

Plan #

Department or Group

Hoisting and Rigging: Lift Planning and Control for Ordinary Lifts

Plan Preparer(s)

Signature	Printed name	Date

Approvals

Signature	Printed name	Date

Authorized Personnel

Authorized employee	Signature	Date	Authorizing supervisor	Signature	Date

Note This form includes basic lift planning and control elements for ordinary lifts. For additional lift plan examples, or to compare an ordinary lift planning to planning considerations for critical or production lifts see DOE-STD-1090-2007.

Performing the Lift: Checklist

See also: Hoisting and Rigging: Lift Planning and Control Guidelines¹

- ✓ Keep a copy of this plan at the work site and follow the plan
- ✓ Assign a designated leader
- ✓ Ensure all personnel involved in the lift understand the plan
- ✓ Provide the task-qualified supervision specified in the planning process
- ✓ Vacate all non-essential personnel from the building or adjacent area
- ✓ Ensure a signaler is assigned, if required
- ✓ Identify the crane operator
- ✓ Follow specific instructions/procedures for attachment of the rigging gear to the load.
- ✓ Use proper rigging techniques. Examples include padding sharp corners, orientation of chocker hitches for “rolls”, orientation of hooks, no binding of hoist rings, etc.
- ✓ Test and balance the load. Slowly raise the crane to take the slack out of the rigging without actually lifting the item. Allow the rigging gear to settle into place, checking for twists and binding. Make sure that padding has remained in place and all slings are protected from sharp edges. Begin to raise the item to verify balance and check the braking system by watching that the load does not sink. If load is not balanced, lower the load and adjust. Repeat as necessary until the load is evenly balanced.
- ✓ Follow “Conduct of Operator” requirements²
- ✓ Stop the job when any potentially unsafe conditions is recognized

1 Hoisting and Rigging: Lift Planning and Control Guidelines (SLAC-I-730-0A21T-008), <http://www-group.slac.stanford.edu/esh/eshmanual/references/hoistingGuideLiftPlan.pdf>

2 DOE-STD-1090-2007 7.5, 8.5, 9.5, 10.5, 16.5

Characterize the Load(s)

This plan covers

- Single load only
- Variety of similar loads: enter dimensions and weight of largest load covered by the plan

Length _____

Width _____

Height _____

Diameter _____

Load weight* _____

*Weight determination (**choose one**)

- Marked on load Weighed Estimated Other _____ (**describe**)

- Weight calculated by _____ (**attach calculations**) Drawing number _____
Name

Characterize the Task *(Include directions for lifting, rotation, flipping, speeds, and travel)*

Evaluate the Hazards *(Define specific controls)*

Plan the Rigging

On a sketch or photo (see page 4 for sketch grid), show how the item will be rigged and the type of gear to be used:

1. Show location of shackles, hoist rings, spreader beams, slings, etc
2. Show attachment points (how rigging gear will be attached to load)
3. Show where padding of sharp edges are necessary
4. Provide the weight of heavy equipment such as a lifter or spreader beam
5. Show proper orientation of eyebolts
6. Indicate the center of gravity (horizontal and vertical)

Characterize Attachment Points

Note: Attach photos to illustrate, as necessary.

Manufacturer-provided lift point

Sling in choker hitch

Sling in basket hitch

Sling in vertical hitch

Threaded hole (**eyebolt or hoist ring**) Hole diameter _____ Material type _____

Other _____

Note: Confirm attachment points or hitch methods with the load owner if in doubt.

The lift points or attachment methods described in this lift plan can withstand the forces created by the rigging gear.

Load owner

Signature

Date

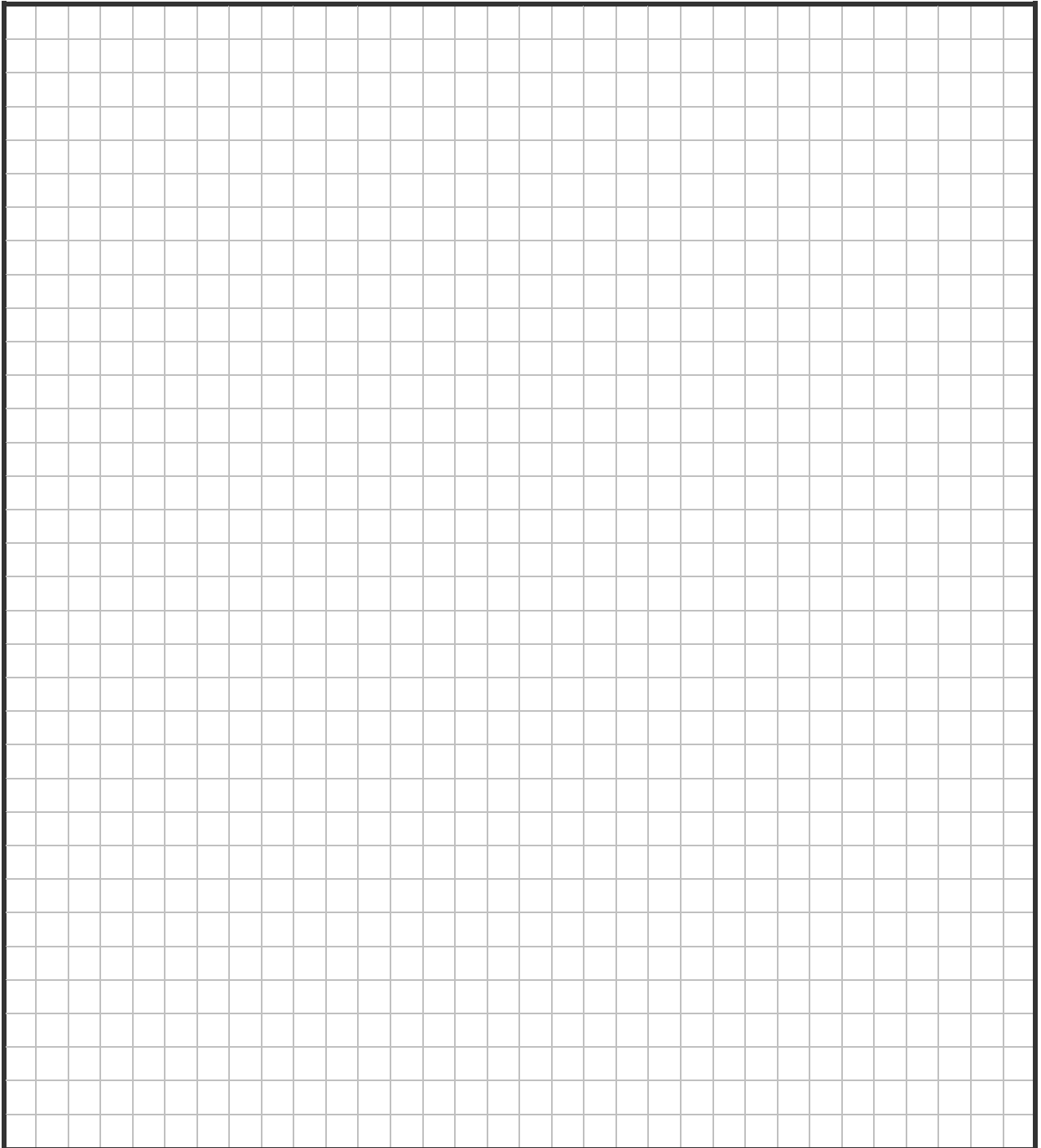
Define Rigging Gear Requirements

1. List each piece of rigging gear shown on the rigging sketch or photo in the table below (such as: load hook, shackles, slings, eye bolts). If a component weighs more than 10 pounds, include the weight in the weight column.
2. Label the sketch or photo using the corresponding letter for the gear.
3. Draw sling angles and the resulting load reduction factors for slings and eyebolts.
4. Calculate the force on each piece of rigging gear. Show that angles are accounted for in determining forces.
5. Determine the required rigging gear capacity and size. Indicate if this is an exact specification or a minimum.

Type	Weight	Force on rigging gear	Capacity / rating / working load limit	Size specification
A				
B				
C				
D				
E				
F				
G				
H				
I				

Rigging Sketch or Photo of Rigged Item

Include all information required to determine that the load is properly rigged and that appropriate rigging gear is selected. Include, as applicable, sling angles, eye bolt orientation, padding points, center of gravity, type of sling hitch, and any other pertinent information.

A large rectangular area filled with a fine grid pattern, intended for drawing a rigging sketch or photo of a rigged item. The grid is composed of small squares and is enclosed by a thick black border.