

Download The Practical Use Of Fracture Mechanics

Length: 3 days CEUs: 2.30 PDHs: 23.00 Providing a practical understanding of fatigue and fracture calculations, this course is intended for engineers who are required to perform such calculations, or who specify or evaluate testing and draft fatigue or fracture portions of design requirements. A method is presented in which fracture mechanics is introduced into finite element analysis by means of a model where stresses are assumed to act across a crack as long as it is narrowly opened. In materials science, fracture toughness is a property which describes the ability of a material to resist fracture, and is one of the most important properties of any material for many design applications. Hydraulic fracturing (also fracking, fraccing, frac'ing, hydrofracturing or hydrofracking) is a well stimulation technique in which rock is fractured by a pressurized liquid.