

Choosing the right material handling system #6: What training and certifications are required?

What material handling system is right for your situation and application? That's often a prohibitively difficult question to answer. To make it easier, we're breaking that big question down into a series of step-by-step questions that will lead directly to the best choice. First, [how much does the load weigh?](#) Second, [how maneuverable and flexible does the system need to be?](#) Third, how far and how frequently does the load need to move? Fourth, how much does the move system cost? Fifth, how do you make the load "loadable"? Today, we're asking what training and certifications will be required to operate the material handling system?

This question may be a little deceptive because we're actually asking something deeper and more foundational: what's the overhead associated with the material handling system in question?

In other words, you can't necessarily just pick up a material handling system and start using it instantly. Many systems necessitate behind-the-scenes costs and effort first, especially for move systems that are mechanically complex and potentially dangerous to operate. In these cases, the Occupational Safety and Health Administration (OSHA), as well as state and local authorities, may require training, certification, and/or licensure for safety purposes.

These requirements seem to be worth the effort. For instance, one review of "forklift related injuries" published in the *Journal of Orthopaedic Surgery* [found](#) that "most of the injuries are preventable with proper training and certification of the forklift drivers."

But these mandates also add secondary considerations to weigh.

- **Hiring:** Operations may need to revisit their hiring procedures and even create new open roles for certified operators of equipment like cranes and forklifts. Further, some material handling systems cannot be operated by just one person, instead requiring spotters and other helpers. This may affect hiring and staffing plans as well.
- **Training:** Heavy machinery requires expertise and skills to operate both effectively and safely, so it makes sense additional training would be required, but this adds expense to the system and may necessitate occasional periods of downtime while operators are being trained. Forklift certification can cost a few hundred dollars and take 1-2 days away from work. Crane certification can require weeks or even months of training and cost thousands of dollars.
- **Safety planning:** If the whole point of training and certification is to promote safety, the chosen material handling system may necessitate other changes to an operation's safety procedures and protocols, if only to stay in compliance with any applicable regulations. In some cases, risk managers and even legal advisors may need to weigh in. (*We'll address safety considerations further in the next article in this series*).
- **Operational planning:** The material handling system can have other logistical and practical impacts on operations as well. The greater the training and certification requirements, the more of a scarce resource those operators become. That means crane and forklift operators themselves can turn into an operational bottleneck if they are tied up elsewhere or off on break. If they're moving Load A, while Load B just sits and waits for them to finish with Load A, the operation is losing efficiency and productivity.

Other systems – air casters, conveyors, rails, transfer carts – and easier and more straightforward to operate and thus require less training and no certifications. Air casters require only about 30 minutes of training, for example. But every system is going to require some degree of training. In general, the amount of training required depends on (1) how complicated the material handling system is to operate, (2) the safety hazards associated with the system, and (3) how challenging the application is.

For more guidance on this question, please see our white paper "[Selecting the right load handling equipment.](#)" There, we take an in-depth look at different kinds of costs to consider. We also assess six other questions that organizations need to ask to pick the right load handling system. Download the paper [here](#).