

LOAD CHART LEARNING GUIDE

FOLDING BOOM CRANE

Hiab XS 288 Boom Truck Crane



CraneSafe Certification

Folding Boom Crane LEARNING GUIDE
LC.FB22.HBXS288.LG1(061109)

10 May 2011



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Introduction

These 3 questions are for you to use to help get ready for the load chart part of the CraneSafe Certification assessment for Folding Boom Truck Crane.

The questions on your assessment will be different from these but will be presented in the same format as these questions.

With the questions are the answers with the relevant load charts. The answers explain how we arrived at the correct answer and you can use this to help work through any questions you may have gotten incorrect. We have not included all of the charts for this crane - but everything you need to answer the questions is included. You do not need the crane manual or full load chart package to answer the questions.

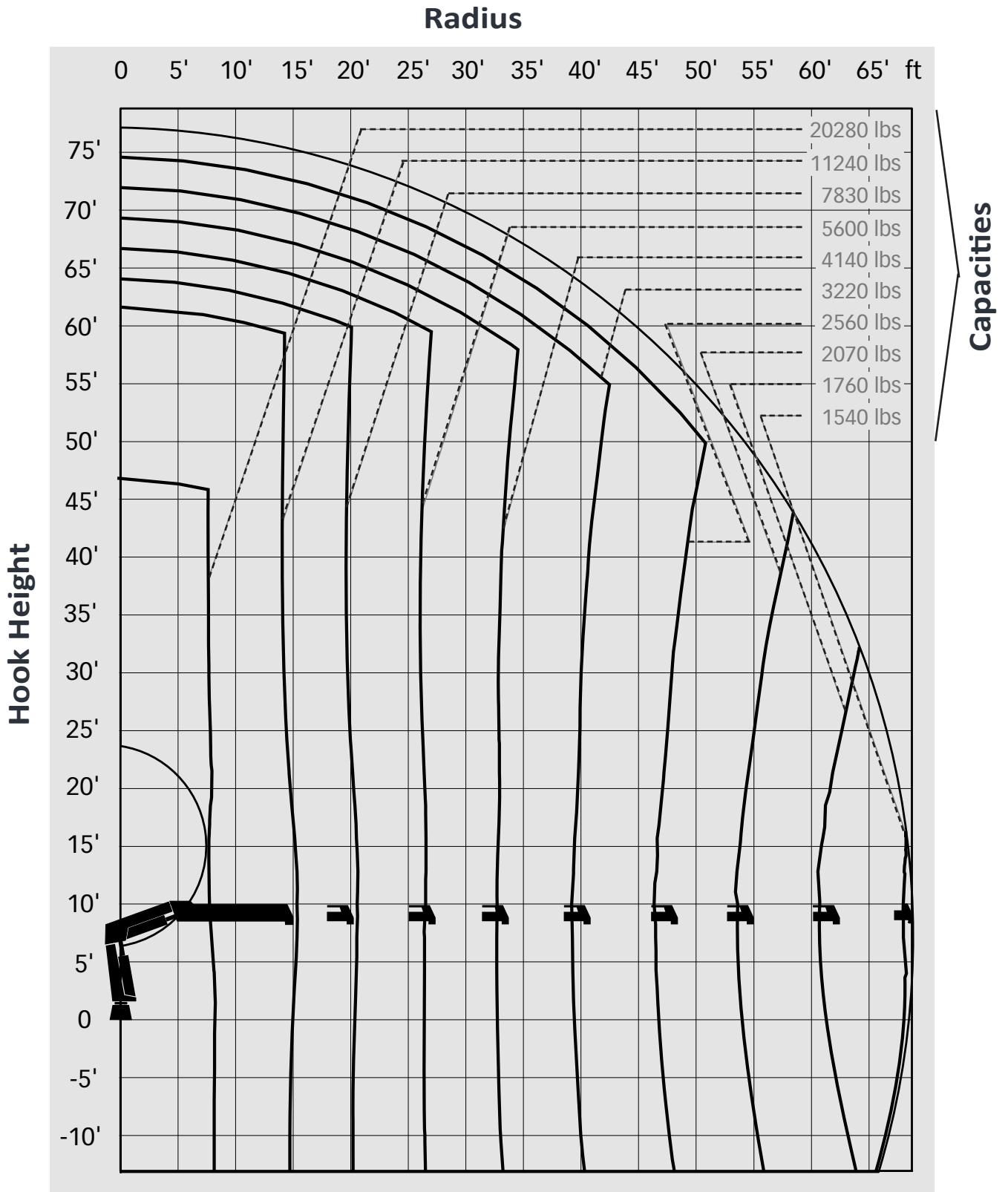
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Load Chart



*These charts are for assessment purposes only and should not be used to operate a crane.
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.*

Load Chart Questions

1. What is the Hiab's GROSS CAPACITY based on the following configuration?

- Radius – 45 feet
- Hook height – 50 feet

Answer: _____ pounds

2. What is the Hiab's NET CAPACITY based on the following configuration?

- Radius – 60 feet
- Height – 20 feet
- Set of lifting forks – 450 lbs

Answer: _____ pounds

3. What is the Hiab's MAXIMUM RADIUS based on the following configuration?

- Load weight – 2500 lbs
- Hook height – 30 feet
- Weight of rigging – 100 lbs

Answer: _____ feet

Load Chart Answers

Q1 – Gross Capacity

1. What is the Hiab's GROSS CAPACITY based on the following configuration?

- Radius – 45 feet
- Hook height – 50 feet

Answer: **2,560 pounds**

Gross Capacity is:

The maximum weight shown in the load chart the Hiab can lift according to the crane configuration.

To determine the gross capacity, follow along the radius numbers at the top of the load chart until you come to a 45 foot radius.

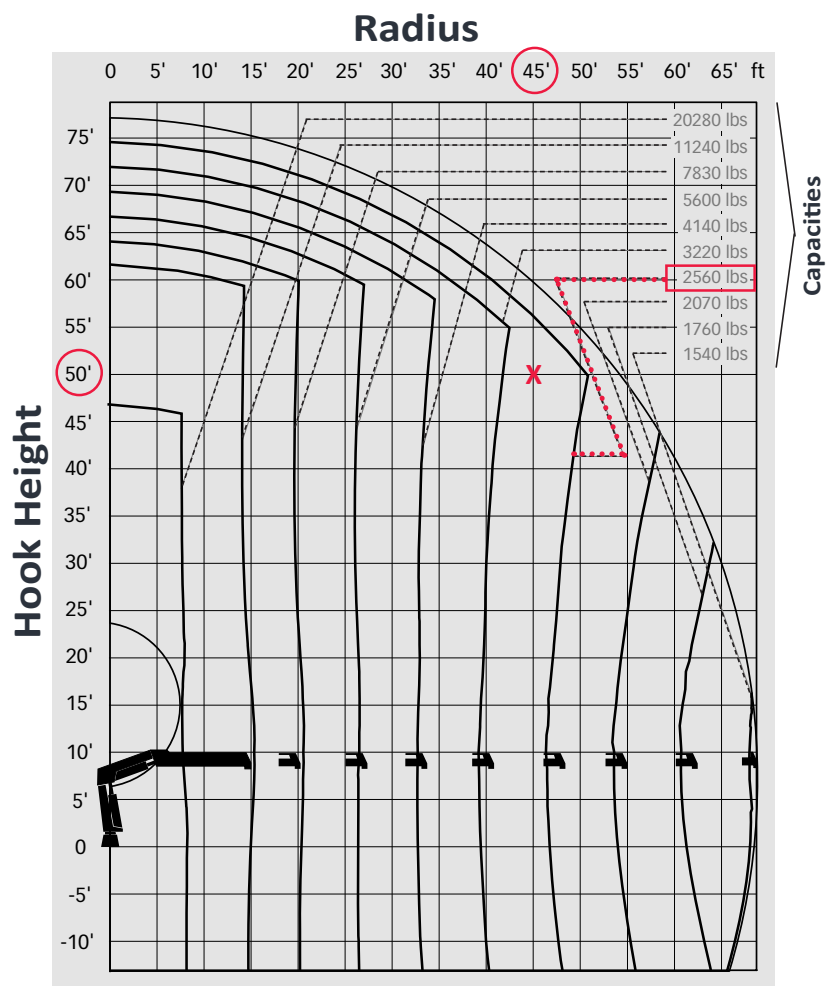
Follow down the 45 foot column to where it intersects with the 50 foot hook height shown in the left hand column on the load chart.

The **X** on the load chart shows the position of the hook based on the above configuration

To determine the gross capacity of the Hiab when it's between the bold lines you must go to the lesser capacity: to the bold line to the right of the hook.

Follow down the nearest bold line to the right of the hook to determine where the red line from the capacities ends at the bold line. Follow the red line to read a capacity of 2,560 lbs.

(If you go to the bold line to the left, the crane is beyond the gross capacity of 3,220 lbs which will exceed the crane's capacity for the above configuration.)



Q2 – Net Capacity

1. What is the Hiab’s NET CAPACITY based on the following configuration?

- Radius – 60 feet
- Height – 25 feet
- Set of lifting forks – 450 lbs

Answer: **1,310 pounds**

Net Capacity:

The maximum weight that can be lifted minus the weight of the load handling devices (eg. pallet forks, slings, etc.)

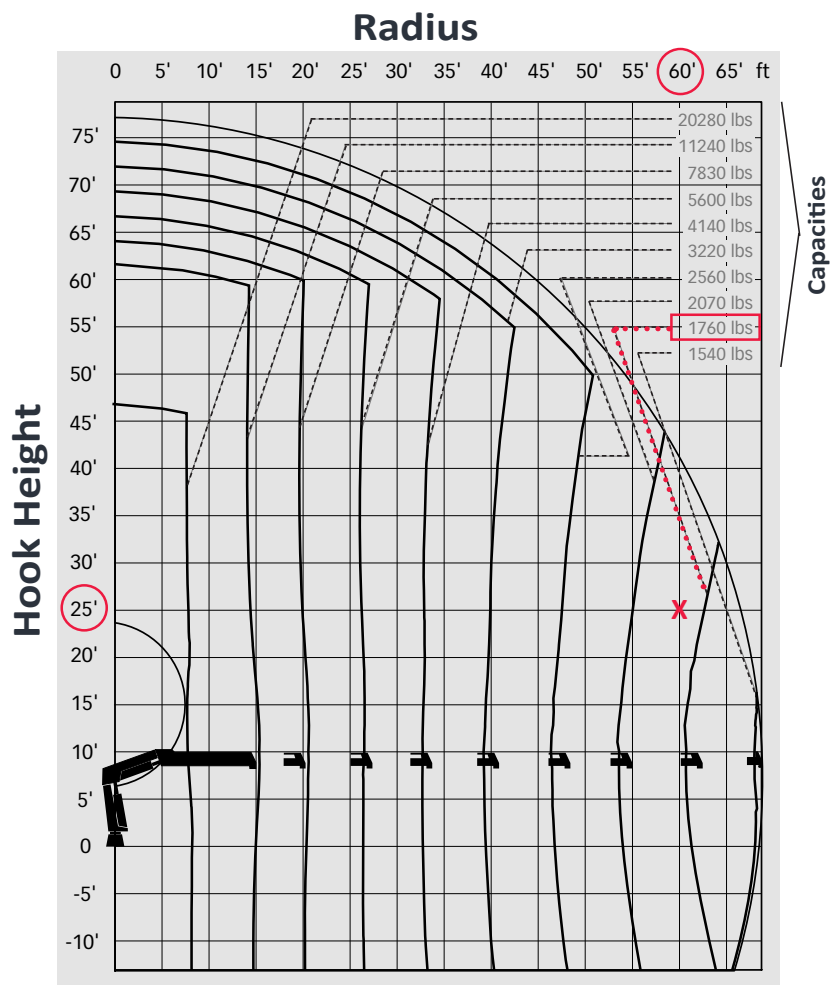
To determine the gross capacity, follow along the radius numbers at the top of the load chart until you come to a 60 foot radius.

Follow the 60 foot line down to where it intersects with the 25 foot hook height shown at the left hand side of the load chart.

The **X** on the load chart shows the position of the hook based on the above configuration

To determine the gross capacity of the Hiab when it’s between the bold lines, you must go to the lesser capacity: to the bold line to the right of the hook.

From the bold line to the right of the hook, follow the red line to read a capacity of 1,760 lbs.



Net Capacity = Gross Capacity – Load Handling Devices

= 1,760 lbs – 450 lbs

= 1,310 lbs

Q3 – Maximum Radius

1. What is the Hiab’s MAXIMUM RADIUS based on the following configuration?

- Load weight – 2500 lbs
- Hook height – 30 feet
- Weight of rigging – 100 lbs

Answer: **40 feet**

$$\begin{aligned} \text{Gross Load} &= \text{Gross Weight} + \text{Rigging Weight} \\ &= 2,500 \text{ lbs} + 100 \text{ lbs} \\ &= 2,600 \text{ pounds} \end{aligned}$$

Select the capacity that is equal to or greater than the gross load of 2,600 lbs from the capacity list at the top right hand corner of the load chart: 3,220 pounds

From 3,200 lbs, follow the red line to where it intersects with the bold line.

Follow the bold line down to a 30 foot hook height (at the X).

Follow the radius line up (shown in red) to the top of the load chart.

