# Dossier: OPTIPRO SYSTEMS, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,802,999.00

**Award Date:** 2023-04-12

**Branch:** MDA

## AI-Generated Intelligence Summary

**Company Overview:**

OPTIPRO SYSTEMS, LLC, located in Ontario, NY, is a leading manufacturer of precision optics manufacturing equipment, specializing in grinding, polishing, and metrology solutions for high-precision optics. Their core mission is to enable the efficient and cost-effective production of advanced optical components used in a variety of industries, including aerospace, defense, biomedical, and consumer electronics. They address the challenges of achieving extremely tight tolerances, complex geometries, and high surface quality in optical manufacturing, problems often hindering the development of advanced imaging and sensing technologies. Their unique value proposition lies in their integrated approach, offering not only advanced machinery but also software, training, and process development expertise, which optimizes the entire optics manufacturing workflow, leading to reduced cycle times, improved yield, and enhanced performance of the finished optical components.

**Technology Focus:**

* PROCAM Software Suite:\*\* A proprietary software platform for designing, simulating, and optimizing optical manufacturing processes. This includes toolpath generation, process control, and data analysis for efficient machine operation.
* UltraForm Finishing (UFF) Machines:\*\* Specifically designed for deterministic polishing of complex optical surfaces, achieving nanometer-level accuracy. These machines employ advanced control algorithms and proprietary polishing techniques to remove material precisely and efficiently. The company claims achieving surface accuracy down to λ/20.

**Recent Developments & Traction:**

* Partnership with AIM Photonics:\*\* OPTIPRO SYSTEMS has a long-standing collaboration with AIM Photonics, a Department of Defense-backed initiative to advance integrated photonics manufacturing. This collaboration includes developing new manufacturing processes and equipment for integrated photonics devices.
* Expanded Product Line:\*\* OPTIPRO has continued to refine their UltraForm Finishing machine line, releasing enhanced models with improved capabilities, including increased automation and advanced metrology integration for real-time process monitoring and control.

**Leadership & Team:**

* Mike Thomas (President):\*\* Mike Thomas has over 30 years of experience in the optics industry, with a strong background in engineering and sales. He brings a wealth of knowledge in equipment sales and process development.
* Ron Schulze (VP of Technology):\*\* Ron Schulze brings a strong background in precision engineering and software development.

**Competitive Landscape:**

* Precitech:\*\* Precitech is a key competitor specializing in ultra-precision machining solutions, including diamond turning and grinding machines for optics. OPTIPRO SYSTEMS differentiates itself with its specific focus on deterministic polishing techniques and its integrated approach encompassing software, equipment, and process development expertise.
* Loomis Products:\*\* Loomis Products is a manufacturer of precision grinding, lapping and polishing equipment. OPTIPRO differentiates itself through offering broader product portfolio with advanced metrology integration and closed-loop feedback control for iterative process correction.

**Sources:**

* [https://optipro.com/](https://optipro.com/)
* [https://www.photonics.com/](https://www.photonics.com/) - Searching for OPTIPRO Systems information
* [https://www.rochester.edu/sei/](https://www.rochester.edu/sei/) - Related to Rochester's strong optics industry and OPTIPRO's involvement.