



WHAT CSP CAN LEARN FROM HIGH-PERFORMANCE AUTOMOTIVE COMPOSITES

Unite! Alliance CSP

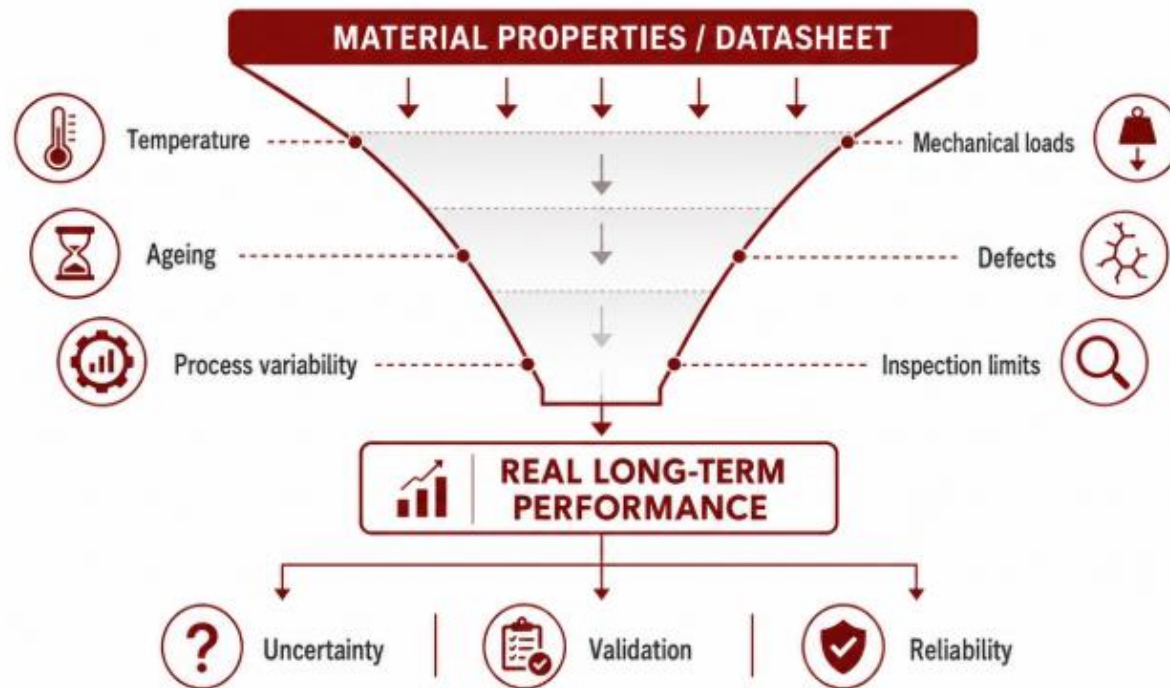
SERGIO DE JUAN, PhD – R&D MANAGER IN MANAGING COMPOSITES

WHAT CSP CAN LEARN FROM HIGH-PERFORMANCE AUTOMOTIVE COMPOSITES



Different applications. Similar challenge:
Turning advanced materials into reliable systems.

THE COMMON CHALLENGE



Advanced materials
only create value
when their real long-
term performance can
be understood,
controlled and trusted

WHO WE ARE: MANAGING COMPOSITES



MANAGING
COMPOSITES

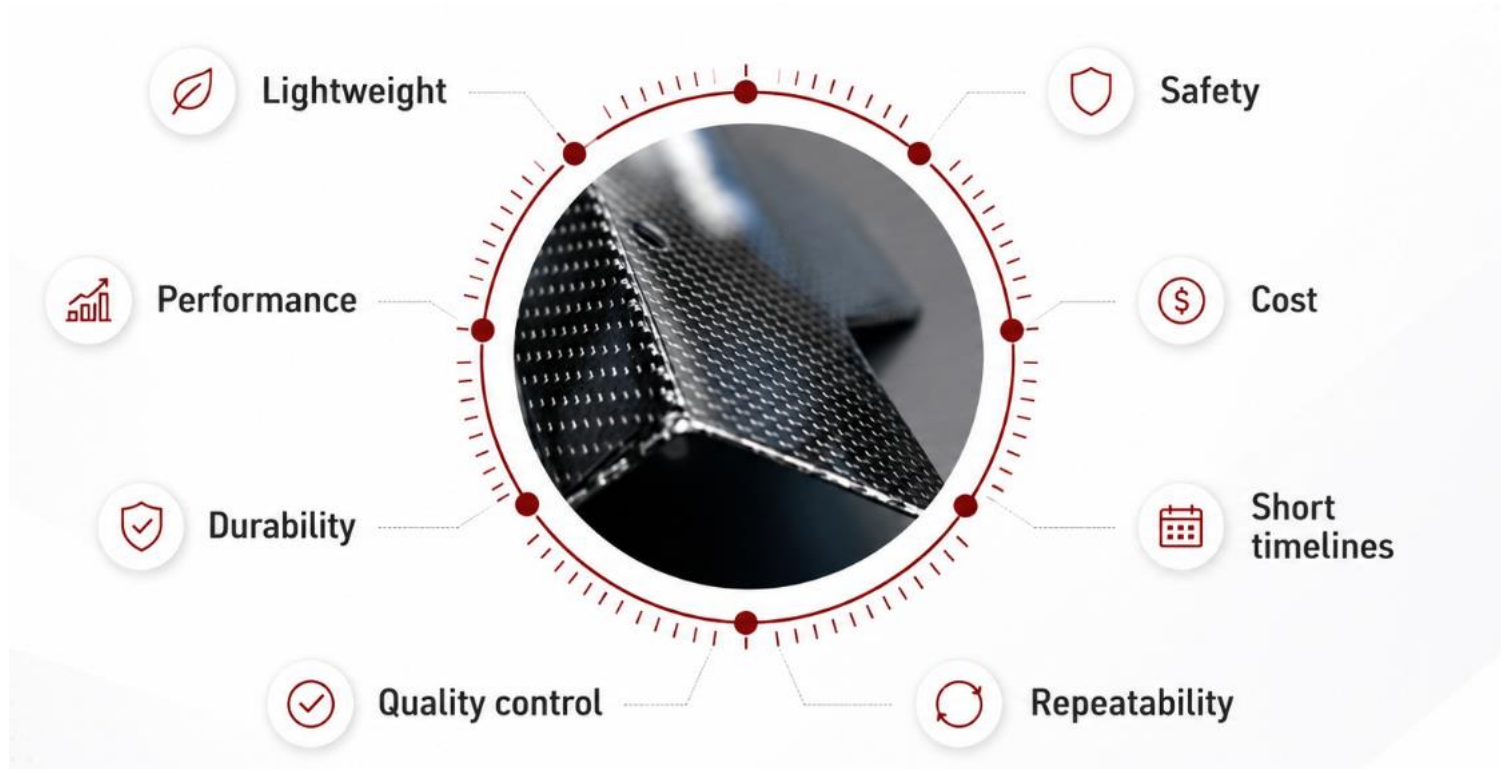


SERGIO DE JUAN, PhD
R&D MANAGER

- Industrial composite engineering & manufacturing
- High-performance sectors
- Full development chain
- Turn-key solutions
- R&D-driven approach



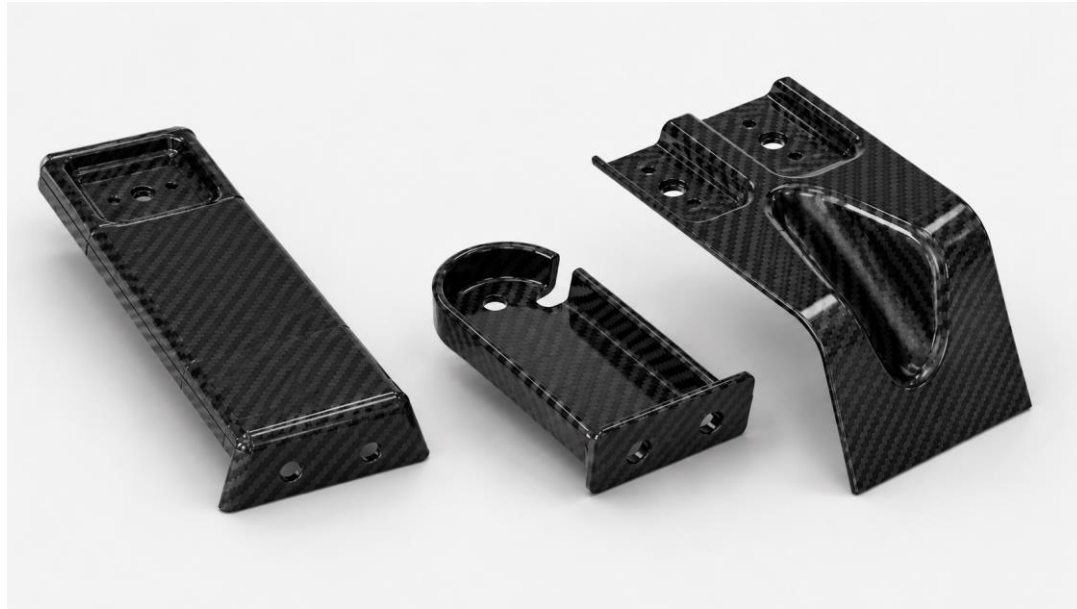
WHY HIGH-PERFORMANCE AUTOMOTIVE IS A USEFUL BENCHMARK



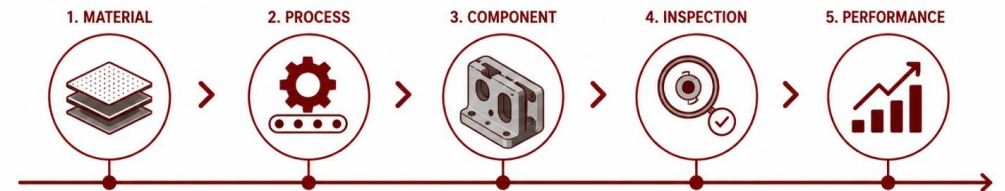
Automotive forces materials to prove performance under real industrial constraints

Lesson 1: A COMPONENT IS NOT JUST A MATERIAL

Brackets



Failure is driven by load paths and local details, not only by laminate properties.

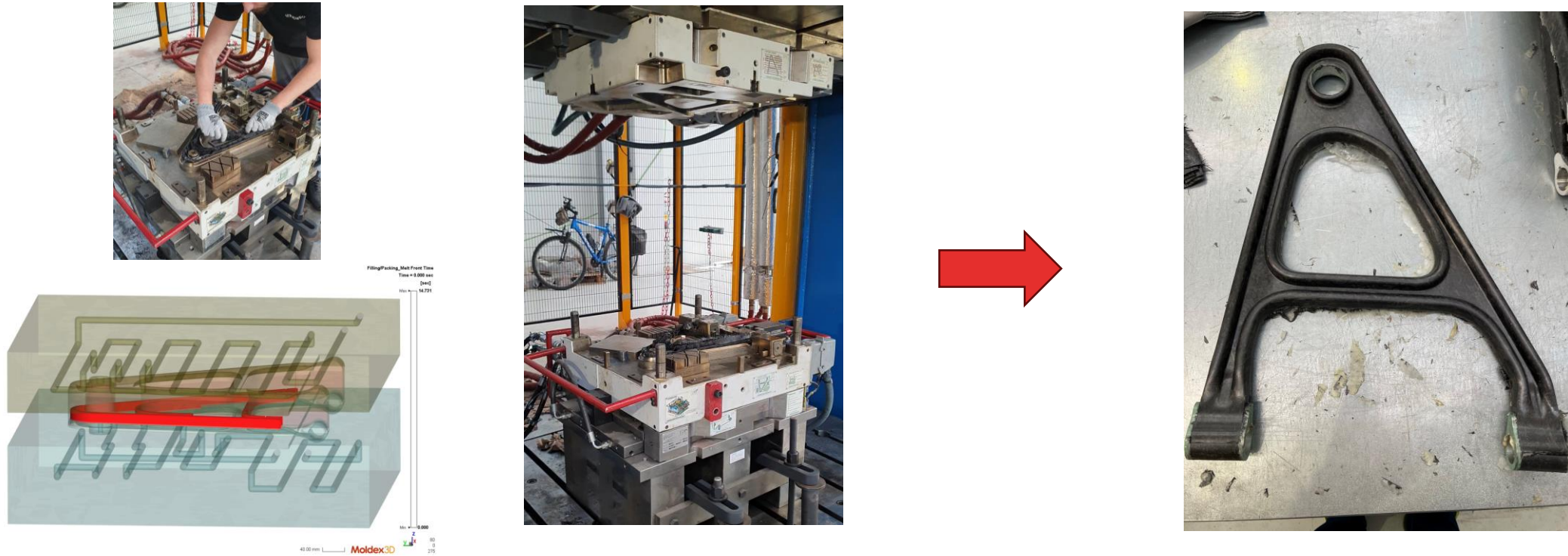


Lesson 2: DURABILITY STARTS AT DETAILS



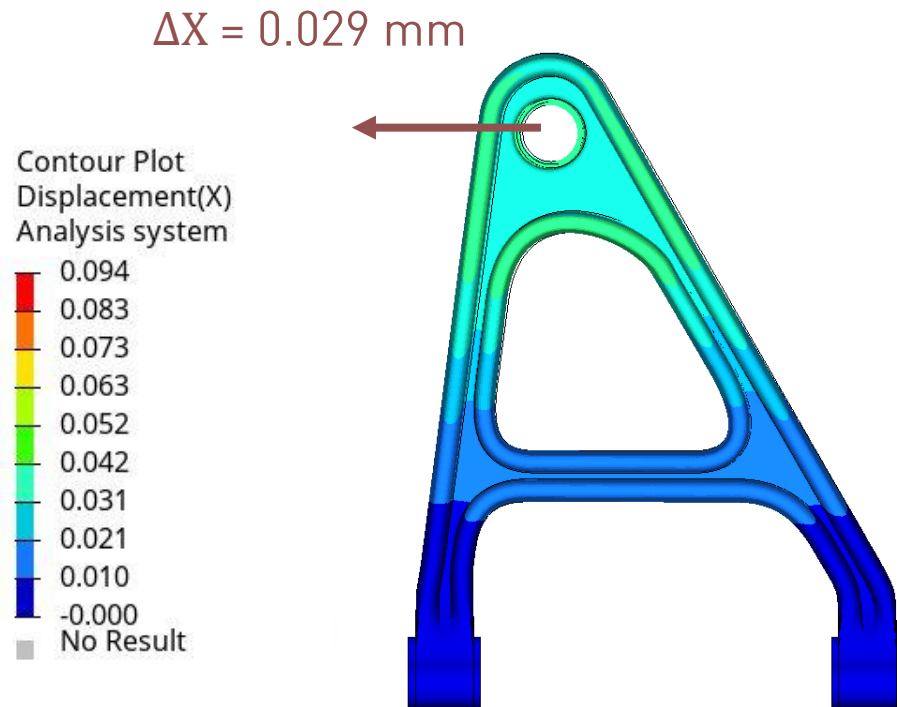
Durability is often decided locally: holes, joints, edges and interfaces.

Lesson 3: PROCESS WINDOW DEFINES PERFORMANCE



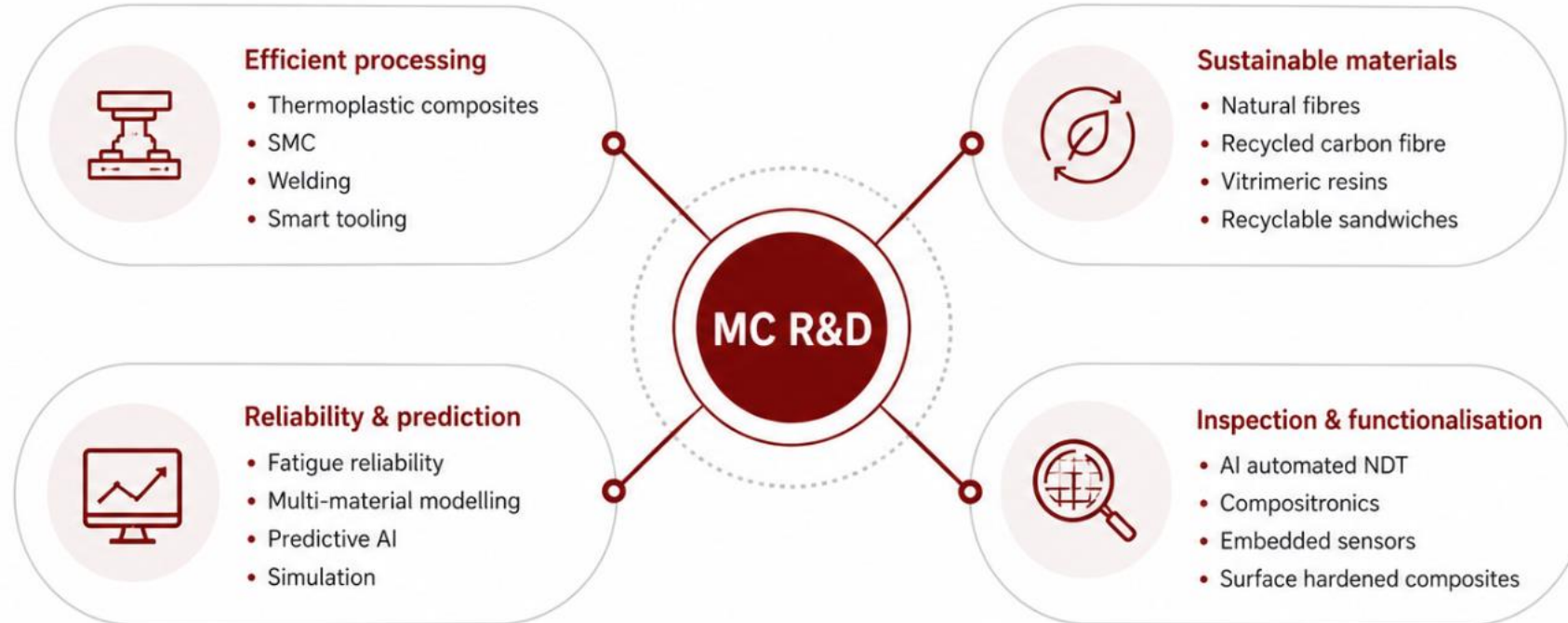
The process is not just how we manufacture the part; it defines the part.

Lesson 4: SIMULATION NEEDS A TEST ANCHOR



Simulation reduces risk only when it is calibrated with real material and component behaviour

MC R&D LINES WITH POTENTIAL TRANSFER



MC R&D focuses on making advanced composites more efficient, sustainable, predictable and inspectable.

CLOSING NOTES

CSP does not need to copy automotive composites

It can benefit from the same industrial reliability
mindset

Design for performance
Manufacture for repeatability
Test for durability
Inspect for reliability
Validate before scaling



MANAGING
COMPOSITES