

Dynamic Failure of Composite and Sandwich Structures (Hardback)

By -

Springer, Netherlands, 2012. Hardback. Book Condition: New. 2013 ed.. 242 x 158 mm. Language: English . Brand New Book. This book presents a broad view of the current state of the art regarding the dynamic response of composite and sandwich structures subjected to impacts and explosions. Each chapter combines a thorough assessment of the literature with original contributions made by the authors. The first section deals with fluid-structure interactions in marine structures. The first chapter focuses on hull slamming and particularly cases in which the deformation of the structure affects the motion of the fluid during the water entry of flexible hulls. Chapter 2 presents an extensive series of tests underwater and in the air to determine the effects of explosions on composite and sandwich structures. Full-scale structures were subjected to significant explosive charges, and such results are extremely rare in the open literature. Chapter 3 describes a simple geometrical theory of diffraction for describing the interaction of an underwater blast wave with submerged structures. The second section addresses the problem of impact on laminated composite structures with chapters devoted to ballistic impacts on pre-stressed composite structures, tests developed to simulate dynamic failure in marine structures, damage mechanisms and energy...



Reviews

Complete guideline! Its this type of great read through. it absolutely was writtern quite perfectly and helpful. I am very happy to explain how this is basically the best book i actually have read through during my personal life and can be he very best book for at any time.

-- Joshua Gerhold PhD

A very awesome book with perfect and lucid reasons. It really is basic but shocks within the 50 percent of the book. Its been designed in an exceptionally easy way and is particularly merely right after i finished reading this ebook where in fact changed me, change the way i think.

-- Meagan Roob