

LIFT CLASSIFICATION FLOW CHART

TEST

LIFT CLASSIFICATION

REQUIRED ACTION

- 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 ?

YES

Critical Lift

Critical Lift
Plan
Required

NO

All lifts not meeting
the Critical Lift
Criteria

YES

Standard Lift

Lift
Evaluation
Plan
Required

NMO Mobile Crane Operator's Lifting Plan

PRELIMINARY Wind _____ mph Temp. _____ deg. F
 Crane inspected? Yes No

ITEM TO BE LIFTED

Net Weight _____ Height _____ Width _____ Length _____

Weight of: Rigging Gear _____ Describe: _____
 Hoist Block _____
 Hoist Rope _____
 Jib/Fly _____ (Stowed/Erected/Stored)
 Aux. Block _____
 Headache Ball _____ Extended or Retracted? _____
 Other attach. _____ Describe: _____

Total combined weight: _____ (Load chart deductions necessary?)
 Gross weight: _____

LIFTING CRANE

Radius at load pick up point in ft. _____
 Verified against load chart: YES NO

Radius at load set down point in ft. _____
 Verified against load chart: YES NO

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

SKETCH & EXPLAIN LIFT SEQUENCE (On back of this form)

MINI - CHECK

Foundation _____	Level _____	Hoist Rope _____
Tagline _____	Brakes _____	Outriggers _____
Rotating Table _____	Boom _____	Controls _____
Head set _____	Vision _____	Lubrication _____
Lights/Horns _____	Rigging _____	Load Scale _____

LIMITATIONS

Head Height _____	Obstructions _____	Explain: _____
Vertical Lift _____	Attach Points _____	_____
Horiz. Travel _____	Radius _____	_____
Powerlines _____	Load Flexing _____	_____

CREW

Rigging Supervisor _____
 Operator _____
 Lead Rigger _____
 Rigger(s) _____
 Rigger(s) _____
 Signaler _____
 Spotter(s) _____
 Tailboard Meeting _____

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: Yes _____ No _____

A. Load

1. Load condition: _____
 2. Wt. Empty _____ lbs.
 3. Wt. of Contents _____ lbs.
 4. Wt. of Aux. Block _____ lbs.
 5. Wt. of Main Block _____ lbs.
 6. Wt. of Lifting Beam _____ lbs.
 7. Wt. Of Slings/Shackles/Other Rigging _____ lbs.
 8. Wt. Of Jib (erected/stowed/stored) _____ lbs.
 9. Wt. Of Hoist Rope (extra) _____ lbs.
 10. Wt. Of Excess Load Material _____ lbs.
 11. Other _____ lbs.
- Gross Weight** _____ lbs.

Source of Load Wt. Information: (drawings, calcs.,ect.)

Load Wt. Confirmed by:

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 side _____ 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, ect.
 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 | 10. _____ Rigger Qualified |
| 2. _____ Rigging inspected | 11. _____ Signal system |
| 3. _____ Crane set-up | 12. _____ Tag lines |
| 4. _____ Swing room | 13. _____ Wind/Temp. |
| 5. _____ Hoist height | 14. _____ Safety spotter |
| 6. _____ Head room | 15. _____ Traffic |
| 7. _____ Crane Ctrwt. | 16. _____ Tailboard |
| 8. _____ Load test | 17. _____ Site control |
| 9. _____ Operator Qualified | 18. _____ Signatures |

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.