



FIGURE 1.7 A modern manufacturing facility made possible with metal building systems. (Photo: Bob Cary Construction.)

- *Flexibility of expansion.* Metal buildings are relatively easy to expand by lengthening, which involves disassembling bolted connections in the endwall, removing the wall, and installing an additional clear-spanning frame in its place. The removed endwall framing can often be reused in the new location. Matching roof and wall panels are then added to complete the expanded building envelope.
- *Low maintenance.* A typical metal building system, with prefinished metal panels and standing-seam roof, is easy to maintain: metal surfaces are easy to clean, and the modern metal finishes offer a superb resistance against corrosion, fading, and discoloration. Some of the durable finishes available on the market today are discussed in Chap. 6.
- *Single-source responsibility.* The fact that a single party is responsible for the entire building envelope is among the main benefits of metal building systems. At least in theory, everything is compatible and thought through. The building owner or the construction manager does not have to keep track of many different suppliers or worry about one of them failing in the middle of construction. Busy small building owners especially appreciate the convenience of dealing with one entity if anything goes wrong during the occupancy. This convenience is a major selling point of the systems.



FIGURE 1.8 Material recycling facilities often utilize metal building systems. (Photo: Maguire Group Inc.)



FIGURE 1.9 A large manufacturing facility housed in a pre-engineered building. (Photo: Varco-Pruden Buildings.)