NPTEL Video Course - Mechanical Engineering - NOC:Concepts of Thermodynamics

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Co-ordinating Institute - IIT - Kharagpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 30 - First Law for Unsteady Problems - Examples (Continued...)
Lecture 31 - First Law for Unsteady Problems - Examples (Continued...)
Lecture 32 - Supplementary Lecture
Lecture 33 - Introduction to Second Law of Thermodynamics
Lecture 34 - Statements of the Second Law of Thermodynamics
Lecture 35 - Perpetual Motion Machines; Reversible and Irreversible Processes
Lecture 36 - Factors for Irreversibility and Introduction to Reversible Cycles
Lecture 37 - Carnot Theorem and Absolute Temperature Scale
Lecture 38 - Second Law
Lecture 39 - Clausius Inequality and Introduction to Entropy
Lecture 40 - Thermodynamic Property Relationships; Entropy change for Solids, Liquids and Ideal gases
Lecture 41 - Entropy balance for Reversible and Irreversible Processes
Lecture 42 - What is Entropy ?
Lecture 43 - Entropy Change in closed system
Lecture 44 - Entropy Change in closed system
Lecture 45 - Supplementary Lecture
Lecture 46 - Supplementary Lecture
Lecture 47 - Entropy Transport for a flow process
Lecture 48 - Entropy Transport for flow process
Lecture 49 - Entropy Transport for flow process
Lecture 50 - Entropy Transport for flow process
Lecture 51 - Entropy Transport for flow process
Lecture 52 - Supplementary Lecture
Lecture 53 - Exergy (Availability)
Lecture 54 - Exergy (Availability) (Continued...)
Lecture 55 - Exergy Analysis
Lecture 56 - Exergy Analysis
Lecture 57 - Thermodynamic Relationships
Lecture 58 - Thermodynamic Relationships (Continued...)
Lecture 59 - Otto Cycle
Lecture 60 - Diesel Cycle
Lecture 61 - Example Problems
Lecture 62 - Brayton Cycle
Lecture 63 - Carnot Cycle and Rankine Cycle
Lecture 64 - Carnot Cycle and Rankine Cycle (Continued...)
Lecture 65 - Vapour Compression Refrigeration Cycle
Lecture 66 - Review of Learning Concepts
Lecture 67 - Supplementary Lecture
Lecture 68 - Supplementary Lecture