Locomotive Cabinets

C A E

What we Simulate:
- Modal Simulation.
- Structural strength.
- 'G' Loading.

- **Tool: Hypermesh, Ansys**
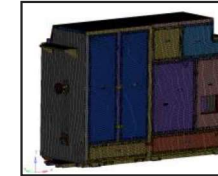
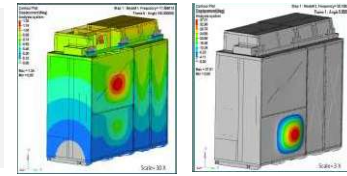**Traction Converter Cabinet**
Cabinet-1:
- Modal Analysis
- Static Structural Analysis as per norm (Combination of the load (**Total 16 combination of G-loads**) of static load cases)
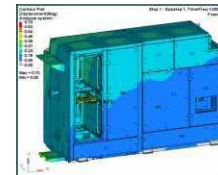
Output:
- Frequency plots, Mass Participation factor.
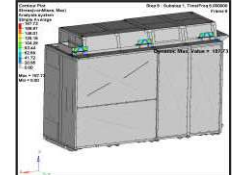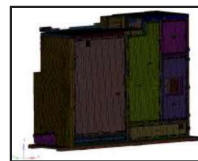- Stress & deformation Plot for Static Structural Simulation, R-calculations, Bolting forces.

Mesh Model

Modal Analysis

Frequency Plots

Displacement Plot

Structural Analysis

Stress Plots

Traction Converter Cabinet
Cabinet-2 :
- Modal Analysis
- Static Structural Analysis as per norm (Combination of the load (G-loads) of static load cases)
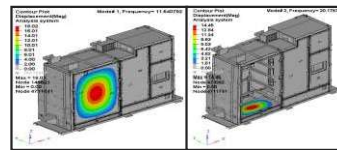
Output:
- Frequency plots, Mass Participation factor.
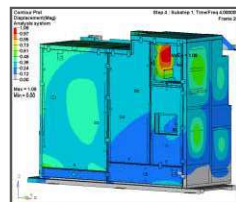- Stress & deformation Plot for Static Structural Simulation, R-calculations, Bolting forces.
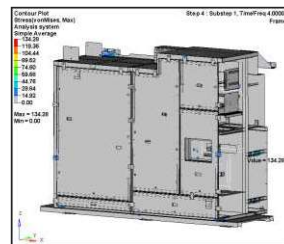

Mesh Model

Modal Analysis

Frequency Plots

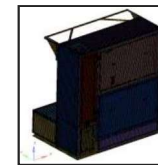Displacement Plot

Structural Analysis

Stress Plots

Auxiliary converter Cabinet
Cabinet-3 :
- Modal Analysis
- Static Structural Analysis as per norm (Combination of the load (G-loads) of static load cases)
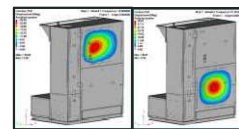
Output:
- Frequency plots, Mass Participation factor.
- Stress & deformation Plot for Static Structural Simulation, R-calculations, Bolting forces.
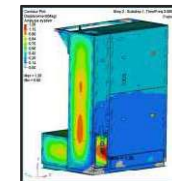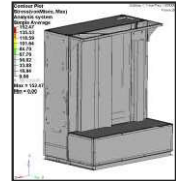

Mesh Model

Modal Analysis

Frequency Plots

Displacement Plot

Structural Analysis

Stress Plots