

Cost Savings Analysis Report

ISG: Thermal Camera Case Assembly & Packaging Optimization

The Challenge

Firefighters' thermal cameras frequently get wet during use, and the open-cell foam in their watertight cases absorbs moisture, leading to mold and mildew. In-house assembly depended on temporary workers, diverting procurement staff from core duties, while spray adhesives released harmful CFCs. The original Pelican cases also involved long lead times and higher costs.

CIS Solution Highlights

- Switched to **closed-cell foam inserts** → **no water absorption**, eliminating mold/mildew risk
- Provided fully pre-assembled, die-cut foam cases
 - Foam pre-inserted and ready-to-use
 - Delivered directly to ISG → open → load cameras → ship
- Eliminated need for **temporary labor**, spray adhesives, and related sourcing
- Changed case manufacturer to **Underwater Kinetics** → **achieved shorter lead times + hard-cost reduction**
- Redesigned product layout & materials → **improved aesthetics**, functionality, and **suitability for end-users** (firefighters)

Key Benefits Summary

Hard Savings (Direct, measurable dollar impact) Lower unit cost of watertight cases (Pelican → Underwater Kinetics)

- Eliminated recurring cost of temp workers
- Removed spend on adhesives, tapes, and related assembly materials
- Soft Savings (Efficiency, quality & risk reduction) Zero CFC emissions from spray adhesives (improved workplace air quality & regulatory benefit)
- No more sourcing/managing temp labor → procurement team freed for strategic work
- Shorter raw-material lead times + vendor consolidation
- Increased production throughput & better storage utilization
- Superior end-user product (cleaner, more reliable, mold-free)

Other Operational Gains Received ready-to-load cases → **significantly faster camera integration & packaging**

- Higher production capacity with the same footprint
- Better overall product quality at lower total cost

Bottom-Line Impact

Monthly Recurring Total Cost Savings: \$8,700.00
Annually: \$104,400

Delivered through a combination of hard cost reductions, labor elimination, process efficiency gains, and enhanced product quality.

Outcome: Lower cost, faster throughput, safer/more reliable product for firefighters