

Working at height

The tank container industry with some 450,000 tank containers in operation puts special emphasis on health, safety, quality and protection of the environment. However, the industry is full of risks

Working at height remains one of the prevalent causes of fatalities and major injuries. Common cases include falls from ladders and through fragile surfaces. In an industry to a large extent dealing with hazardous goods, it is important to protect workers' safety.

Tanker cleaning involves the following:

- Tanker cleaning is always carried out via accessing the top of the road/rail tanker, which, on average, stands about four metres tall on hard concrete ground – all of which constitutes a significant fall from height risk;
- Tanker cleaning is carried out with high pressure steam or chemicals that makes all walk surfaces very slippery, increasing the fall from height risk;
- Tanker cleaning is generally a piece work operation and therefore time is critical.

Loadtec Engineered Systems was set up almost 20 years ago primarily to sell loading arms, but increasingly, it is supplying total solutions that make a difference to the whole working environment and the safety aspect is increasingly important.

The law

Each country has a specific health and safety law on working at height. However, the purpose of the UK's Work at Height Regulations 2005 is to prevent death and injury caused by a fall from height. The regulations apply to employers who employ staff who work at height. It applies to tank container companies and the tank cleaning companies they use.

In a statement, the UK's Health and Safety Executive (HSE) states: "Employers and those in control of any work at height activity must make sure work is properly planned, supervised and carried out by competent people. This includes using the right type of equipment for working at height."

A quick browse through the HSE website reveals fines in the hundreds of thousands of pounds (even millions if an employee has died as a result) for companies that have violated these regulations, but what struck most is the heart-wrenching story of the scaffolder who died just weeks from his wedding.

What equipment?

There are two types of safety systems: passive or active. Active involves the operator undertaking tasks, before he can do the job he is there to do. These can be key interlocks; closing barriers; moving and positioning mobile access carts; or putting on harnesses and physically climbing up the tank. Changing weather conditions and the monotony of the repetitive tasks will soon have



workers looking for easier ways to get the job done quicker.

Passive is where the operator walks up an easy staircase, presses a button and walks out onto the top of the tanker. No harnesses to put on, no slippery floor to walk on, no constraints, only a secure cage to surround the working area to prevent him falling. Time saved is about five or maybe ten minutes. Stress level is zero. He gets the job done quickly, safely and without someone having to watch him with the consequential associated costs.

Of course there are degrees of safety. The more money spent the safer it gets.

Below are various solutions Loadtec can offer for those working on the top of tanks and they range from the safest to the least safe solution and with costs to match:

- Multi-Modal Access System – The safest and most expensive of the fall prevention systems Loadtec offers, this system is designed to provide operators with flexible and safe access on to tankers of varying heights and lengths. The unique feature is that each end of the elevating platform can be tilted to match the slope of a tanker top
- Tanker Enclosure System – This allows the operator to have free access to the entire tanker top. This can mean walking along the top of a round barrel or ISO container with varying designs of walkway and manhole positions without reliance on the tanker walkways
- Large Cage Tanker Solution – Wide safety cages provide complete fall prevention where multiple hatches need to be accessed for cleaning, this simple design can be easily configured to fit onto your existing structures or supplied with any platform and stair configuration
- Mobile Access Carts – This cart can be moved around a loading bay easily by one person or longer distances with a tractor and suitable for areas with limited space

Depending on the type of cleaning and the type of tanks employees are working on, there will be a safe solution to suit each situation. All in all, all companies should ensure that they employ the right solution to make tank cleaning as safe as possible. ■

For more information:

This article was written by Alec Keeler, managing director of Loadtec Engineered Systems. Visit: www.loadtec.co.uk