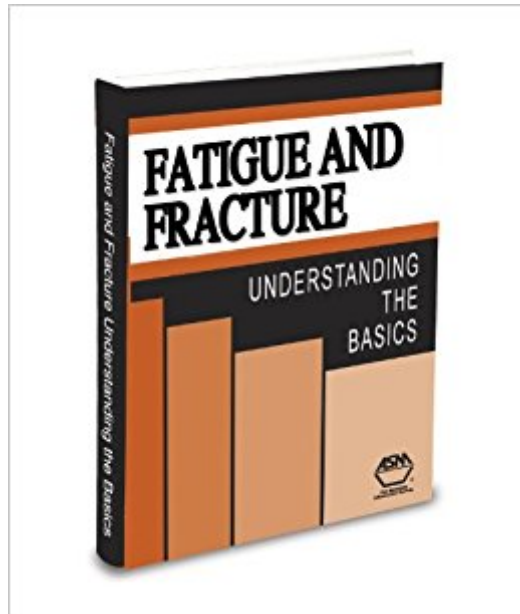


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# Fatigue And Fracture: Understanding The Basics



## Synopsis

This book emphasizes the physical and practical aspects of fatigue and fracture. It covers mechanical properties of materials, differences between ductile and brittle fractures, fracture mechanics, the basics of fatigue, structural joints, high temperature failures, wear, environmentally-induced failures, and steps in the failure analysis process. Separate chapters are devoted to fatigue and fracture of steels, aluminum alloys, titanium and titanium alloys, ceramics, polymers and continuous fiber polymer matrix composites.

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About the Editor: F.C. Campbell's 38-year career at The Boeing Company was divided between engineering and manufacturing. He worked in the engineering laboratories, manufacturing research and development, as well as engineering on four production aircraft programs, and in production operations. At the time of his retirement in 2007, he was a Senior Technical Fellow in the field of structural materials and manufacturing technology. He has written or edited many books for ASM International, including Structural Composite Materials, Elements of Metallurgy and Engineering Alloys, and several titles in the Understanding the Basics series.

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