



Oregon

John Kitzhaber MD, Governor

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December 6, 1991

Revised: April 19, 2011

Coast Crane Company
1601 NE Columbia Blvd.
Portland, OR 97211

Dear Mr. Cooper:

This is a revised response to your letter dated November 26, 1991 regarding anti-two block systems for cranes.

Oregon OSHA does not approve or disapprove commercial products in relationship to our codes. However, in response to the specific questions you asked in your letter, the following interpretation is provided.

You asked whether an anti-two-block system is required on all cranes or is an audio visual alert system acceptable when the crane is not being used as a personnel lift.

This question must be answered twice, once in relation to OAR 437-002-0230(2)(b) which relates to crawler, locomotive and truck cranes NOT used in construction and says:

“A limiting device shall be installed and maintained to prevent the hook or other end fittings from contacting the upper sheaves.”

In relation to this rule the answer to your question is that an anti-two block system is required on all crawler, locomotive and truck cranes regardless of what is being lifted. No mention is made in the rule of an audio-visual system. However, if an audio-visual system, likely through an operator's action, actually prevents the fitting from contacting the upper sheaves, the rule requirement would be met.

The second answer is in relation to 1926.1416 Operational Aids. In 1926.1416 (d)(3)(i) and (3)(ii)(A) and (B) the requirements are very specific.

1926.1416(d)(3)(i) says:

(3) Anti two-blocking device.

(i) Telescopic boom cranes manufactured after February 28, 1992, must be equipped with a device which automatically prevents damage from contact between the load block, overhaul ball, or similar component, and the boom tip (or fixed upper block or similar component). The device(s) must prevent such damage at all points where two-blocking could occur. *Temporary alternative measures:* Clearly mark the cable (so that it can easily be seen by the operator) at a point that will give the operator sufficient time to stop the hoist to prevent two-blocking, and use a spotter when extending the boom.

1926.1416(d)(3)(ii)(A) and (B) says:

(ii) Lattice boom cranes.

(A) Lattice boom cranes manufactured after Feb 28, 1992, must be equipped with a device that either automatically prevents damage and load failure from contact between the load block, overhaul ball, or similar component, and the boom tip (or fixed upper block or similar component), or warns the operator in time for the operator to prevent two-blocking. The device must prevent such damage/failure or provide adequate warning for all points where two-blocking could occur.

(B) Lattice boom cranes and derricks manufactured after November 8, 2011, must be equipped with a device which automatically prevents damage and load failure from contact between the load block, overhaul ball, or similar component, and the boom tip (or fixed upper block or similar component). The device(s) must prevent such damage/failure at all points where two-blocking could occur.

For lattice boom cranes (manufactured after Feb 28, 1992) this new rule makes it clear that an audio-visual device would potentially warn the operator to prevent two-blocking and would be compliant with the rule. Telescoping manufactured after February 28, 1992 and lattice booms manufactured after November 8, 2011, are required to have automatic systems not warning systems.

Please contact Ron Haverkost at (503) 378-3272 if you have additional questions.

Sincerely,

Peggy A Munsell, Manager
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