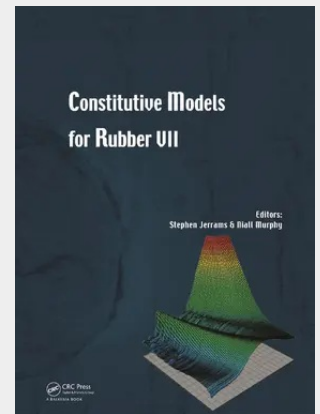


Constitutive Models for Rubber VII

All aspects of our lives, industry, health, travel and leisure, are utterly reliant on rubber materials, yet typically this notion rarely occurs to us. Increasingly, greater demands are made on elastomeric compounds and we seek elevated performance in terms of improved physical and chemical properties. In particular, we have come to expect rubber components (tyres, vibration isolators, seals etc) to exhibit exceptional wear and fatigue resistance, often at elevated temperatures. Unsurprisingly then, the emphasis in characterising isochoric materials has shifted significantly away from understanding and modelling hyperelastic material behaviour, to a position where we can confidently design and manufacture rubber components having the functionality and resilience to meet the dynamic loading and harsh environmental conditions that are prevalent today. In consequence, state-of-the-art technology in terms of dynamic response and fatigue resistance are strongly represented here along with numerous insights into advanced elastomers used in novel applications. This development is not at the expense of research devoted to current test procedures and the constitutive equations and algorithms that underpin finite element methods. As a result, Constitutive Models for Rubber VII is not only essential reading for undergraduates, postgraduates, academics and researchers working in the discipline, but also for all those designers and engineers involved in the improvement of machines and devices by introducing new and novel elastomers possessing elevated properties.



224,50 €

209,81 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780415683890

Medium: Buch

ISBN: 978-0-415-68389-0

Verlag: CRC Press

Erscheinungstermin: 09.09.2011

Sprache(n): Englisch

Auflage: 1. Auflage 2011

Produktform: Gebunden

Gewicht: 1020 g

Seiten: 474

Format (B x H): 174 x 246 mm

