

Crack Initiation and Propagation

Factors That Affect Fatigue Life

8.24 (a) With regard to size, beachmarks are normally of macroscopic dimensions and may be observed with the naked eye; fatigue striations are of microscopic size and it is necessary to observe them using electron microscopy.

(b) With regard to origin, beachmarks result from interruptions in the stress cycles; each fatigue striation corresponds to the advance of a fatigue crack during a single load cycle.