# **ROPE AND CHAIN**

#### **FIBER ROPE**

- Never drag a rope. This hurts the outer fibers and leads to the eventual deterioration of the rope's overall strength.
- Avoid kinking. This strains the rope and overstresses the fibers.
- Splice. Do not knot. When joining lengths of ropes, they should be spliced, not knotted. A properly done splice will hold up 100% of the strength of the rope, but a knot only half.
- Do not allow rope to freeze. Store away from heat, moisture, chemicals, rodents, and sunlight.

## WIRE ROPE

- Use sheaves and drums of suitable size and design.
- Don't exceed the rated capacity of wire rope.
- Check for the integrity of the wire rope.
- Be sure to use the correct lay (twist) for the application.

### **CHAINS**

- Take up slack slowly and make sure every link seats correctly.
- Chain shackles are to be used for shortening and/or splicing chains together. Bolts as makeshift links or fasteners are prohibited.

## INDOOR CRANE (HOIST)

- The hook should have a safety latch that closes the throat of the hook.
- Read the ANSI warning tag listing operational checks, which should be located on the control section.
- Never exceed the crane's lifting capacity; it should be stenciled on both sides of the hoist.
- Determine the weight of the load by checking the manufacturer information or request a dynamometer from your Production Safety Representative.
- Select the proper rigging gear that is within the Safe Working Load (SWL) of the web sling or wire rope being used.
- Inspect the rigging gear prior to use. For wire rope, never exceed six or more broken wires within one lay of strand length. The wire rope is to be discarded.
- Cranes are designed for vertical lifts only. Side pulling may result in hoist and crane breakdown or collapse.
- Sling angles are very critical; never exceed 45 degrees, as this will put too much tension on the sling.
- Conduct all lifting operations so that no one would be injured if there were an equipment failure.
- Never leave a suspended load unattended.
- Do not pass a load over coworkers or allow anyone to walk under the load.
- Personal protective equipment, including, hard hats, eye protection, hearing protection, and gloves should be worn by employees when appropriate.