When considering a loading arm supplier, companies need to make sure all its equipment works seamlessly together

Integrating loading solutions

When considering which loading arm to choose, many factors must be considered, such as the technology behind a particular manufacturer’s swivel joints, correct seal material selection, vapour recovery, dry break coupler systems, break away devices and overfill prevention.

But one question is often overlooked – will the loading arm work with the company’s new or existing truck or rail car loading racks? In others words, can the loading arm be integrated into the loading rack and work with other dynamic equipment such as safe access and fall prevention cages, overhead obstructions such as canopies and roofs, piping, valves and other associated equipment typically found at loading rack sites?

Loading arms are a dynamic and most of the issues where clashes can occur are related to the equipment used to protect operators from falls from height while working on top of trucks and rail cars.

This same safe access and fall prevention equipment which typically incorporates safety cages or platforms with handrails is also dynamic. It must elevate up and down or articulate out of the way to safely store when not in use to prevent being hit by the trucks or rail cars being serviced at the loading rack.

In one scenario, for example, it must be considered how the loading arm will work with an 1,100 mm high safety cage system that sits on top of a tank truck for fall prevention.

The safety cage must be there to meet the falls from height standards, so now the loading arm must be able to go up and over the safety cage system.

If there is a low canopy or roof overhead or some other obstructions, the length of the loading arm drop tube required to connect to the truck may cause the loading arm to crash into the overhead structure and not allow the loading arm drop tube to come up and over the safety cage.

In addition, the storage location of the arm must be considered to allow an operator to safely gain access to the loading arm and maneuver the arm into position and not clash with the safe access equipment storage position.

The integration of the loading arm into a loading rack facility can become quite complex. This is only one simple example to demonstrate the thought that must be put into a properly designed loading rack system.

Many times loading arms are purchased from one company and the loading rack with fall prevention is purchased from another supplier.

This is where the problems can begin. To avoid any possible complications companies should look at manufacturers that produce loading rack systems and loading arms all under one roof.

For more information:
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