Safety First

1. All personnel working with the crane or, within the working area of the crane, shall be wearing hard hats, safety-reflective vests, safety boots, gloves, etc.
2. All personnel within the working area of the crane shall be made aware of the potential hazards when working with cranes (the purpose of the pre-lift meeting of all involved personnel)
3. The crane operator will perform a pre-lift inspection of the crane and of the rigging that will be employed on the job
4. The crane operator may shut-down the crane operation if they see ***any*** of unsafe conditions.
5. Safety is everyone's responsibility and everyone is ultimately accountable..

Load and Jobsite Considerations

1. **Jobsite Access:** can we get the crane into the site and then setup properly to do the job
2. **Ground Stability:** the ground conditions must be able to support the combined weight of the crane and the load being lifted
3. **Load Weight:** what is the real weight of the of the load to be lifted.
4. **Load Radius:** what is the horizontal distance between the center of the crane rotation to center of the load.
4. **Weight of load-handling devices:** ball, block, and/or any necessary rigging must be included when calculating total weight of the load to be lifted
6. **Weight of any crane attachments:** jib, lattice extension or auxiliary boom point must also be taken into consideration
7. **Boom Length:** including the jib, swing away extension or any other attachments that may increase length of the boom
8. **Boom Angle:** the angle formed between the horizontal plane of rotation and center line of the boom.
9. **Parts of Line:** ensure line capacity exceeds load to be lifted
10. **Quadrant of Operations:** the area of operation that the lift is being made in relative to crane setup; note.. different quadrants may have lower lifting capacities.

Operational Considerations

1) Loads shall not be allowed to exceed crane-rated load capacity and/or working radius as determined by the crane-load capacity charts.
2) When working at boom lengths or radii between the figures shown on the load capacity chart, the next lower capacity rating should be used. It is dangerous to guess the capacity for boom lengths or radii between those listed on the rating page.
3) It is very dangerous to lift a load without knowing whether it is within the rated capacity while expecting the crane to start to tip to warn of an overload. Cranes may suddenly tip over or the boom may collapse if the load is too heavy.
4) Always stay within the rated capacity. Operators must reduce the load under adverse field or weather conditions until it is determined the machine can safely handle the lift.