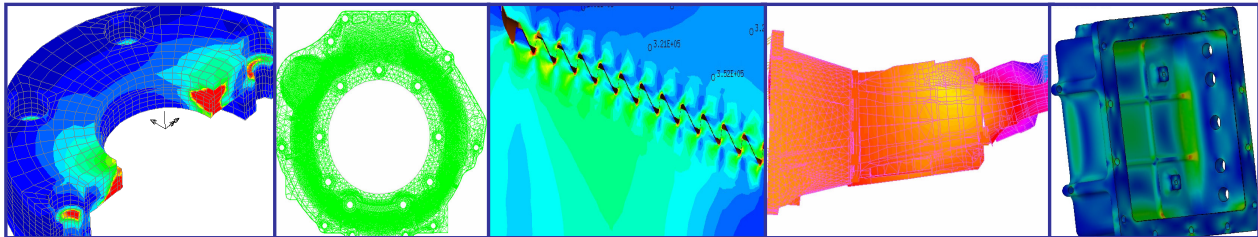


# FEA

## Finite Element Analysis



Experienced professional engineers at e3k have a proven track record of delivering top quality results for clients.

e3k not only perform analysis for clients, but have the skill and expertise to interpret the results and optimise designs based on criteria such as weight saving, strength and stiffness, flexibility, noise reduction, cooling performance, and fatigue life.

### FEA Capabilities Include

- Stress, Strain, and Displacement
- Buckling
- Modal or natural frequency analysis
- Frequency response
- Transient response analysis
- Contact surfaces
- Thermal behaviour
- Fatigue analysis

### Selected Case Studies

- Design of aircraft tie down fitting for Brisbane Airport
- Audit of hydraulic actuator for aircraft emergency generator
- Static and dynamic analysis of magnesium torque converter housing for Ford Australia
- Francis Turbine for New Zealand Hydroelectric projects
- Hydraulic bolt tensioners for US and EU Nuclear Power Industry
- Detailed design and analysis of concept internal combustion engine

### Senior Engineers

- Dr Duncan Gilmore
- Dr Ray Hope
- Dr Ben McGarry

