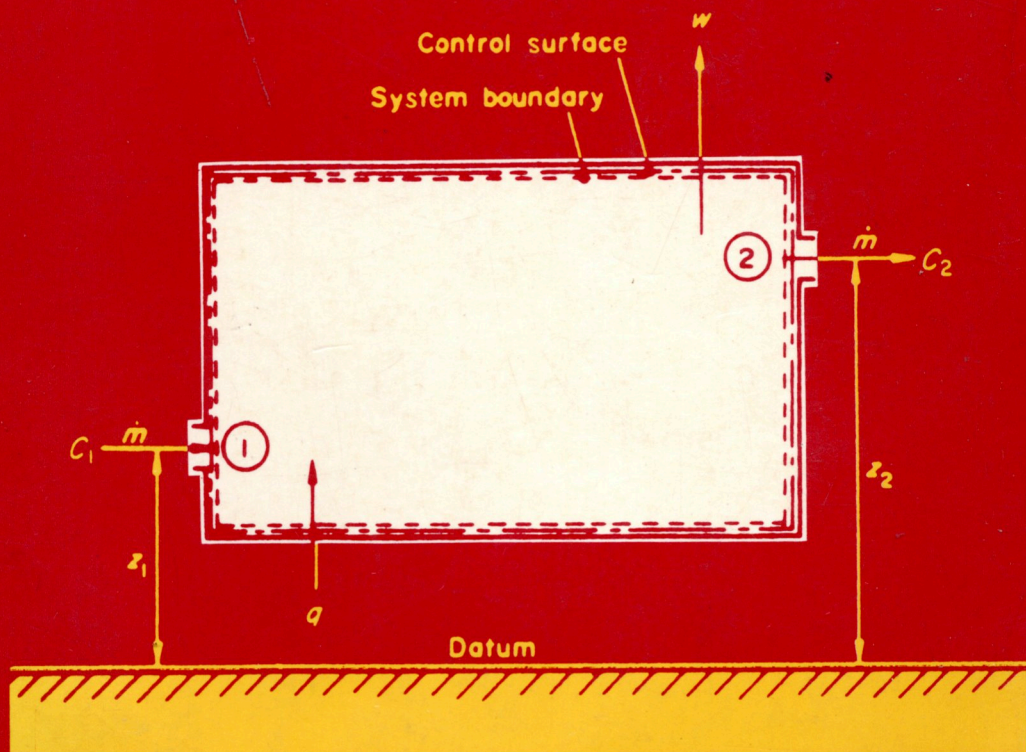


Principles of Engineering Thermodynamics

EM Goodger

SECOND EDITION

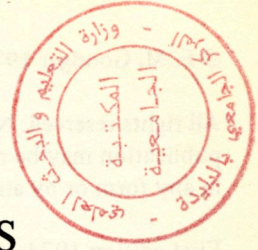


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Principles of Engineering Thermodynamics



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Second Edition

M
MACMILLAN

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E. M. Goodger's text was welcomed in the first edition for its concise and systematic treatment of the subject without the complication of the many side issues found in the larger books.

The new edition consolidates the success of Goodger's energy approach and expands the treatment of several topics including

- units
- rotary compressors and expanders
- heat exchange
- cycle analysis and combined cycle plant
- hygrometry

Extensive teaching and student experience from a number of courses has been employed to refine the book for contemporary requirements.

The energy foundation of the book moves from an early focus on energy forms, transfers and conversions to analyse the behaviour of idealised fluids and their applications to practical processes and cyclic devices and plant. Particular care has been taken over the mathematical sign convention used, a common source of confusion. Here, the standard thermodynamic convention has been explained carefully and then used consistently, allowing reference to any section in the certain knowledge of the meaning of each sign.

E. M. Goodger is Senior Lecturer in Fuel Technology at Cranfield Institute of Technology. He has held posts as Visiting Professor at Imperial College, London, and Foundation Professor of Mechanical Engineering at the University of Newcastle, New South Wales. His books are *Combustion Calculations*, *Hydrocarbon Fuels*, *Alternative Fuels* and *Aviation Fuels Technology*, his latest, with Ray Vere.

