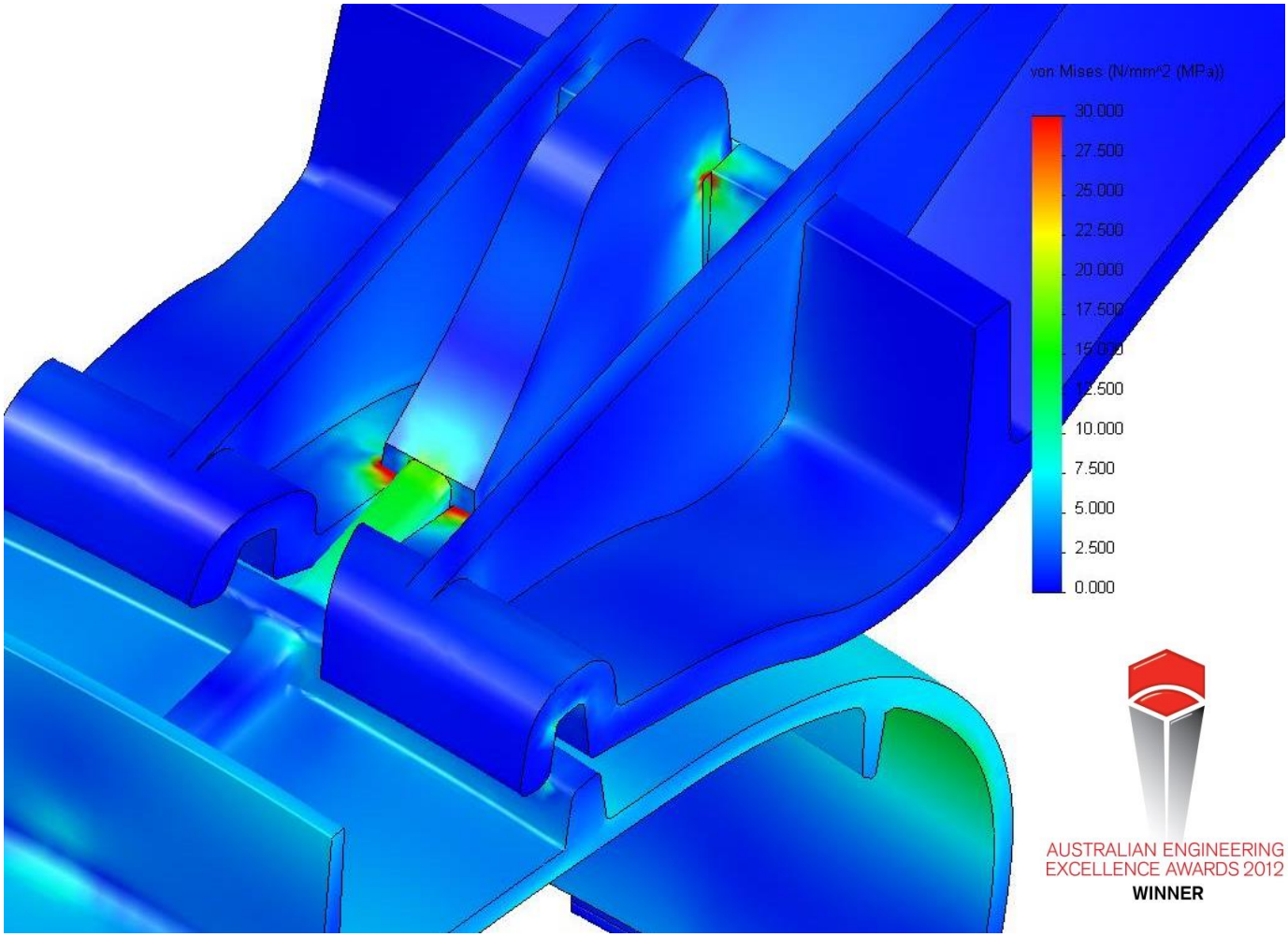
FEA

FINITE ELEMENT ANALYSIS

e3k™
engineering3000
new product design & development

Raise the quality of your products and reduce development costs



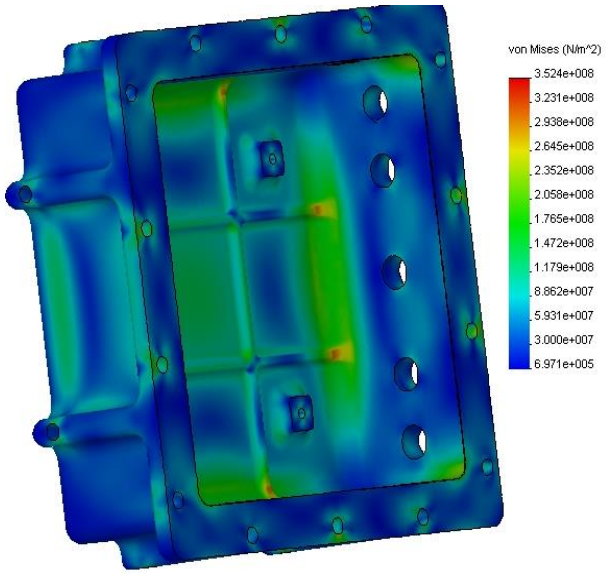
AUSTRALIAN ENGINEERING EXCELLENCE AWARDS 2012
WINNER

The award winning team at e3k regularly use simulation software as part of the engineering design process. We can efficiently optimise and validate each design step using fast-solving, CAD integrated, simulations to ensure quality, performance, and safety. This reduces the need for costly prototypes, reduces rework and delays, and saves time and development costs.

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.

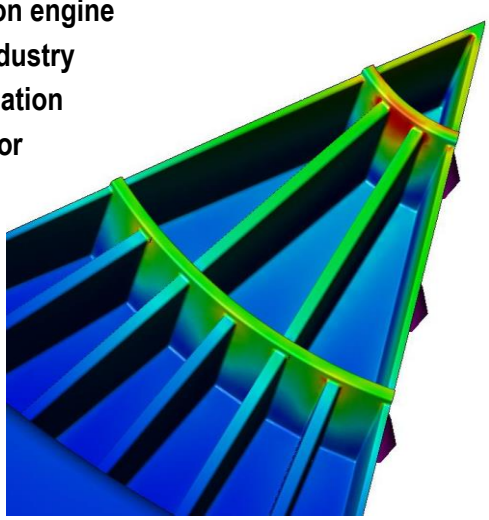
FEA Capabilities Include

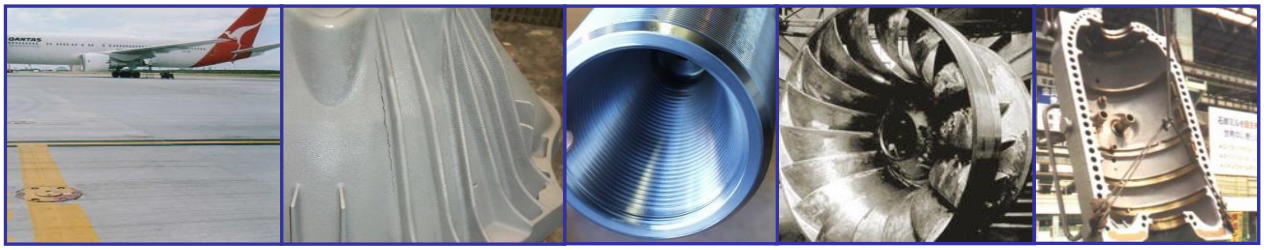


- Stress, Strain, and Displacement
- Buckling
- Modal or natural frequency analysis
- Frequency response
- Transient response analysis
- Contact surfaces
- Thermal behaviour
- Fatigue analysis
- Assembly analysis

Selected Case Studies

- Static and dynamic analysis of magnesium torque converter housing for Ford
- Detailed design and analysis of a novel internal combustion engine
- Hydraulic bolt tensioners for US and EU Nuclear Power Industry
- Explosion proof chamber design and standards test simulation
- Audit of hydraulic actuator for aircraft emergency generator
- Australian Standard test simulations for waste water tank
- Francis Turbine for New Zealand Hydroelectric projects
- Design of aircraft tie down fitting for Brisbane Airport
- Ocean Power Turbine design for injection moulding
- Server tower earthquake rating simulations
- Gold mine SAG mill fracture review
- Helicopter crash failure analysis
- Foundation screw pile





www.e3k.com

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