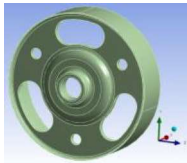




RESEARCH & DEVELOPMENT



CAE Pulley (Automotive)

What we Simulate:

- Structural analysis of pulley.
- Safety factor calculations for infinite fatigue life.

▪ Tool: Ansys Workbench

Pulley

Case:

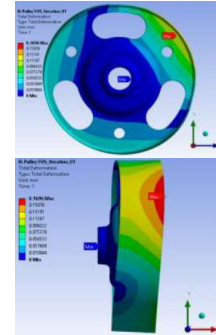
- Stiffness calculations.
- Load calculations.
- Stress evaluation.
 - Pressure & Displacement load.
 - Hydrotest pressure load.
- Fatigue life Calculations.

Output:

- Stress & deformation Plot.
- Stress linearization.
- Fatigue life.

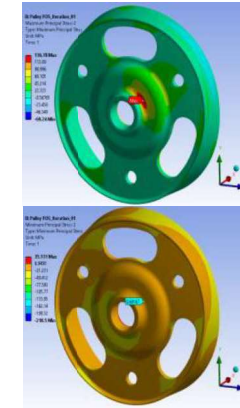


Mesh Model

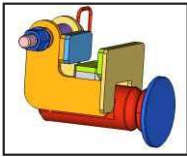


Deformation Plot

Structural Analysis (Radial Hub load)



Principal Stress Plot



CAE Lifting pin (Heavy)

What we Simulate:

- Structural strength.

▪ Tool: Hypermesh, Ansys

Lifting Pin

Case:

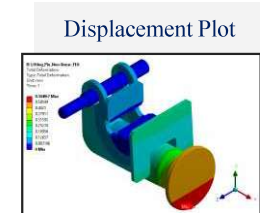
- Linear & non-linear Static Structural Analysis (ASME BTH-1)

Output:

- Stress, Total strain, Plastic strain, deformation Plot for Structural Simulation.

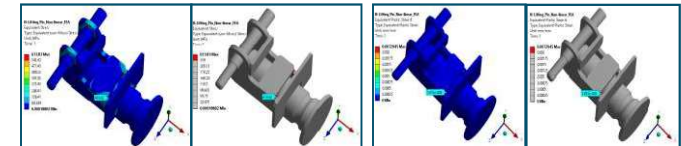


Mesh Model



Displacement Plot

Structural Analysis



Stress Plot

Plastic-Strain Plot