Does the gross load exceed 75% of the crane’s total lifting capacity?

Does the gross load at any point during the lift exceed 80% of crane’s capacity chart?

Does load replacement time exceed 10 days?

Will the loss of the load during installation cause a loss of production exceeding 10 days or a cost of $100,000.

Will the loss of the load constitute a risk to the public or environment, i.e. chlorine or acid?

Does the lift require 2 or more cranes?  (Note: never exceed 75% of each crane’s capacity in a multi-crane lift.)

Will the load be swung over an unprotected plant, equipment or service?

Will the lift be performed in proximity of live electrical conductors?
NMO Mobile Crane Operator's Lifting Plan

<table>
<thead>
<tr>
<th>PRELIMINARY</th>
<th>Wind ________ mph</th>
<th>Temp. ________ deg. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crane inspected?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM TO BE LIFTED</th>
<th>Net Weight ________</th>
<th>Height ________</th>
<th>Width ________</th>
<th>Length ________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of: Rigging Gear</td>
<td>Describe:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hoist Block</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hoist Rope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jib/Fly</td>
<td>(Stowed/Erected/Stored)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aux. Block</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headache Ball</td>
<td>Extended or Retracted?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other attach.</td>
<td>Describe:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total combined weight:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Load chart deductions necessary?)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross weight:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIFTING CRANE</th>
<th>Radius at load pick up point in ft.</th>
<th>Verified against load chart: YES NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radius at load set down point in ft.</td>
<td></td>
<td>Verified against load chart: YES NO</td>
</tr>
</tbody>
</table>

While suspended, will load ever exceed maximum radius indicated above, during operation? YES NO
If YES, verified against load chart: YES NO

<table>
<thead>
<tr>
<th>SKETCH &amp; EXPLAIN LIFT SEQUENCE (On back of this form)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>MINI - CHECK</th>
<th>Foundation ________</th>
<th>Level ________</th>
<th>Hoist Rope ________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tagline ________</td>
<td>Brakes ________</td>
<td>Outriggers ________</td>
<td></td>
</tr>
<tr>
<td>Rotating Table</td>
<td>Boom ________</td>
<td>Controls ________</td>
<td></td>
</tr>
<tr>
<td>Head set ________</td>
<td>Vision ________</td>
<td>Lubrication ________</td>
<td></td>
</tr>
<tr>
<td>Lights/Horns ________</td>
<td>Rigging ________</td>
<td>Load Scale ________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIMITATIONS</th>
<th>Head Height ________</th>
<th>Obstructions ________</th>
<th>Explain: ________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Lift ________</td>
<td>Attach Points ________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horiz. Travel ________</td>
<td>Radius ________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerlines ________</td>
<td>Load Flexing ________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CREW</th>
<th>Rigging Supervisor ________</th>
<th>Operator ________</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Rigger ________</td>
<td>Rigger(s) ________</td>
<td>Rigger(s) ________</td>
<td></td>
</tr>
<tr>
<td>Signaler ________</td>
<td>Spotter(s) ________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tailboard Meeting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tasks assigned? YES NO
**NMO CRITICAL LIFT PLAN SHEET**  
**HYDRAULIC / LATTICE MOBILE CRANE**

**Unit #:**  
**Date:**

**Location:**  

**Load Description:**

**Lift Description:**

**Diagram of Crane Lift & Load Placement Attached:**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

---

### A. Load

1. **Load condition:**  
   - Wt. Empty __________ lbs.
2. Wt. of Contents __________ lbs.
3. Wt. of Aux. Block __________ lbs.
4. Wt. of Main Block __________ lbs.
5. Wt. of Lifting Beam __________ lbs.
7. Wt. Of Jib (erected/stowed/stored) __________ lbs.
8. Wt. Of Hoist Rope (extra) __________ lbs.
10. Other __________ lbs.

**Gross Weight**

---

### B. Crane

1. **Type of Crane**
2. **Maximum Crane Capacity**
3. **Boom Length**
4. **Radius at Pick-up** __________ ft. / **Set-down** __________ ft.
5. **Crane capacity at radius:** over rear __________ lbs. / **Over front** __________ lbs.
6. **Boom angle at Pick-up** __________ ft. / **Set-down** __________ ft.
7. **Max. rated capacity of crane at this boom length, radius and boom angle for this lift is** __________ lbs.
8. **Max. load on crane for this lift is** __________ lbs.
9. **Lift is** __________ % of the crane's rated capacity

### C. Jib/Fly

1. **Erected** __________ **Stowed** __________ **Stored** __________
2. **If jib/fly to be used:** length __________ angle __________
3. **Rated capacity of jib/fly from chart** __________ lbs.

### D. Hoist Rope

1. **Rope diameter** __________ **Number of parts** __________
2. **Lift capacity based on parts** __________ lbs.

### E. Rigging

1. **Hitch type**
2. No. of slings __________ **Size** __________ **Type** __________
3. **Sling assembly rated capacity** __________ lbs.
4. **Shackle size** __________ **No. of shackles** __________
5. **Shackle rated capacity** __________ lbs.
6. **Shackle secured to load by:**

---

### F. Crane Placement

1. **Any deviation from smooth, solid foundation?**
2. **High voltage or electrical hazards?**
3. **Buildings, Equipment, Plant, or Services to lift or swing over?**
4. **Travel?**
5. **Swing direction?**

### G. Considerations

1. **If lift exceeds 75% of crane's capacity, attach** additional special instructions, restrictions, diagrams for crane, rigging, lift, etc.
   - Yes ________ No ________
2. **Multiple crane lifts require a separate plan for each crane.**
3. **Any changes in the crane configuration, placement, rigging, lifting scheme, or calculations require that a new critical lift plan be developed.**

### H. Pre-lift checklist-Completed Prior to Lift

1. **Crane inspected**
2. **Rigger Qualified**
3. **Rigging inspected**
4. **Side lines**
5. **Swing room**
6. **Hoist height**
7. **Crane Chtr.**
8. **Load test**
9. **Operator Qualified**
10. **Signal system**
11. **Tag lines**
12. **Wind/Temp.**
13. **Safety spotter**
14. **Traffic**
15. **Tailboard**
16. **Site control**
17. **Tailboard**

---

### I. Notes/Comments

---

---

**Supervisor Signature**  
**Date**

---

**Crane Operator Signature**  
**Date**

---

**Lead Rigger Signature**  
**Date**
Critical Lift Criteria
What Constitutes A Critical Lift?

- When the gross load value exceeds 75% of the total crane’s capacity.
- When the gross load being lifted exceeds 80% of the crane’s capacity chart.
- When the load replacement time exceeds 10 days.
- When the loss of the load during installation will cause a loss of production exceeding 10 day or cost of $100,000.
- When the loss of the load constitutes a risk to the public or to the environment, i.e. chlorine or acid.
- When the lift require 2 or more cranes.
  - Note: Never exceed 75% of each crane during a multi-crane lift.
- When the load has to be swung over an unprotected plant, equipment or service.
- When the lift is performed in proximity of live electrical conductors.