

Mechanical Drawing: Board & CAD Techniques

Chapter 17 Cams and Gears

Chapter Summaries

Section 17.1 Cams and Cam Drawings

- Cams are designed to have uniform, harmonic, and uniformly accelerated and decelerated motion.
- A cam-related displacement diagram shows the motion a cam produces through one revolution, and a cam profile shows its important features.

Section 17.2 Gears and Gear Drawings

- Information needed for a typical gear drawing includes the tolerances required and a notation of the material to be used.
- Drawing gear teeth using the simplified board-drafting method involves simplifying the drawing of the involute curve.
- A CAD-generated gear-tooth drawing creates one tooth in detail and then forms the entire gear using the array method.