

3D. ENGINEERING. DESIGN. SIMULATION.

**CREAFORM**

# TRANSPORTATION

For more than a decade now, Creaform has been involved in projects of all sizes with major players in the transportation industry, and is committed to address the most difficult requirements. Our staff has quickly gained notoriety within various business circles, and our customers know they can count on their effectiveness, thoroughness and professionalism.

## DESIGN

For your needs pertaining to product development & design, 2D drawings & advanced surfacing, engineering & project management, Creaform can help you get started, seamlessly incorporate your complex work structures, or complete a project. We work from our office or from yours, and we take care of your confidential work packages with secure servers, thoroughness and professionalism.

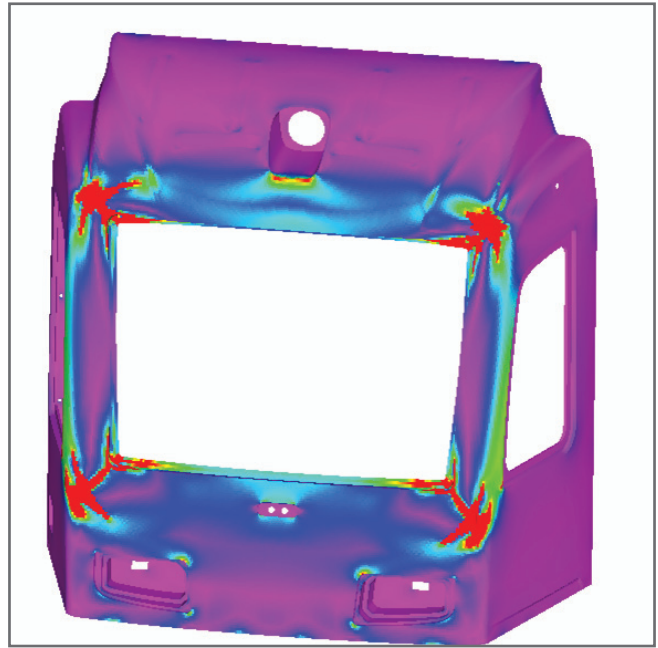
- Train/bus interiors and furniture
- Industrial design and styling
- Advanced surfacing for external panels and interior trims
- Design adaptation to regional standards or requirements
- Integration of Creaform human resources into project teams
- Prototyping and design reviews
- 3D models from 2D drawings (retrofitting)
- Electrical routing and schemes



## ANALYSIS

To ensure compliance of your designs with all relevant international industry standards, you can count on the thoroughness of Creaform's structural analysis and computational fluid dynamics teams. Verify your work with us, or trust us to certify our own.

- Structural simulation (FEA)
- Computational fluid dynamics (CFD)
- Dynamic analysis (random vibration, frequency response)
- Explicit solving (drop tests, crash tests, high velocity impacts)
- Non-linear (static, transient, inertial)
- Mechanical fatigue and life prediction analysis
- Certification to transportation standards by professional engineers: APTA, IEC, ASTM, CSA



## MANUFACTURING

Developing products not only involves creating virtual models and prototypes, it also means making these ideas into real things. Creaform has extensive knowledge and experience in creating all the necessary equipments required to manufacture those ideas in an innovative and cost-efficient way. Our proven metrology track record provides us with a solid design foundation for integrating turnkey solutions into your quality control processes.

- Complex fabrication tooling and inspection fixtures
- Methods and complex part nomenclature
- Instrumentation schematics
- Safety and security, maximum loading certification
- Quality control methods
- Sourcing

