

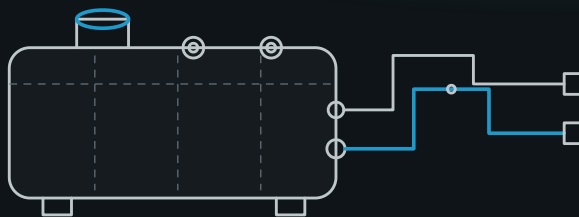
CTE ADVANCED TECHNOLOGIES

Precision Fabricate

ALUMINIUM

5083 · 6082 · 6061 · 2014A

Aluminium fluid systems, complex-geometry bent tube, tanks and assemblies, fabricated to your design.



WHAT WE FABRICATE

- ✓ Fuel & header tanks
- ✓ Oil & dielectric reservoirs
- ✓ Fluid-transfer lines, complex geometry
- ✓ Baffled & welded assemblies
- ✓ Helium-tested & PPAP'd

HOW WE BUILD IT

Manufactured to your design

We build to your drawings and specification, with DFM input at the design stage — from prototype to series production.

Motorsport timelines & quality

Delivered to the schedules and tolerances demanded at the pinnacle of motorsport: Right First Time, On-Time.

APQP & PPAP production control

Governed by APQP planning and PPAP approval — control plans, inspection and full material traceability (MTR).

Precision fabricated to the highest standards, and certified accordingly.

A fabricated aluminium tank and a flight-critical one differ in one thing: evidence. From fuel and oil tanks to fluid-transfer lines in myriad designs and complex geometry, CTE manufactures to your design and certifies the result — helium leak-tested to the most demanding standards, under APQP & PPAP.

SECTORS WE NOW SERVE

01 Motorsport & niche automotive

Fuel and header tanks built to zero-leak tolerance. CTE: helium fine-leak testing and weld-integrity validation.

02 Defence & UAV

Lightweight tanks, reservoirs and ground-support systems. CTE: low-volume, traceable build to MIL / AMS / prime requirements.

03 EV, power electronics & data

Dielectric immersion-cooling reservoirs and coolant manifolds. CTE: clean, leak-tight aluminium, helium-validated, series-capable.

04 Energy & hydrogen

Coolant and cryogenic-adjacent containment. CTE: pressure- and leak-tested fabrication with a full evidence package.

05 Specialist industrial & marine

Header tanks, expansion vessels and bespoke fluid handling. CTE: built from your concept, finished, tested and documented.

BUILT TO YOUR DESIGN, UNDER APQP & PPAP – EVERY PART CARRIES THE EVIDENCE

Coded TIG welding

F1-audited, coded to your specification

Helium leak testing

Mass-spec, fine-leak

X-ray / RT & dye-pen

Volumetric & surface NDT

CMM & 3D scanning

Dimensional validation

CNC bend & hydroform

Complex, repeatable geometry

Integrated machining

Finished assemblies, not just parts

APQP / PPAP

Control plans & MTR traceability

ISO 9001 & King's Award

International Trade 2026

Specify the test, not just the part

Tell us the leak rate, pressure and standard your application demands, and we build and certify to it. Engage us early to make the part manufacturable, testable and cost-effective before it is committed.

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Talk to our commercial team →

MATERIAL READOUT – ALUMINIUM

GRADES

5083 / 6082 / 6061 / 2014A

BUILT FOR

Fuel · oil · coolant · dielectric

LEAK INTEGRITY

Helium fine-leak to 1×10⁻⁸ atm·cc/s

STANDARDS

ASME VIII · AMS · MIL-STD-883 M1014