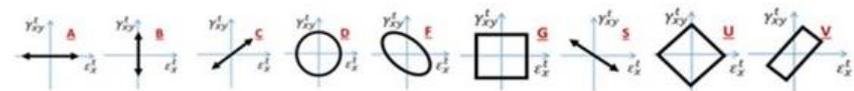
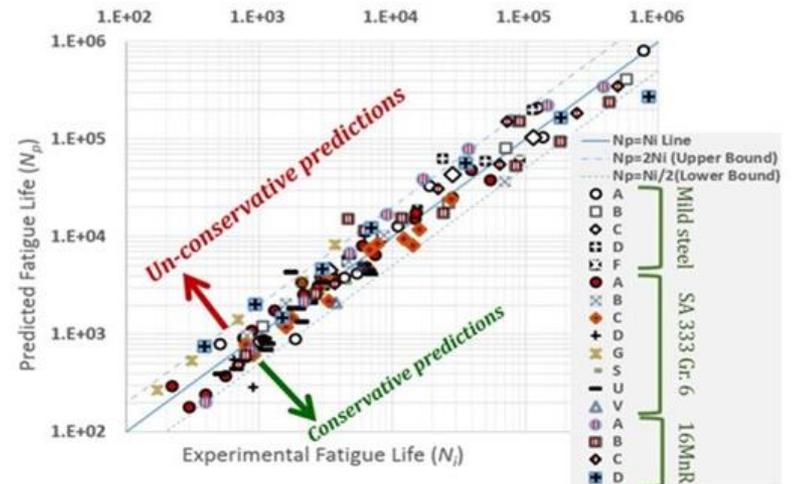
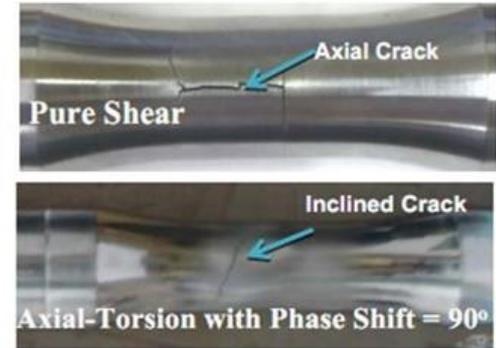


Development of new models for improved fatigue design and cyclic plasticity assessment under multiaxial loading

- The current fatigue design uses uniaxial fatigue life data/curve. However, in reality the power plant components are subjected to multiaxial non-proportional loading.
- The multiaxial loadings significantly affects the fatigue life and these are not adequately accounted in the fatigue models current design.
- In house multiaxial fatigue and cyclic plasticity investigations were carried out. Large number of tests were conducted.
- Results analysed and new models for improved fatigue design / life and cyclic plasticity assessment under multiaxial loading were developed and validated.



MULTIAXIAL FATIGUE INVESTIGATIONS