

# FATIGUE & DURABILITY FOR RUBBER CAE SERVICES

## WORLD LEADING EXPERTISE

Endurica's fatigue specialists are rubber industry experts who engage our technology portfolio to quickly and confidently solve your issues.

### A few examples:

For a **MARINE** customer with wave-induced loads and a tight design deadline, Endurica:

- characterized the client's material.
- completed FEA.
- performed fatigue analysis of design options.

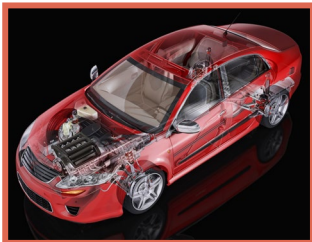
**OUTCOME:** Demonstrated capability to operate safely for target life.



An **AUTOMOTIVE PARTS SUPPLIER** bidding on OEM business was looking for an extra edge.

Endurica completed analysis of the proposed design under OEM-specified load cases.

**OUTCOME:** Enabled supplier to demonstrate the durability of their design to the OEM and captured the contract.



Company making **ELECTRIC CARS** needed bushing redesigned to support battery weight. Engaged Endurica for study of three proposed designs. Endurica:

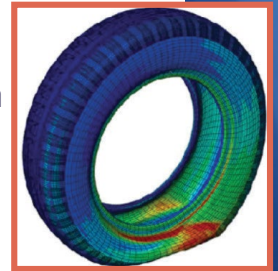
- simulated bushing under road loads.
- identified most durable option.

**OUTCOME:** Successful product launch on a tight timeline.

### AGRICULTURAL SYSTEMS DEVELOPER

Endurica investigated a case of cracks developing in early product returns from the field.

**OUTCOME:** Endurica's analysis diagnosed the cause of the cracking and provided insights the developer used to correct the issue.



**RAW MATERIALS SUPPLIER** with a new material needed to show benefit to clients. Endurica:

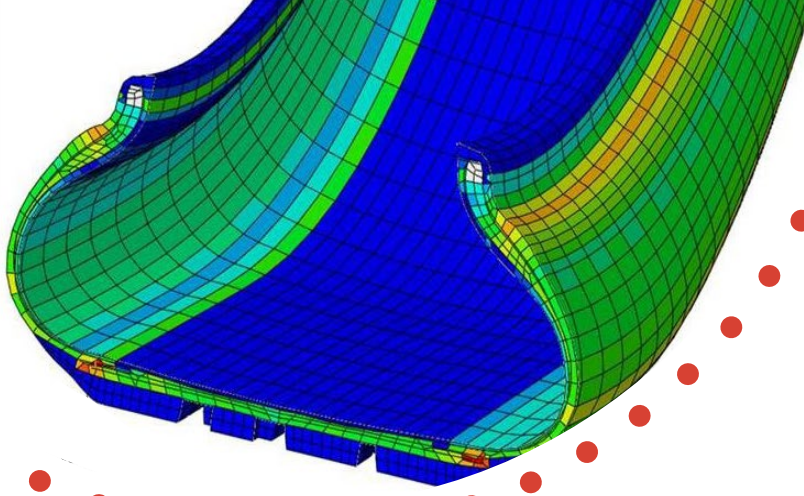
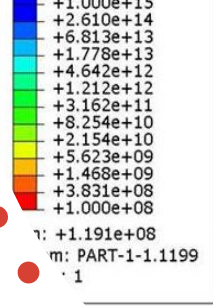
- characterized new material and several current alternatives.
- compared simulated performance in a range of products: tires, transmission mount, bushing, flex joint.

**OUTCOME:** Enabled raw materials supplier to build prospect confidence in the new material leading to increased sales.

 2020 TIBBETTS AWARD WINNER

# Endurica

Get Durability Right®



## C-SUITE INSIGHTS

### TOP EXPERTISE

We'll take you straight to the answers you need. We wrote the Endurica and fe-safe/Rubber™ fatigue solvers, and the testing specs for the Fatigue Property Mapping™ testing service. We have partner relationships with top labs and simulation companies globally.

### ON DEMAND

Get simulation capacity for your organization right when you need it and avoid the costs of maintaining permanent capacity.

### FLEXIBLE SCOPE

Endurica has experience with project scopes ranging from 1 day to several years and multiple partners. We have worked with leading companies in many sectors: aero, auto, civil, offshore, consumer, medical devices, electronics, raw materials.

### TECHNOLOGY TRANSFER

Looking for a fast way to implement Endurica methods in your organization? Engage us on a startup project to build momentum and maximize technology transfer.

## LIFELEFT™ DURABILITY SIMULATION SERVICE

### Send us your specifications:

- part geometry
- load cases
- material properties (or let us test them)

### Our report contains:

- expected life and failure mode
- life contours plotted on finite element model
- failure location
- identification of most damaging load case(s)
- design diagnostics to optimize durability

### LEGAL SENSITIVITY

Durability studies frequently center on sensitive intellectual property and liability concerns. Endurica routinely works under customer non-disclosure agreements. Get Durability Right® with confidence that you've engaged professionals who will put your interests up front and deliver the highest quality results.

## THE ENDURICA DIFFERENCE

Learn more at:

[www.endurica.com/rubber-durability-consulting](http://www.endurica.com/rubber-durability-consulting)

Call today to discuss YOUR special project:

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