# Dossier: ARMORLUBE LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,964.00

**Award Date:** 2022-11-02

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

ArmorLube LLC specializes in providing advanced surface treatment solutions, primarily focused on enhancing the performance and lifespan of firearm components, weapon systems, and other industrial and military applications. Their core mission is to improve reliability, reduce friction, and increase corrosion resistance through the application of proprietary thin-film coatings. They aim to solve the problems of wear, galling, jamming, and environmental degradation that plague high-performance mechanical systems. Their unique value proposition lies in their application of Physical Vapor Deposition (PVD) processes to create durable, low-friction coatings with specific properties tailored to the needs of demanding applications within the defense and aerospace sectors, often offering enhanced performance over traditional treatments like chrome plating or bluing.

**Technology Focus:**

* Application of Physical Vapor Deposition (PVD) coatings, including Chromium Nitride (CrN), Titanium Aluminum Nitride (TiAlN), and Diamond-Like Carbon (DLC) coatings. These coatings significantly increase surface hardness, wear resistance, and corrosion protection.
* Customized coating processes optimized for specific materials (steel, aluminum, titanium) and applications (firearm actions, barrels, gas systems, aerospace components). Tailoring ensures optimal performance characteristics, such as reduced coefficient of friction (down to 0.1 or lower) and increased part longevity.

**Recent Developments & Traction:**

* Partnerships with various firearm manufacturers for OEM application of ArmorLube coatings to production firearms. Specific partner details are difficult to ascertain but are implied through product offerings.
* Continued marketing and refinement of coating application for diverse firearm types, suggesting ongoing development and adaptation of their processes.
* While definitive public funding information is unavailable, the consistent presence and activity suggests ongoing revenue generation and potentially private investment.

**Leadership & Team:**

* While specific names of key leaders were difficult to ascertain from readily available web sources, the company demonstrates a focused technical expertise in PVD coating processes and the firearms industry. The absence of easily accessible leadership information may suggest a smaller, privately held company.

**Competitive Landscape:**

* H&M Metal Processing: Specializes in similar surface treatment solutions, including PVD coatings, for various industries. ArmorLube differentiates itself by specifically targeting the firearms market and offering specialized coatings designed for firearm applications.
* IONBOND: A global provider of PVD coating services across multiple sectors. ArmorLube's focused approach on firearms, combined with specialized application knowledge, allows them to compete effectively within that niche market.

**Sources:**

* [https://armorlube.com/](https://armorlube.com/)
* [https://www.thefirearmblog.com/?s=armorlube](https://www.thefirearmblog.com/?s=armorlube)
* [https://www.ar15.com/forums/AR-15/Armorlube/12-586693/](https://www.ar15.com/forums/AR-15/Armorlube/12-586693/)