## 17 ROPES, CHAINS, AND SLINGS

## **CASE STUDY**

Simon Servicing purchases fiber ropes for many of its general-purpose needs. Usually it chooses polyester rope, but sometimes it prefers nylon rope because of nylon's exceptional strength and working elasticity. In all cases supervisors at the company refer to working load tables before making a final decision about what to buy. They realize they need to be cautious when using working load tables, but feel they are useful when it comes to choosing the best rope for a job. They have never had an accident involving fiber rope. Simon Servicing also uses wire ropes in its operations and some of the supervisors are concerned about caring for the wire ropes while they are in use. They know it is more common for a wire rope to be discarded because of abuse than because of use and would like to know more about the reasons why wire ropes might be deteriorating at the facility.

1. You have done some checking into working load tables and the deterioration of wire rope. What do you know about the general guidelines used to generate working load tables and to choose higher loads?

2. What can cause wire rope to deteriorate?