

CRANE RIGGING TERMINOLOGY TERM DEFINED

The term "technically difficult rigging" is included in the list of what constitutes a critical lift in EM 385-1-1 promulgating the requirement for a critical lift plan. Until recently the definition of what a "technically difficult lift" is was not clear. The following has been interpreted by our Navy Crane Center and should be used to aid in determining if your contractors' lift is technically difficult. A "technically difficult rigging" arrangement is defined as a situation where any of the following conditions are present:

1. The location of the center of gravity is questionable.
2. The structural integrity of the load is questionable (i.e., a load that lacks the structural soundness to support its own weight when lifted).
3. The attachment points on the load are not clearly evident (i.e., the load is not designed with attachment points for lifting and the shape of the load does not readily lend itself to common sling configurations such as choker or basket hitches).
4. A satisfactory rigging configuration is difficult to determine (i.e., the shape or complexity of the load to be lifted prevents the use of standard rigging configurations).
5. The forces generated in and by the rigging configuration are difficult to determine (i.e., additional forces due to multiple lift angles, compressive forces in the load, etc.).
6. A disassembled rigging configuration, (slings, shackles, spreaders, etc.) has to be reassembled for a particular lift and the possibility exists for it to be reassembled incorrectly or for required pieces to be left out.
7. A crane lift involving submerged objects.
8. Crane lifts without the use of outriggers using on rubber load charts.
9. Lifts where the center of gravity of the object being lifted is not known or a change could be anticipated.
10. Lifts involving the use of more than one hoist.