Oil Cooler (Automotive)

What we Simulate:
- Modal Simulation.
- '10G' Loading. (x,y,z directions)
- Pressure loading
- Steady state thermal
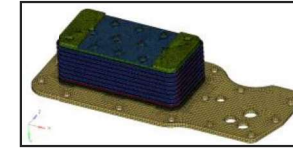- Isothermal fatigue

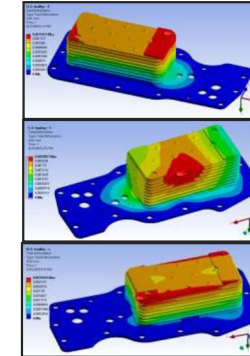- **Tool: Hypermesh, Ansys**

Oil Cooler
Case:
- Modal Analysis
- Non-linear Static Structural Analysis
- 'G'-loading.
- Pressure Test
- Thermal analysis
- Fatigue life prediction

Output:
- Mode shape plots.
- Stress & deformation Plot for Structural Simulation.
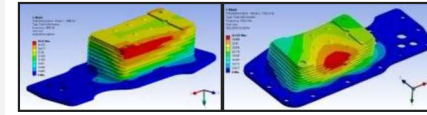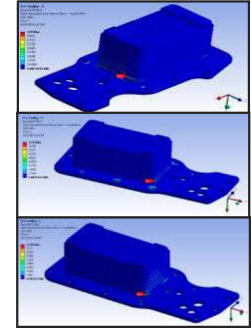- Temperature distribution plot.
- Fatigue life plot.

Mesh Model
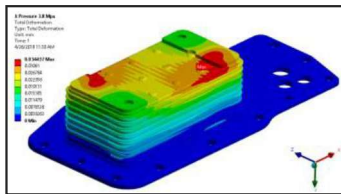
Modal Analysis

Frequency Plots

Directional Deformation Plot

Structural Analysis ('G' loading)

Stress Plots (x,y,z)

Displacement Plot

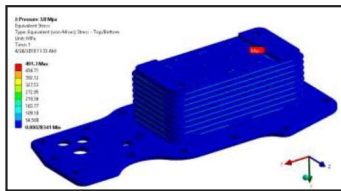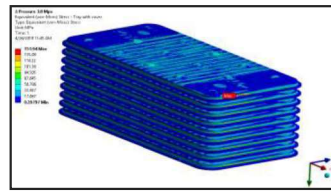Stress Plots

Structural Analysis (Pressure Case)
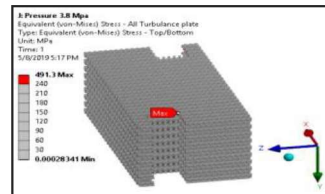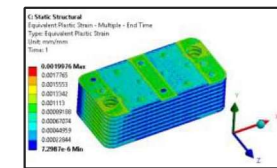
Stress Plots

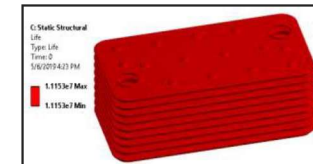Stress Plots
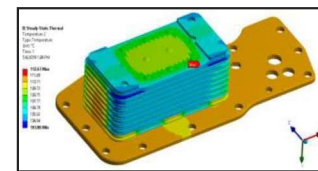
Temp. distribution plot

Displacement Plot

Steady state thermal & Fatigue
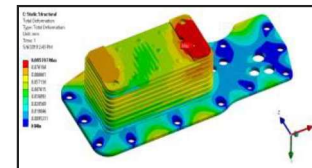
Plastic-Strain Plots

Life Plots