

10 Points of Lift Plan Development



Host: **Mike Parnell**
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ASME B30 Vice Chair (Cranes & Rigging)
ASME P30 Chair (Lift Planning)

The views expressed in this presentation are that of ITI and are not necessarily the views of the ASME or any of its committees



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Tackling the Challenges of Training Site
Supervisors, Lift Directors, and other Leaders

4 Major Lifting Considerations in Power Gen
Environments

Rigging & Sling Failures: Case Studies &
Solutions

Today's Presentation:

10 Points of Lift Plan Development

WEBINAR TRAINING COURSES

- **Lift Director & Site Supervisor**
- **Critical Lift Planning**
- **Rigging Gear Inspection for Supervisors**
- **Advanced Rigging: Load Distribution & Center of Gravity**
- **Advanced Rigging: Multi-Crane Lifts & Load Turns**

MIKE PARNELL – ABOUT YOUR HOST

Mr. Parnell has a wealth of knowledge regarding cranes, rigging, and lifting activities throughout a variety of industries.

- 30+ years learning about wire rope, rigging, load handling, and lifting activities.
- Vice Chair of the ASME B30 Main Committee which sets the standards in the US for cranes and rigging
- Chair of the ASME P30 Main Committee which sets the standards for lift planning.

ASME standards are also adopted by many countries around the world.



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The Lift Plan



THE LOAD

- Weight, CG, dimensions and source
- Shifting components?
- Evaluate / verify the attachment points are suitable for load handling, while maintaining load integrity



LOAD HANDLING **EQUIPMENT**

- Identify LHE capacity and configuration
- Dynamics, environmental, load eccentricities
- LHE meets manufacturers', regulatory and site requirements
- Proper set-up, erection, installation and dismantle procedures



THE RIGGING

- Method
- Capacity
- Dynamic, environmental, CG-to-pick point
- Equipment meets regulations/site requirements
- Procedure to install and remove
- Rigging protection; consider temperature, chemical, D/d, edges, abrasion, load turning



LHE and **LOAD MOVEMENT**

- Load movement and travel paths
- Free from inadvertent contact
- Dynamics, environmental eccentricities
- Personnel positions; spotters, signalers, tag liners, blocking, cribbing or connecting crew



PERSONNEL TRAINING & QUALIFICATION

- Lift Director
- Site Supervisor
- LHE Owner
- LHE User
- Lift Engineer
- Lift Planner
- Soils Analyst
- LHE Operator
- Qualified Rigger
- Qualified Signaler
- Regulatory Representative
- Load Manufacturer Representative
- Rigging Equipment Representative
- Site Safety Officer
- LHE Spotters
- Load Spotters



SITE

- Scope of work
- Access, travel path, egress for LHE and load
- Foundation; compaction tests, soils analysis, structures, vaults, voids, backfill
- Load landing point



COMMUNICATION

- Suitable communication; hand / voice / video / horns / lights
- Backup plan



SITE CONTROL

- Vehicular traffic
- Potential interference from other activities
- Barricades, guards or physical measures to restrict interference



CONTINGENCY PLANS



- Response teams
- I.D. type of hazard
- Recommended action
- Contact and communication

EMERGENCY ACTION PLAN



- Site Plan
- Responders
- Ensure the rigging team understands

PRE-LIFT MEETING

- Review activity
- Handling sequence
- Personnel assignments
- Questions/solutions
- Review
- Sign-off



EXECUTING CLP

- LHE inspected
- Load inspected
- Rigging inspected
- Personnel ready
- Site inspected



THE LIFT

- Initiate the lift
- During the lift proceed as planned or stop and adjust according to contingency or acceptable methods



If impossible to proceed, “all-stop” and secure load & LHE.

POST LIFT REVIEW

- After the lift review, inspect and update



Q&A

