



# Continuum thermomechanics

/

Bermúdez de Castro López Varela, Alfredo (1950-)

Birkhäuser Verlag,  
2005

**Electronic books**

Monografía

"The purpose of this textbook is to give a modern and unified approach to continuum mechanics and thermodynamics in a rigorous mathematical framework. The intended audience are students, researchers and engineers interested in these fields or in mathematical modelling and numerical simulation in solid and fluid mechanics, acoustics, heat transfer, chemistry, or combustion."--Jacket

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMjUyODk0NTE>

---

**Título:** Continuum thermomechanics Alfredo Bermúdez de Castro

**Editorial:** Basel Boston Birkhäuser Verlag 2005

**Descripción física:** 1 online resource (xii, 209 pages) illustrations

**Mención de serie:** Progress in mathematical physics v. 43

**Bibliografía:** Includes bibliographical references (page 203) and index

**Contenido:** 1.) General definitions, conservation laws -- 2.) Lagrangian coordinates -- 3.) Constitutive laws -- 4.) The principle of material frame-indifference -- 5.) Replacing entropy with temperature -- 6.) Isotropy -- 7.) Equations in Lagrangian coordinates -- 8.) Linearized models -- 9.) Quasi-static thermoelasticity -- 10.) Fluids -- 11.) Linearized models for fluids, acoustics -- 12.) Perfect gases -- 13.) Incompressible fluids -- 14.) Turbulent flow of incompressible Newtonian fluids -- 15.) Mixtures of Coleman-Noll fluids -- 16.) Chemical reactions in a stirred tank -- 17.) Chemical equilibrium of a reacting mixture of perfect gases in a stirred tank -- 18.) Flow of a mixture of reacting perfect gases

**Copyright/Depósito Legal:** 209873517 516027943 613490841 646746286 739128301 880014945 911079180  
1005820955 1035667570 1044616926 1056410986 1077262878 1087347898 1097274379 1102293515

**ISBN:** 9783764372651 acid-free paper) 3764372656 acid-free paper) 9783764373832 3764373830 0817672656  
alk. paper) 9780817672652 alk. paper) 1281349259 9781281349255

**Materia:** Thermodynamics Continuum mechanics Fluid mechanics Continuum mechanics. Fluid mechanics. Kontinuumsmechanik- Thermomechanische Eigenschaft. Thermomechanische Eigenschaft- Kontinuumsmechanik. Thermodynamics. Continuum mechanics. Fluid mechanics. Thermodynamics. Kontinuumsmechanik- Thermomechanische Eigenschaft. Thermomechanische Eigenschaft- Kontinuumsmechanik.

**Enlace a formato físico adicional:** Print version Bermúdez de Castro, Alfredo, 1950-. Continuum thermomechanics. Basel ; Boston : Birkhäuser Verlag, 2005 (DLC) 2005048125

**Punto acceso adicional serie-Título:** Progress in mathematical physics v. 43

---

### Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es