

# Fatigue and Fracture Mechanics Laboratory

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Research is centered around two MTS test frames and has involved both metals and non-metals including composite materials. The research involves fatigue testing (Fig A), fatigue test results (Fig B) fatigue life predictions and scanning electron fractography (Fig C). Current research includes fatigue of cast steel, high mean stress effects, high strength bolts, and thin-walled steel tubes in as-welded, shot-peened and laser-peened conditions.

Test set-up



Fig A

Constant Amplitude Test Results  
 $R = 0.1$

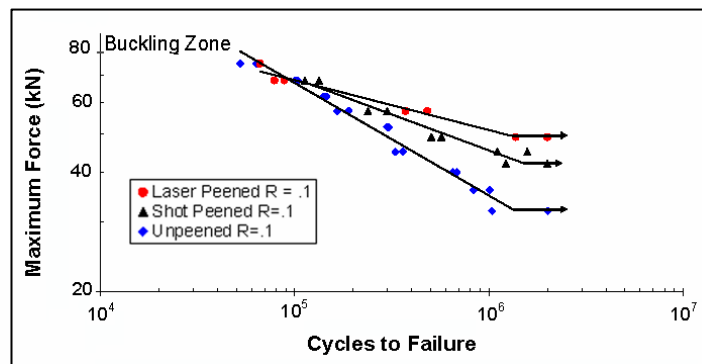


Fig B

Fractography:

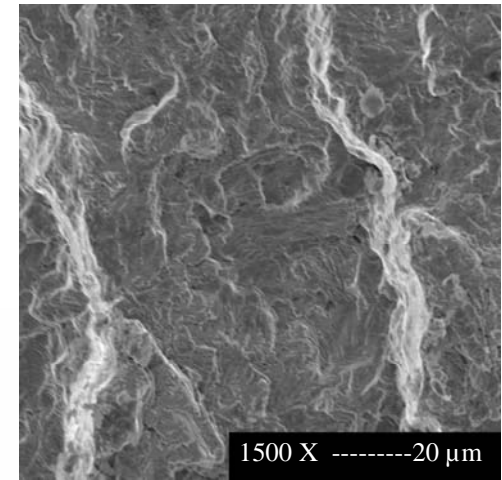


Fig C