Download Modern Metal Fatigue Analysis

Fatigue life. The American Society for Testing and Materials defines fatigue life, N f, as the number of stress cycles of a specified character that a specimen sustains before failure of a specified nature occurs. For some materials, notably steel and titanium, there is a theoretical value for stress amplitude below which the material will not ...Fatigue is failure under repeated or otherwise varying load which never reaches a level sufficient to cause failure in a single application. Component seems to lose strength after multiple load applications, appears to get tired, hence the name “fatigue”.Section VIII, Division 2 of the ASME Boiler and Pressure Vessel Code (ASME 2010) defines fatigue as “… conditions leading to fracture under repeated or fluctuating stresses having a maximum value less than the tensile strength of the material.”NDT Stress-Life Fatigue Testing Basics The many variables associated with material type, sample geometry and in service use of a part or component complicates the design and implementation of an appropriate fatigue testing regime., Modern Metal Fatigue Analysis.

Other Files :