

**2600SEG124**  
**SAFETY STANDARD FOR CRANE OPERATIONS**

**APPENDIX B CRITICAL HOISTS**

The ACP defines Critical Hoist as a load which is equal to, or greater than 70% of the crane's capacity in the initial configuration to carry out this hoisting, and/or that fulfills the conditions of an exceptional hoist.

**Personnel basket lifting and load hoisting with two or more cranes simultaneously shall always be considered to be a critical hoist.**

For critical hoists it is mandatory to fill out **(RSH) Form 2575 for critical hoists found in INFORED** before the hoist, and the supervisor in charge of the equipment at the time of the hoist shall be obligated to discuss the whole hoist procedure with the personnel involved, and they shall sign Form 2575, once the meeting has concluded.

In case the critical hoist is carried out by a contractor within the operational areas of the ACP, he/she shall submit the hoisting plan which shall be reviewed and approved by the supervisor of the crane operations of the division and/or the representative of the crane committee.

The supervisor in charge of the critical hoist will ensure that, in addition to the completion of the form, the entire hoist procedure be clearly defined, which shall include the following information:

1. The hoist load, its weight, dimensions, and whether it contains any type of dangerous material.
2. The crane that is used, the radius, and length of the boom at the beginning and end of the hoist indicating the operating quadrants of the crane. The initial and ending position of the crane with respect to the load. In this manner it will be guaranteed that the crane shall not be overloaded at any time during the hoist.
3. Condition of the land.
4. The description of their pertinent capacities to be used for the hoist.
5. If the hoist is with two or more cranes, refer to the section on "Multiple Hoists" for other considerations.

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**MULTIPLE HOISTS**

Multiple Hoists are critical hoists in which two or more cranes are used simultaneously. The supervisor in charge of the crane unit in the area is responsible for filling out the **(RSHH) Form 2575 for critical hoists found in INFORED** and for writing a detailed procedure of the hoist.

The hoist procedure shall include, among other considerations, the following:

1. The cranes that will be utilized.
2. The condition of the land.
3. The cranes shall be leveled.
4. The weight and center of gravity of the load shall have to be determined.
5. The greatest radius for both cranes shall have to be measured.
6. The angles and lengths of the boom for each crane shall have to be determined.
7. Calculate the capacity for each one of the cranes during the operation.
8. **Neither of the two cranes shall be loaded with more than 75% of its net capacity.**
9. The cranes shall be in good operating condition.
10. The swing, and rising and lowering of the boom shall be kept to a minimum.
11. To the extent possible, the cranes shall not be moved with the load. If it needs to be done, the two cranes shall have the same boom length.
12. **The Riggers, helpers, and Crane Operators shall know exactly what they have to do before the hoisting is initiated.**
13. **THERE SHALL ONLY BE ONE PERSON SIGNALING DURING THE HOIST.**
14. Perform a test without load to confirm their calculations and measurements.
15. It shall be determined which crane shall lead at the time of swinging and receiving the signals, and the others shall follow it with the swing brake deactivated. The crane leader may be changed among the cranes involved during the hoist.
16. All the crane and cargo motions shall be carried out as smoothly and in the most controlled manner possible.
17. All crane hoisting cables shall be maintained perpendicular at all times. This is absolutely critical to avoid a crane pulling the other crane, throwing it off its capacity.