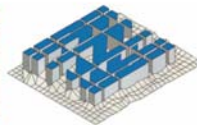


Modern Metal Fatigue Analysis :

An Introduction to FEM based Fatigue Life Calculation & Fracture Mechanics Simulation



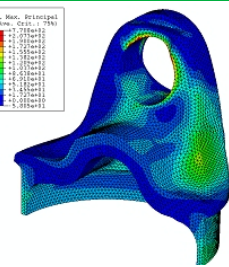
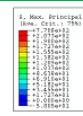
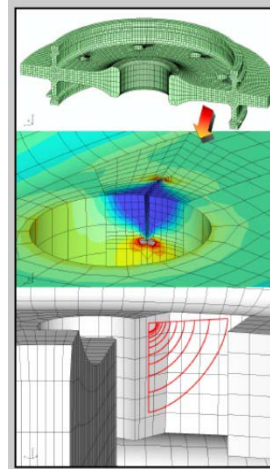
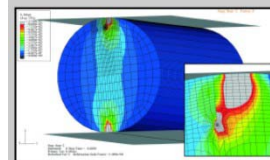
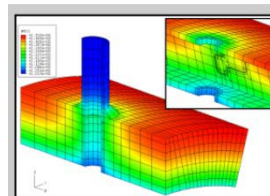
25th June 2010 @ Bangalore

Register Today : contact@pro-sim.com +91 9972304450

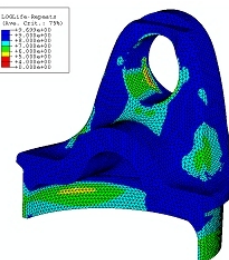
Overview: Offers an introduction to modern theories of metal fatigue, Fracture Mechanics Simulation and their practical application through worked examples and interaction/discussion. There is a strong emphasis on what is possible and the pitfalls to avoid.

Content:

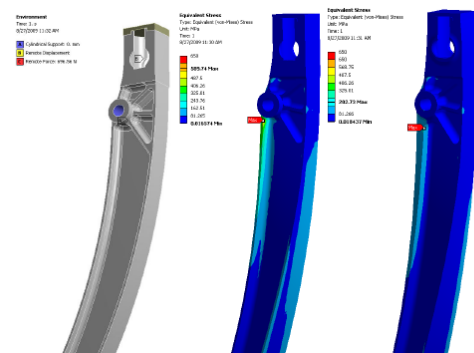
- Introduction to fatigue
- Local stress-strain fatigue
- Materials data
- Signal analysis for fatigue
- Using stress-life data
- Stress concentrations, stress gradient and notch sensitivity
- Critical distance methods
- Why biaxial fatigue is important
- Modern biaxial fatigue methods
- Fatigue analysis from finite element models
- Statistics & reliability
- Crack growth analysis
- 3D Fracture Mechanics Simulations
- Fatigue of welded joints, including recent 'local' approaches
- Fatigue lives from the PSD
- Fatigue test & design
- Fatigue analysis in practice



End-Yoke: Plot of Maximum Principal Stress



End-Yoke: Plot of fe-safe™ Log-Life



Who should attend: Design and Test Engineers responsible for product durability in the ground vehicle, aerospace and manufacturing industries should attend. No previous knowledge of fatigue is necessary.

Case Studies of **fe-safe (Fatigue, Durability) & Zencrack (Fracture Mechanics)** will be presented.

Hands on Training— on **Fatigue & Fracture Calculations** can be organized separately for Interested Participants

Interested Participants can avail **Evaluation Copy of fe-safe & Zencrack**



re-designing a break pedal using ANSYS and fe-safe™ fatigue analysis software.

Registration Details

Industry—Rs 1200-00
 R&D Institutions—Rs 1200-00
 Faculty Members—Rs 1000-00
 Students—Rs 300-00

Registration fee can be paid in the form of DD/Cash/Cheque in favour of " **ProSIM, Bangalore**" Payable at Bangalore .
For any details please contact

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