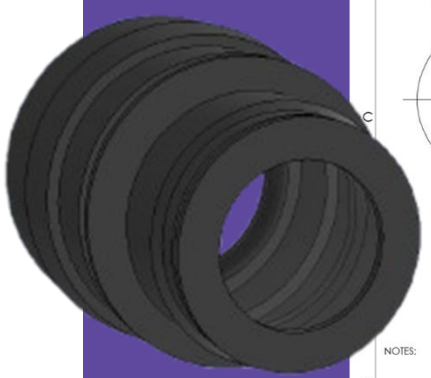
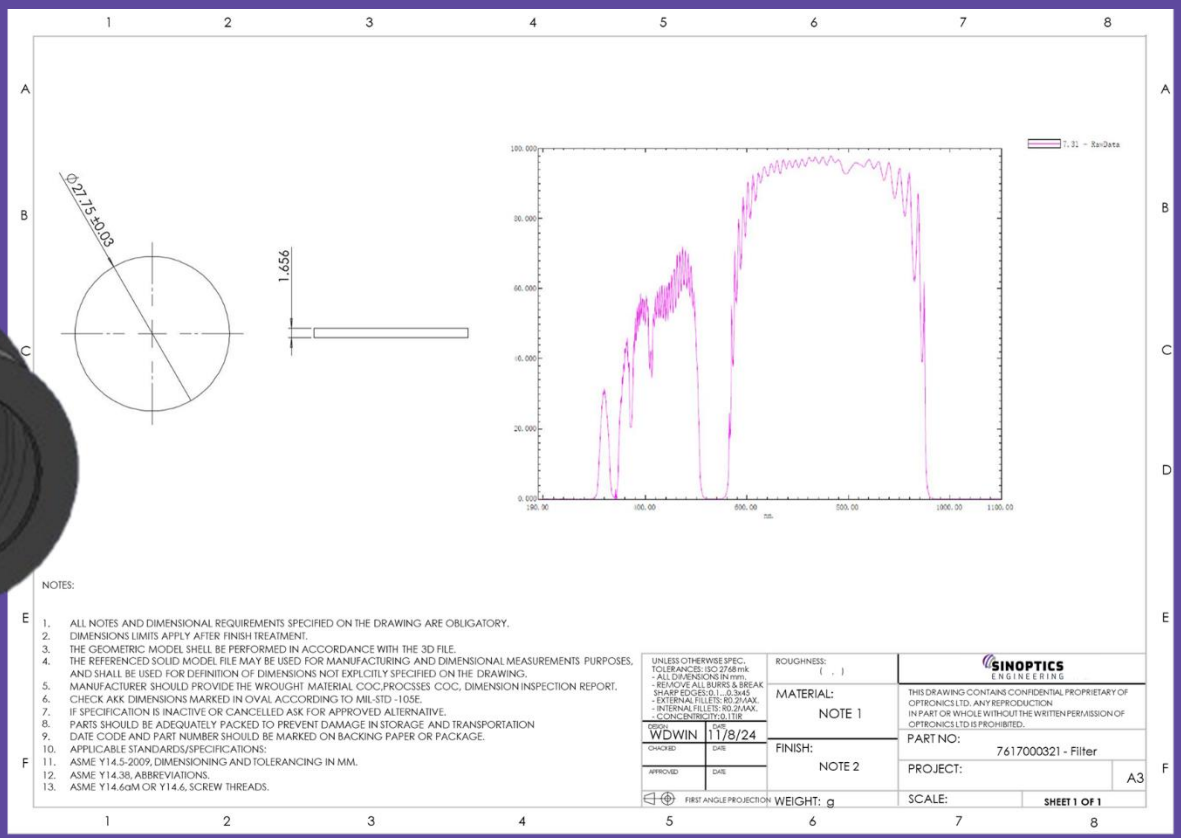
How Custom Optics Helped Secure a Government Contract with a Leading Defense Firm

Case study II





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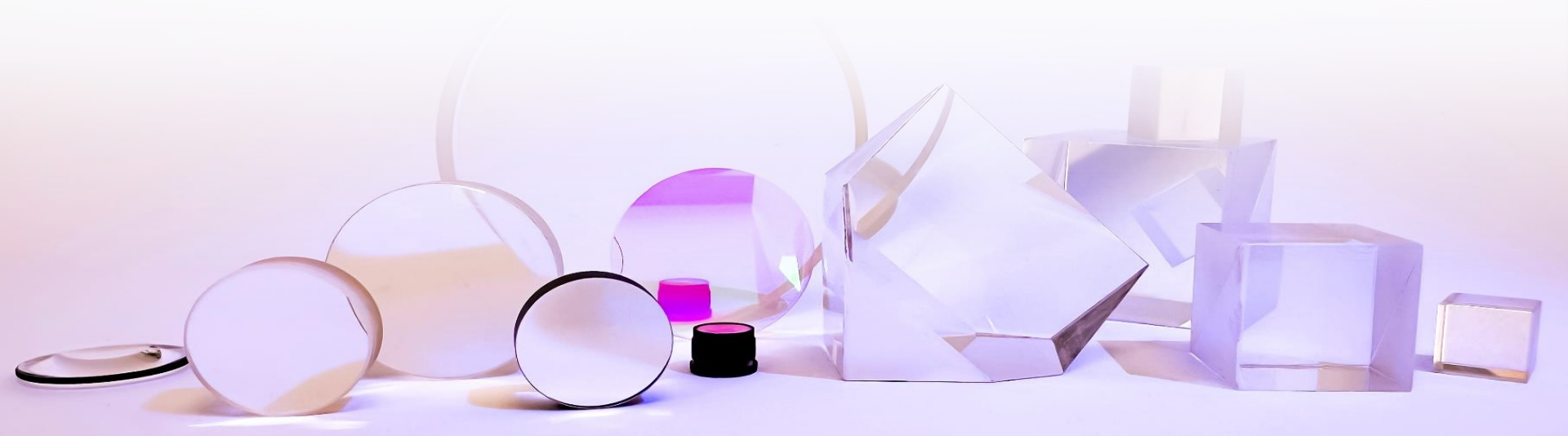
Precision Optics for Thermal Imaging Devices

A defense contractor in an APAC country contacted us with an RFI for a high-performance objective lens assembly for a unique version of one of their best-selling thermal imaging systems.

The project was put out to bid by government agencies, and it required 1,500 built units within a limited deadline, and...



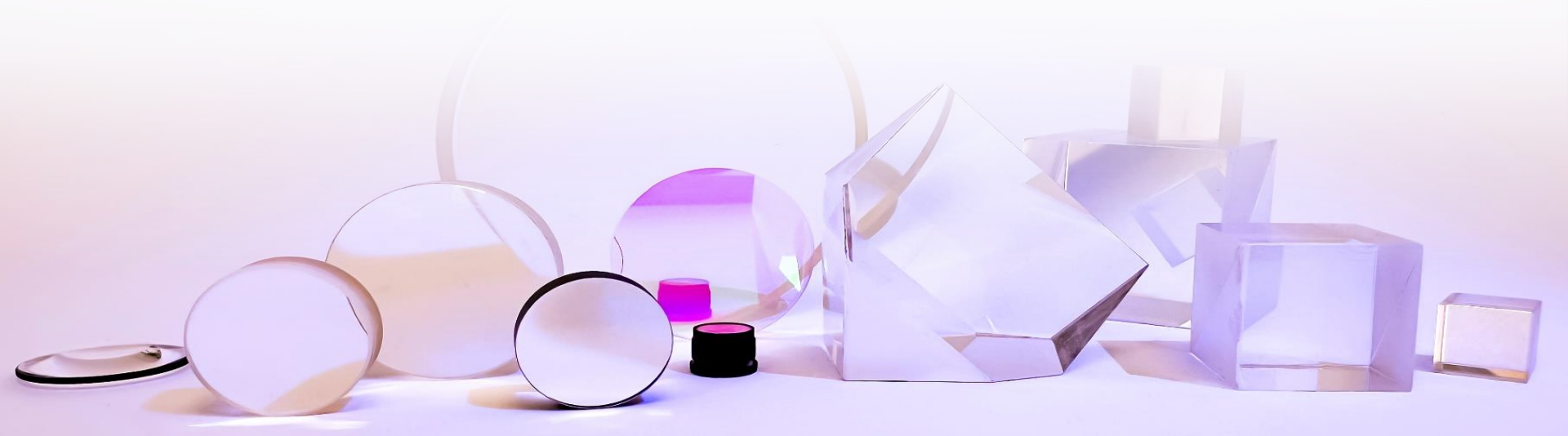
...as well as a **7-year contract** for spare and replacement parts. The specifications required adjustments in several core parts.

So the client sought for a one-stop-shop supplier.

What's the deal?

Optical Performance: The lens assembly required high transmittance in the LWIR band, thermally tuned anti-reflective coatings, and precision aspheric lenses to reduce aberrations

Durability: The assembly must survive heavy impact and hard weather conditions with a sealed plastic enclosure to avoid dust and moisture



Production Standards: *ISO 9001-certified* processes and pre-production sample tests to ensure mass-production device compatibility and uniformity

Timeline: The first 500 units were needed within 6 months, followed by phased delivery of the remaining units

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Challenges!

Expertise in production & full **quality assurance**, including **ATPs** and reproducibility, to ensure both short-term delivery and long-term reliability

Rock Solid Supply Chain: Continuous sourcing and delivery of high-quality plastic moldings, precision lenses, and essential parts

We’re an important link in a big chain, hence a wide perspective is imminent

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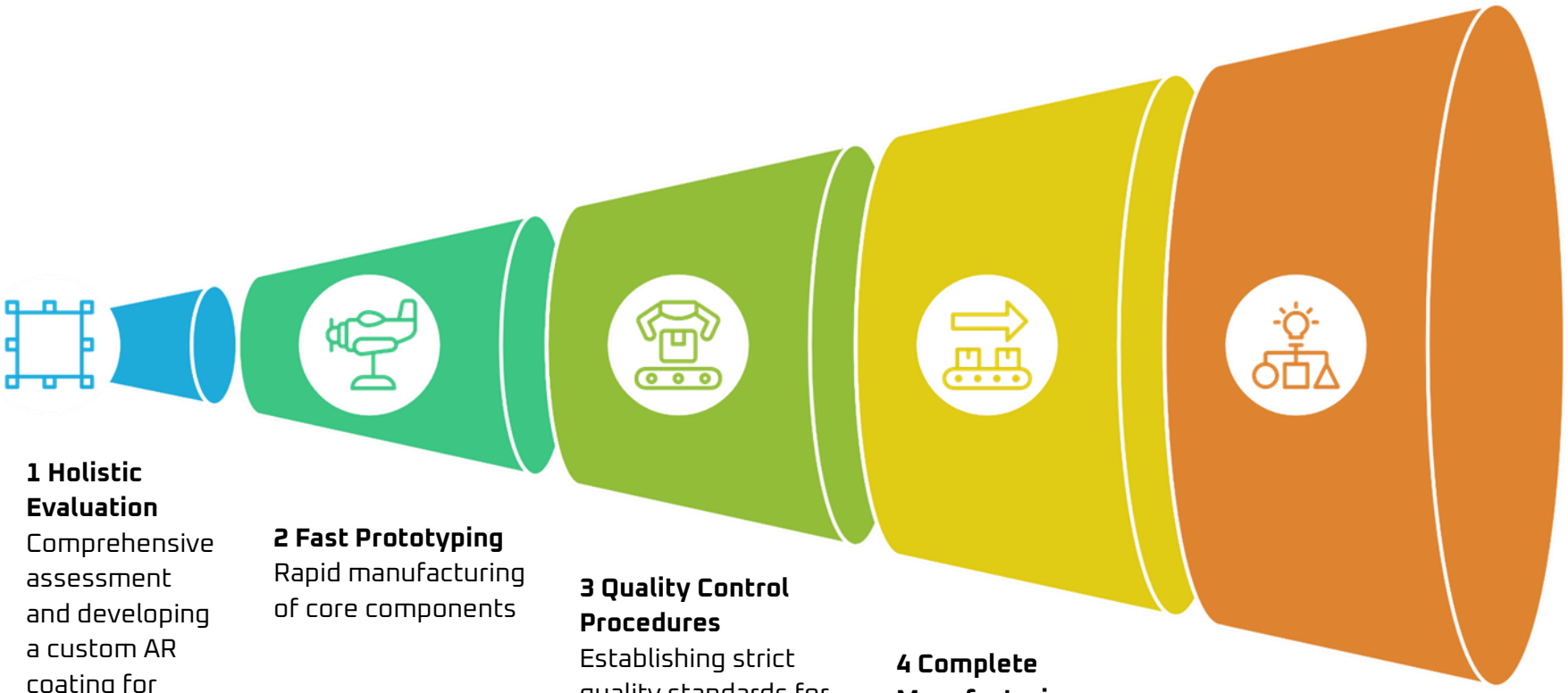
What did we do?



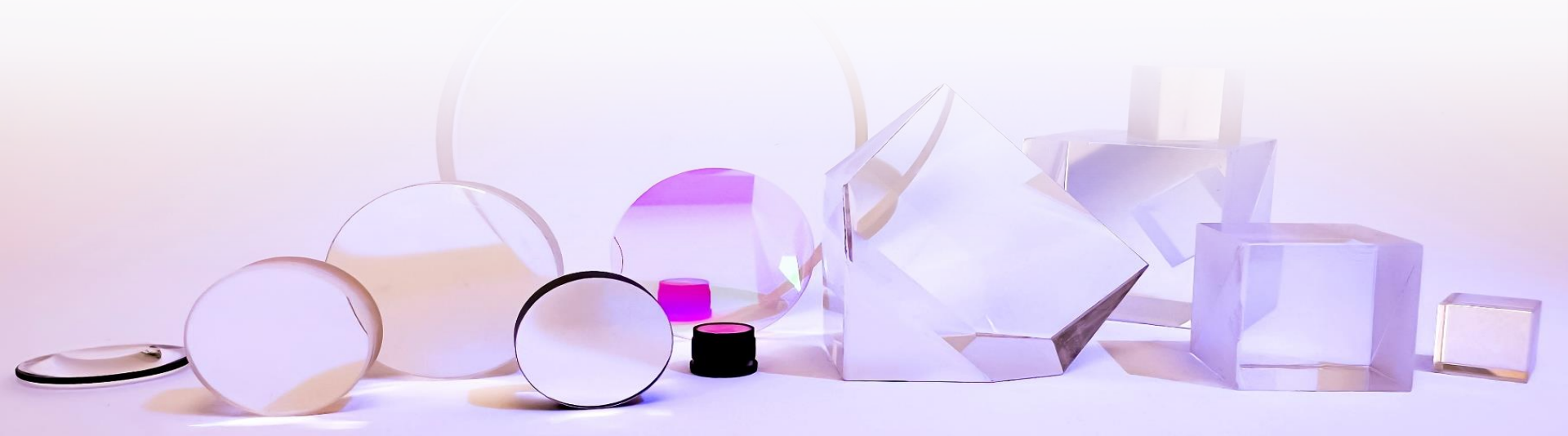
1 Holistic Evaluation
Comprehensive assessment and developing a custom AR coating for

2 Fast Prototyping
Rapid manufacturing of core components

3 Quality Control Procedures
Establishing strict quality standards for assembly and reproducibility

4 Complete Manufacturing
Full-scale production and shipping just-in-time

5 Complete Manufacturing
Managing supply schedules for products and spares using our tier 1-4 chain



Yoohoooooo!!!

Proven results: Our turnkey solution was selected by the customer because of our robust supply chain, ability to scale production, and stringent quality standards, which led to the successful bid.

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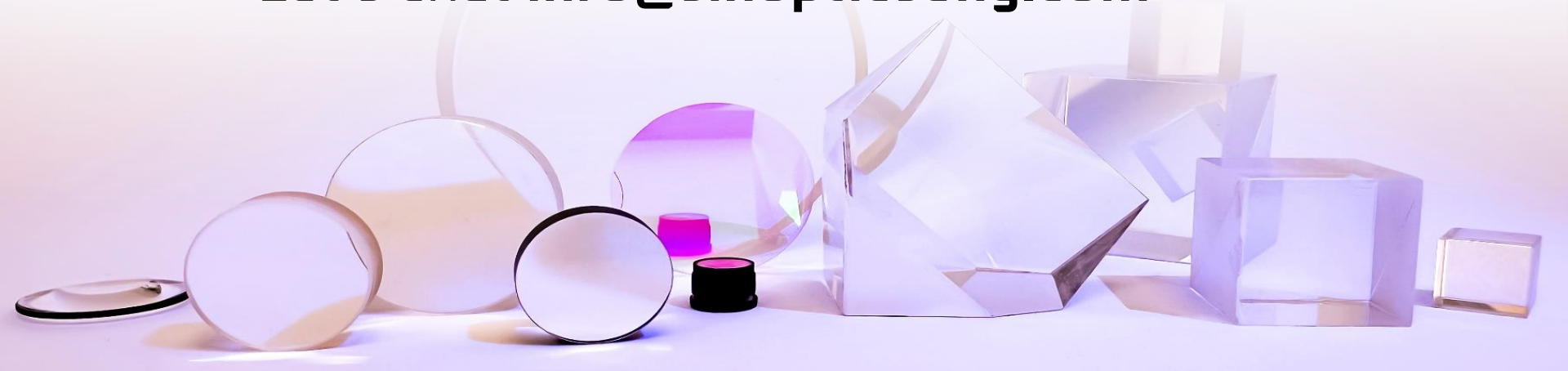
Let's chat **info@sinopticseng.com**