MMVA01 Termodynamik med strömningslära (2008)

Delkapitel i Çengel Turner & Cimbala (3rd ed.) och motsvarande i Çengel & Boles (4/5/6th ed.) samt Çengel & Turner (2nd ed.)

CT3 = Çengel, Turner & Cimbala, Fundamental of Thermal-Fluid Sciences, 3rd edition, McGraw-Hill, 2008
CT2 = Çengel & Turner, Fundamental of Thermal-Fluid Sciences, 2nd edition, McGraw-Hill, 2005
CB56 = Çengel & Boles, Thermodynamics, 5th/6th edition, McGraw-Hill, 2006/8
CB4 = Çengel & Boles, Thermodynamics, 4th edition, McGraw-Hill, 2002

Titel	CT3	CB56	CT2	CB4	Anm.
Introduction	1-1	-	1-1	-	
Thermodynamics	1-2	1-1	1-2	1-1	
Heat Transfer	1-3	-	1-3	-	**utgår**
Fluid Mechanics	1-4	-	1-4	-	
Importance of Dimensions and Units	1-5	1-2	1-5	1-2	*kursivt*
Problem-Solving Technique	1-6	1-12	1-7/9	1-13	
Systems and Control Volumes	2-1	1-3	2-1	1-3	
Properties of a System	2-2	1-4	2-2a	1-4a	
Density and Specific Gravity	2-3	1-5	2-2b	1-4b	
State and Equilibrium	2-4	1-6	2-3	1-5	
Processes and Cycles	2-5	1-7	2-4	1-6	
Temperature and …	2-6	1-8	2-7	1-9	
Pressure	2-7	1-9	2-8	1-10	*kursivt*
Pressure Measurement Devices	2-8	1-10	2-9/10	1-11/12	**utgår**
Introduction	3-1	2-1	-	-	
Forms of Energy	3-2	2-2	2-5	1-7	
Energy Transfer by Heat	3-3	2-3	4-1	3-1	
Energy Transfer by Work	3-4	2-4	4-2	3-2	
Mechanical Forms of Work	3-5	2-5	4-3	3-3	**s. 75-77 utgår**
The First Law of Thermodynamics	3-6	2-6	5-1	4-1	
Energy Conversion Efficiences	3-7	2-7	6-4	5-4	**utgår**
Energy and Environment	3-8	2-8	2-6	1-8	*kursivt*
Pure Substance	4-1	3-1	3-1	2-1	
Phases of a Pure Substance	4-2	3-2	3-2	2-2	
Phase-Change Processes …	4-3	3-3	3-3	2-3	
Property Diagrams …	4-4	3-4	3-4	2-4	
Property Tables	4-5	3-5	3-5	2-5	
The Ideal-Gas Equation of State	4-6	3-6	3-6	2-6	
Compressibility Factor …	4-7	3-7	3-7	2-7	*kursivt*
Other Equations of State	4-8	3-8	3-8	2-8	**utgår**
Moving Boundary Work	5-1	4-1	4-3.1	3-3.1	
Energy Balance for Closed Systems	5-2	4-2	5-2	4-2	
Specific Heats	5-3	4-3	3-9	2-9	
Internal energy, … of Ideal Gases	5-4	4-4	3-10	2-10	
Internal Energy, … Solids and Liquids	5-5	4-5	3-11	2-11	*kursivt*
Conservation of Mass	6-1	5-1	4-5	3-5	
Flow Work …	6-2	5-2	4-6	3-6	
Energy Analysis of Steady-Flow Systems	6-3	5-3	5-3	4-3	
Some Steady-Flow Engineering Devices	6-4	5-4	5-4	4-4	
Energy Analysis of Unsteady-Flow Processes	6-5	5-5	5-5	4-5	*kursivt*
The Second Law of Thermodynamics	7	6	6	5	
Perpetual-Motion Machines	7-5	6-5	6-5	5-5	*kursivt*
Entropy	8	7	7	6	
What is Entropy?	8-6	7-6	7-6	6-6	*kursivt*
Minimizing the Compressor Work	8-11	7-11	7-11	6-11	**utgår**
Isentropic Efficiences …	8-12	7-12	7-12	6-12	**"Nozzles" utgår**

"Topics of Special Interest" i CB finns inte i CT

/CN, 12 augusti 2008