

## Section 8: The Mechanical Properties of Materials

#	Section heading	Relevant in Ohring
8.1	Elastic behavior – stress and strain Hooke's Law and elastic moduli	7.1 7.2
8.2	The tensile test	7.3.1; 7.3.2 skim 7.3.3 - 7.3.5
8.3	Dislocations and plastic deformation	7.4.1, 7.4.2 omit 7.4.3
8.4	Strengthening mechanisms Cold work (recovery, recrystallization...) Solid solution strengthening Precipitation hardening	Skim 7.4.4 9.4 9.5.1 skim 9.5.2
8.5	Hardness testing	7.7.1
8.6	Brittle fracture	7.6 7.7.2 10.5 skim
8.7	Fatigue	7.7.4 10.7, 10.8
8.8	Creep	7.7.3 10.6