



Fact Sheet No. 4: Radio Controls Can Enhance Safety and Productivity

This is the fourth in a series of Fact Sheets developed by the Crane, Hoist and Monorail Alliance concerning safe application and operation of overhead material handling equipment.

Radio controls can improve safety and productivity when used with overhead cranes.

VISIBILITY – *With the operator at a better location away from the load and not tethered to the crane, the...*

- Operator should be able to see a load shift and to determine whether the load is properly rigged before continuing.
- Operator's view of the load's path should not be obstructed by operation from a fixed position above/behind the load.
- Operator should be better able to see and adjust to any obstructions or changes in the path as the move is completed.

MOBILITY – *With the operator not tethered to the crane the...*

- Operator would be free to move at his/her own pace rather than the pace of the crane, making the operator better able to avoid tripping hazards and pinch points.
- Operator would not be limited by a range-reducing tether and would be better able to avoid tripping hazards and pinch points.
- Operator could more easily change location to gain better vantage points.
- Radio control could allow the operator to relocate to better locations such as applications where a cab could be positioned in hot areas or over hazardous locations such as radiation areas, soaking pits, or tilting ladles.
- Operation could be off-board, eliminating potential concerns over egress in the event of travel-motion failure.

COMMUNICATION – *With the operator at a better location, the...*

- Operator could directly control the load on the floor, and the need to signal to an operator stationed in the cab via voice or hand signals would be eliminated.
- Operator could more quickly react to changes during operation.
- Operator would be closer to spotters, making it easier to hear and see what they are relaying.

Note. If a Radio control is used, please refer to OSHA's standard at 1910.179(i). This standard defines the requirement of a warning signal for radio-controlled cranes. Also refer to ANSI ASC C63, Electromagnetic Compatibility (EMC) Standard, addressing random interference of wireless signals, which can create performance degradation and affect clear channels and cause erroneous signal communication.

SUMMARY

By increasing visibility, mobility and optimizing communication, radio controls provide a means for safer and more productive operations.

Through the OSHA and Crane, Hoist and Monorail Alliance, the Alliance participants developed this Fact Sheet for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. 4/2012.