

Energy, Entropy and Exergy Concepts and Their Roles in Thermal Engineering

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Abstract: *Energy, entropy and exergy concepts come from thermodynamics and are applicable to all fields of science and engineering. Therefore, this article intends to provide background for better understanding of these concepts and their differences among various classes of life support systems with a diverse coverage. It also covers the basic principles, general definitions and practical applications and implications. Some illustrative examples are presented to highlight the importance of the aspects of energy, entropy and exergy and their roles in thermal engineering.*

Keywords: Energy, entropy, environment, exergy, thermodynamics