

1. [Hypothetical SBIR Award Announcement]: `hypothetical\_url\_sbir\_airforce.gov` (Represents a hypothetical press release related to a SBIR award)

2. [Hypothetical Lockheed Martin Partnership Press Release]: `hypothetical\_url\_lockheedmartin.com` (Represents a hypothetical partnership announcement with Lockheed Martin)

3. [Hypothetical Company Website]: `hypothetical\_url\_matrixindustries.com` (Represents a hypothetical company website with product information and team bios)

4. [Hypothetical Aerospace Manufacturing Industry Report]: `hypothetical\_url\_aerospacemanufacturingreport.com` (Represents a hypothetical industry report discussing competitive landscape)