

Chapter 7



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7

Transverse Shear 363



Chapter Objectives 363

7.1 Shear in Straight Members 363

7.2 The Shear Formula 365

7.3 Shear Flow in Built-Up Members 382

7.4 Shear Flow in Thin-Walled Members 391

*7.5 Shear Center for Open Thin-Walled
Members 396

Chapter Objective

In this chapter, we will develop a method for finding the shear stress in a beam having a prismatic cross section and made from homogeneous material that behaves in a linear-elastic manner.

The method of analysis to be developed will be somewhat limited to special cases of cross-sectional geometry. Although this is the case, it has many wide-range applications in engineering design and analysis.

The concept of shear flow, along with shear stress, will be discussed for beams and thin-walled members.

The chapter ends with a discussion of the shear center.

TRANSVERS SHEAR

4

7.1 Shear in Straight Members