

Crucial Dimensions

1. Overview

When purchasing an overhead bridge crane the dimensions specified can make or break the buyer. Here, it's important to look at some dimensions and how they affect your selection of cranes and the related pricing.

2. Important Vertical Dimensions to Know

- (A) Pit Depth (if applicable)
- (B) Floor to lowest-hung obstruction (IE light, duct)
- (C) Floor to tallest height load must be lifted
- (D) Floor to top of rolling surface (rail if top-running, tread of beam if under-run)
- (E) Height of any machinery to be cleared
- (F) Any working height load must be lifted to
- (G) Floor to ceiling

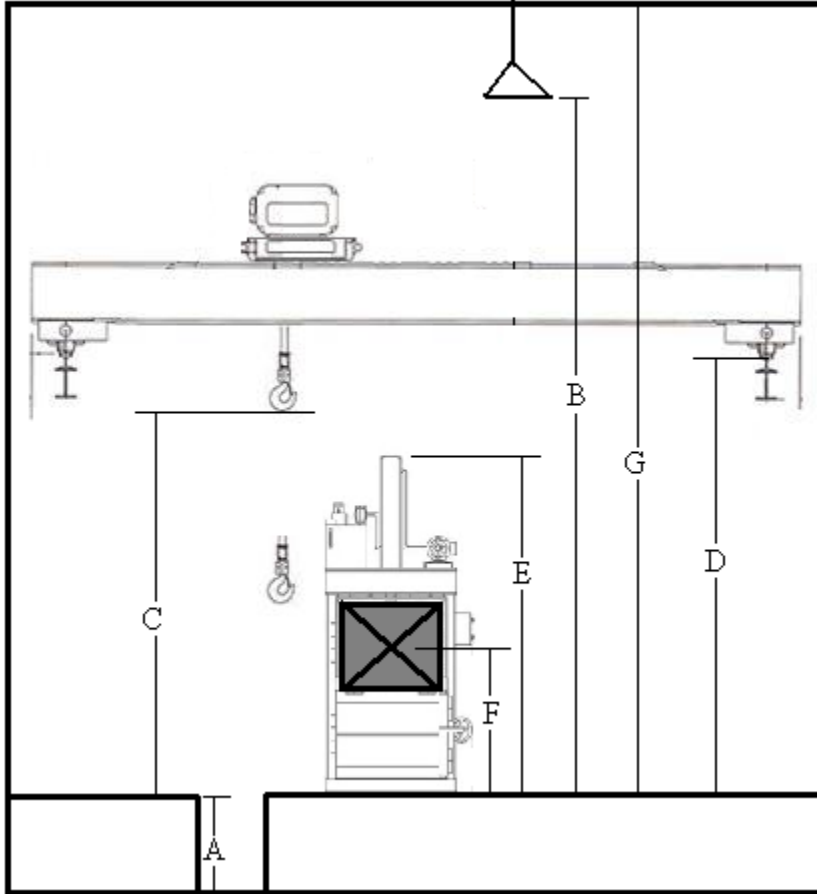


Fig. 101

In the diagram above, a top-running overhead bridge crane is used to load a baler, at the large “X” on the machine. While it may appear there is plenty of room to accomplish this, sometimes pre-existing conditions can narrow the envelope the crane must fit in. Examples include a higher than normal “E”, “C”, or “D” dimension or a lower than normal “B” or “G” dimension. Before requesting a proposal from Dearborn Overhead Crane, it’s a good idea to have a knowledge of the above dimensions and how flexible they are – for example, it’s not likely the rolling surface can be changed if it exists already, but a light can be moved cheaply, possibly saving thousands of dollars in expenditure on the actual overhead bridge crane itself.

3. Important Horizontal Dimensions to Know

- (M) Span of crane (between centerline of rolling surface)
- (N) Span of building area (wall to wall)
- (O) Approach distance to side-walls (for dropping off loads)
- (P) Approach distance to end-walls (for dropping off loads)
- (S) Side Clearance on Each Side (center of rolling surface to wall)

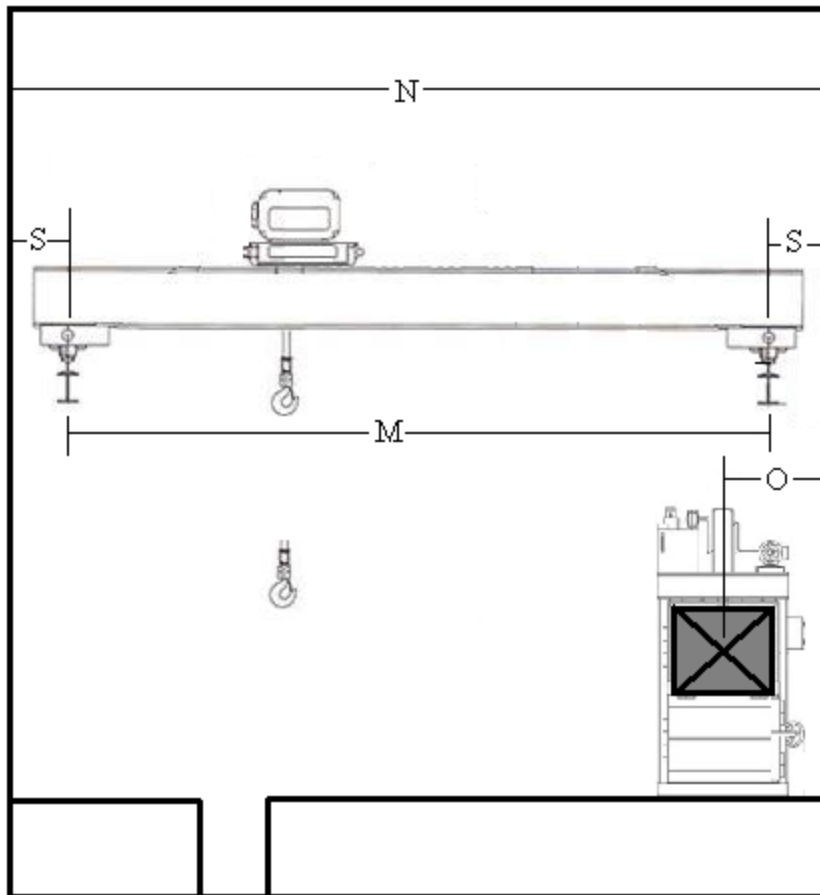


Fig. 102

In figure 102, four of five important horizontal dimensions are shown. It's also important to know these dimensions and how flexible they are before requesting a proposal on an overhead bridge crane. For example, an overhead crane with a very small "O" dimension on both sides of the building will be much more expensive than a crane with a large "O" on the left, and smaller "O" on the right. If a runway has not yet been installed or designed, optimizing the "S" dimension can also save significant money. The "P"

dimension is just like the “O” dimension, but pertains to the approach distance to end-walls rather than side walls.

4. Conclusion

A good knowledge of the important dimensions, and a rating of their flexibility allows Dearborn Overhead Crane to fit an overhead electric crane into a most economical envelope. Overhead bridge crane designers have a “bag of tricks” available to them. This bag of tricks has tricks to save money, and tricks to save space. It’s rare the space saving trick also saves money. Discussing your important dimensions and their flexibility with one of Dearborn Overhead Crane’s overhead bridge crane designers can create economical and reliable solutions.