

DO I HAVE TO LOAD TEST My Overhead Crane &/or Hoist?

BY JERRY BURCK

Load Testing overhead cranes and/or hoists has been a topic of conversation for years. In the past, OSHA was not specific on this issue and the clearest answer was found cited by ASME B30.17 standards. These standards stipulated that any new, significantly repaired or altered (modernized) crane or hoist *should* be load tested prior to being put into service. This same section went on to say that *if* the unit was load tested, then certain test procedures and considerations shall be conducted.

Well, it seems that no matter how many times we look at the written guidelines from OSHA (1910.179(k)) and ASME (B30.17-2.2.2), we come up with the same answer; you don't have to load test, BUT, if you have an accident and it is a result of a structural failure in your overhead lifting equipment – and if that equipment was not load tested – then Katy bar the door!

The facts to this point are; you will not only be facing a civil lawsuit, but also fines and other unpleasant inquiries from various regulatory and / or governmental agencies. And plainly, you would not have a very good defense for your decision not to load test the equipment when governing standards state your equipment *should* have tested.

While *should* does not demand testing, good business is to protect your people, process and equipment in the working environment. Load testing can range in cost from the very modest (\$1000) to somewhat expensive (\$20,000) but the fact of the matter is that load testing and the security that comes with it is not an item to cut from a project to save costs.

In conclusion, it is the opinion here at CraneBuzz.com that,

whether you are a supplier or consumer, you should include, or look for, the load test line item in your bids, be clear on who is supplying the weights and whether or not they are certified.

One last relative item for discussion here is deflection testing, most commonly asked for regarding bridge girders. Please remember that this is a design criterion and not a test criterion. What we mean by design criterion is that the bridge is designed for a maximum allowable deflection of 1/888 inches of span by CMAA Specification 70. This design considers the crane to be under full load (or Safe Working Load) for this deflection requirement, not an overload condition. If you test for deflection, we recommend that you first do this test @ 100% of rated capacity and take your readings for the record. Then, as a separate process, perform the load test @ 125% of rated capacity. If you test for deflection @ 125% of rated capacity, you will not get a true evaluation for whether the structure is within design limitations or not. ■



Jerry Burck is the founder of Crane Buzz, an online resource for the overhead lifting industry. For more information on Crane Buzz or to participate in the conversation visit, www.cranebuzz.com