



# EIGHT CRANE DANGER SIGNS

EMPIRE  
PACIFIC

*Risk Management, Inc.*

Company Name \_\_\_\_\_

Date \_\_\_\_\_

If you work around cranes, you should be on the lookout for the following eight danger signs of improper operation. If you see any of these occurring on a jobsite, immediately inform a supervisor before a catastrophe takes place. Here are things to watch for:

1. Outriggers, crawler tracks, or tires raised off the ground while operating. This is an extremely dangerous condition that indicates the crane is being overloaded and may tip over or collapse. The wrong move in this situation can cause a catastrophe.
2. Operating close to power lines or other dangerous objects. Electrocutation due to contact with power lines is the leading cause of crane related fatalities. Detailed federal regulations for proximity to high voltage sources must be strictly enforced. Any potential danger should be pointed out to the crane operator or a supervisor, but never touch the crane at this time.
3. Riding the load or crane hook. This is a serious violation of federal and state safety regulations. Crane structures and cables have far lower strength margins for handling material than what is required for lifting personnel. Workers must never be suspended from a crane boom unless an approved personnel basket with mandatory safety equipment is used, and lifting procedures are strictly followed.
4. Visible structural damage on the crane or rigging. There is little or no back up system in the load-supporting components of most cranes. A damaged component can fail completely and without warning, causing the boom or load to fall.
5. Modifications made by adding extra counterweight or holding down the rear of the crane. All job-initiated modifications are illegal and may permit overloading the crane. If not approved by the crane manufacturer in writing, these modifications can over stress critical structural components, which could cause failure of the crane.
6. A crane operating near a trench or excavation. Cranes exert extremely high loads on the soil near the tracks, outriggers, or tires. A crane set up in close proximity to an excavation can cause soil failure, crane turnover, and possible disaster.
7. The crane is noticeably out of level while operating. There is no faster way to collapse a crane boom than to impose a side force on the boom. Working out of level creates a dynamic side force that means a crane collapse may be imminent.
8. The crane's hoist line is not vertical at all times during operation. This indicates improper operation. A hoist line that is not vertical obviously indicates that the load is not hanging straight down. Out of plumb loads can cause crane collapse by generating side forces on the boom. In some instances, the crane may tip over if the load swings.

5300 SW Meadows - Suite 220 - Lake Oswego, Oregon 97035  
Phone 503 968-6300 [www.empirepac.com](http://www.empirepac.com) Fax 503 968-6300

*Courtesy of TOOLBOXTOPICS.COM*

**Safety Recommendations:** \_\_\_\_\_

**Job Specific Topics:** \_\_\_\_\_

**M.S.D.S Reviewed:** \_\_\_\_\_

**List of Attendees**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____