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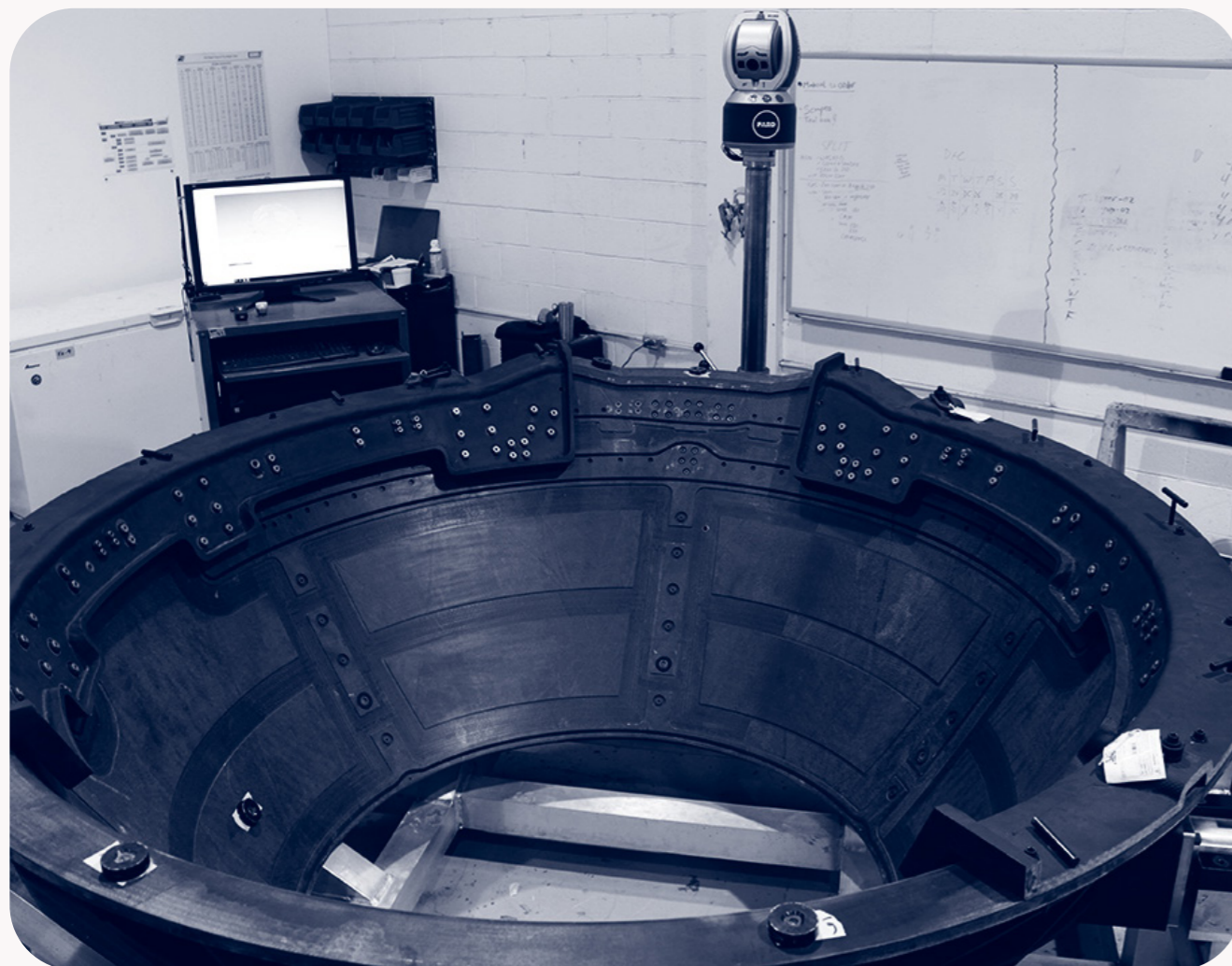
# CTS COMPOSITES

Specialist tooling and fixturing partner for  
advanced manufacturing programs



# TOOLING AS PROGRAM FOUNDATION

CTS partners with engineering teams to get tooling right upfront, ensuring long-term production stability is built in from the start.



Once tooling architecture is fixed, these parameters are difficult to change. Tooling decisions carry direct technical and operational consequences.

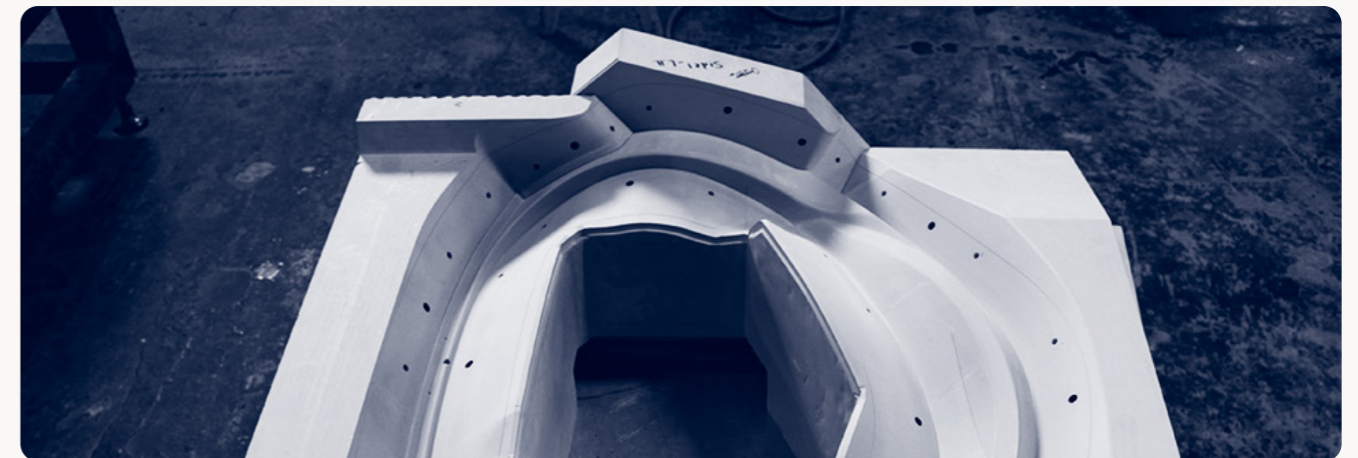
**CTS works with engineering teams to ensure tooling solutions support reliable manufacturing performance.**

# OUR APPROACH

CTS supports advanced manufacturing programs from tooling definition through manufacture and validation.

Our involvement includes:

- Tooling specification support
- Evaluation of material behaviour and durability
- Tolerance strategy development
- Assessment of tooling design before manufacture
- Technical collaboration during program development



**Tooling decisions involve technical trade-offs:**

- Tolerance versus cost
- Cycle time versus durability
- Complexity versus robustness

**CTS works with engineering teams to resolve these relationships before tooling manufacture begins.**

# OUR PRODUCTS

Tooling solutions aligned to application requirements, production rate and lifecycle expectations.

CTS supports engineering teams in developing tooling specifications suitable for production environments.

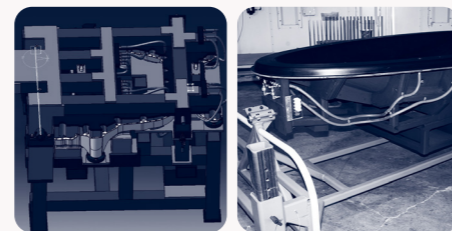
## Patterns and molds

Composite tooling engineered for dimensional accuracy and structural stability. Primary design considerations include thermal behavior and CTE.



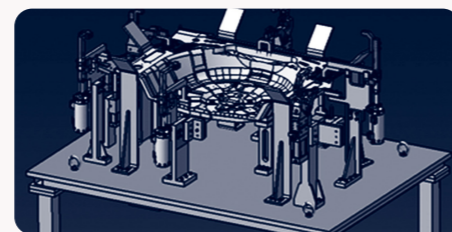
## Fixturing systems

Precision CNC and assembly fixturing solutions designed to maintain alignment and repeatability during assembly and manufacturing.



## Composite, pre-peg, metal and hybrid tooling

Tooling solutions developed for environments where composite and metallic materials interact. CTS evaluates thermal expansion behaviour, structural loading and interface precision across materials.











# OUR CAPABILITIES

Material selection is based on structural performance, environmental exposure and dimensional stability.

CTS evaluates machinability, durability, and long-term behavior before tooling manufacture. Manufacturing processes are aligned with technical performance and production requirements.

CTS operates a fully equipped manufacturing environment capable of supporting complex tooling programmes at scale, including:

-  20,000 sq ft manufacturing facility
-  Large-format 5-axis CNC milling (up to 16' x 10' x 5', ±0.005" tolerance)
-  3-axis routing and cutting
-  400°F curing ovens (up to 28' in length)
-  Autoclave access (up to 20' x 8.5')
-  3,500 sq ft temperature-controlled clean room
-  Coating and spray booth (up to 30' x 14' x 12')
-  Manual milling, welding and drilling capabilities



# QUALITY

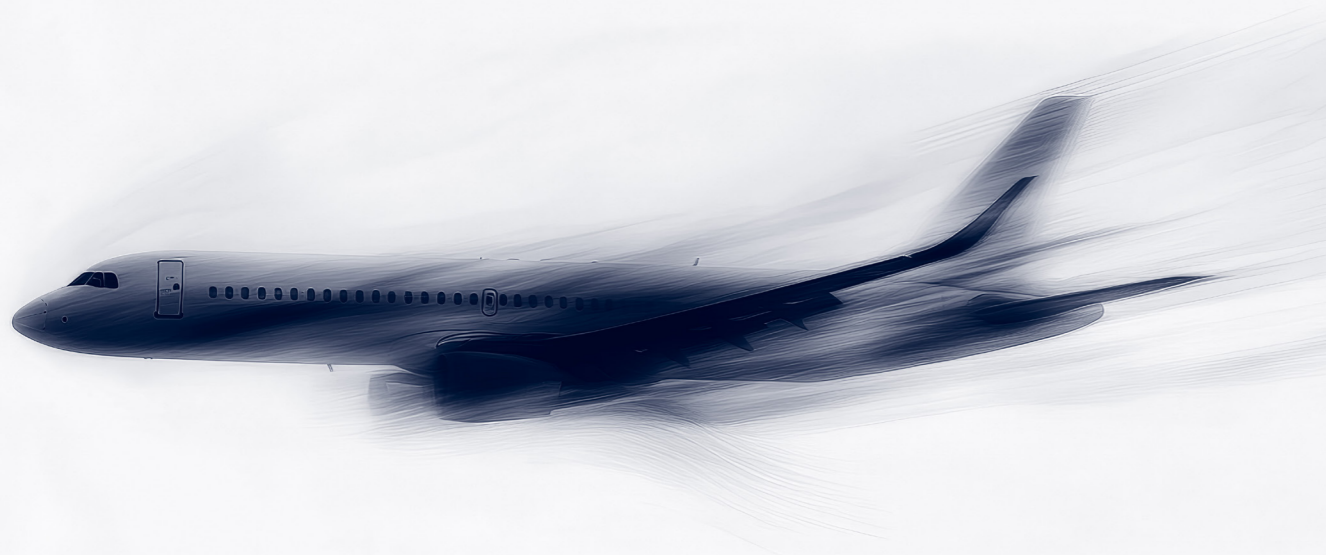
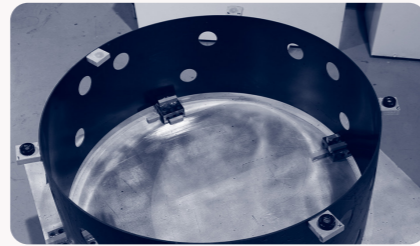
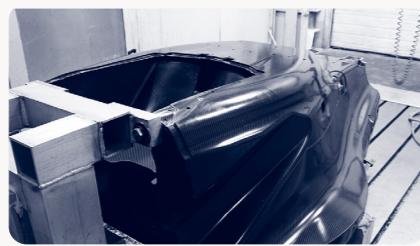
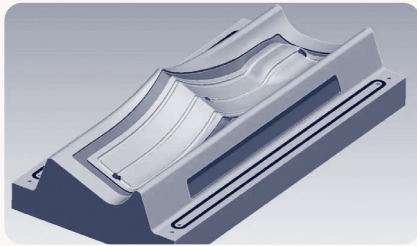
CTS maintains ISO 9001-certified quality systems to ensure tooling meets specification requirements. Tooling is tested and validated using FARO laser measurement technology, and verified against production performance expectations prior to release.

# SECTORS WE SERVE

- Aerospace
- Automotive
- Defence
- Marine
- Energy and industrial applications



CTS supports programs where dimensional accuracy, repeatable manufacturing and operational reliability are essential.



# GET IN TOUCH

Engage CTS when defining tooling solutions for advanced manufacturing programs.

Contact our team to discuss your requirements.



**Mobile:**  
+1-514-210-5380



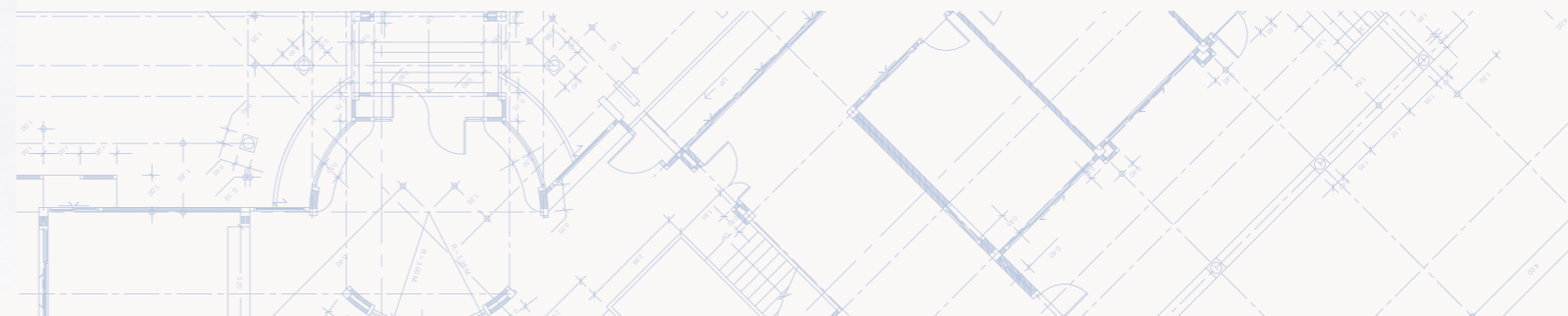
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COMPOSITES INC.

**Tooling that allows manufacturing programs  
to perform exactly as intended.**

