



Total IA Manticore Zerotop

Precision moulded components for defence-grade laptop technology

CLIENT

Total IA

SECTOR

Defence / Aerospace

APPLICATION

Manticore Zerotop laptop

SERVICES

Design support · Tooling ·
Injection moulding

The Challenge

Total IA needed a UK manufacturing partner for a fully UK-designed and manufactured defence-grade laptop. Components had to deliver excellent structural integrity with tight dimensional control, withstand demanding defence and naval environments, and scale from a long-term R&D programme into reliable production. Component performance and consistency were critical.

Our Solution

OTP partnered with Total IA across a **four-year R&D programme**, developing and manufacturing eight precision injection moulded components for the Manticore Zerotop — including key structural and interface elements such as the chassis, screen housing and user interface components.

Each part demanded careful consideration of material performance, tooling accuracy, moulding consistency and long-term durability. Advanced tooling and controlled moulding processes ensured every component met the required standards for strength, fit, finish and repeatability.

Design & Manufacture

- 1 Technical Moulding** — Specialist expertise for complex structural parts.
- 2 Tooling Development** — Advanced tooling and continuous process refinement.
- 3 Precision Control** — Tight dimensional accuracy and repeatability.
- 4 Key Components** — Chassis, screen housing and interface elements.
- 5 UK Scale-Up** — Scalable UK-based support from R&D to production.

Why It Matters

This project highlights OTP's ability to support advanced UK manufacturing programmes in high-performance sectors such as defence, aerospace and government technology. By combining technical injection moulding, advanced tooling and reliable process control, OTP helped deliver critical components for a robust defence-grade laptop built to meet demanding operational requirements.

8 precision parts

for a 100% UK-designed & manufactured device



The Manticore Zerotop — engineered for defence and naval deployment

The Result

- ✓ Successful scale-up from R&D into production
- ✓ Entirely UK-manufactured defence-grade device
- ✓ Complex structural parts with proven durability
- ✓ Consistent precision, fit and finish across parts
- ✓ Four-year development partnership sustained