Shape and Layout Optimization of Structural Systems and Optimality Criteria Methods

By G. I. N. Rozvany

Springer Jun 1992, 1992. Taschenbuch. Book Condition: Neu. 244x170x26 mm. This item is printed on demand - Print on Demand Neuware - Shape and layout optimization represent some of the most useful but also most difficult classes of problems in structural design, which have been investigated in detail only during the last few years. Shape optimization is concerned with the optimal shape of boundaries of continua or of interfaces between two materials in composites. Layout optimization deals with the simultaneous optimization of the topology, geometry and cross-sectional sizes of structural systems. In spite of its complextiy, layout optimization is a very rewarding task, because it results in much greater savings than the optimization of cross-sectional sizes only. Because of their important role in shape and layout optimization, the book also covers in detail new optimality criteria methods , which are capable of handling many thousand design variables and active design contraints. Shape and layout optimization is becoming an indispensable tool in the design of aeroplanes, space structures, cars, ships, building and civil engineering structures, power stations, chemical plants, artificial organs, sporting equipment, and all other solid systems where stresses and deformations play an important role. 504 pp. Englisch.

READ ONLINE
[6.63 MB]

Reviews

The ideal ebook i possibly go through. It generally does not cost an excessive amount of. Once you begin to read the book, it is extremely difficult to leave it before concluding.
-- Vincenza Hand

Basically no phrases to clarify. It really is rally fascinating throgh reading time. Once you begin to read the book, it is extremely difficult to leave it before concluding.
-- Anabel Zemlak