

Safe pair of

Vehicle loading and unloading studies have found that these procedures account for more than 30% of workplace accidents. John Challen finds out what effort is currently being made to achieve a safer operating environment

With forklift trucks accounting for 27% of all accidents in the workplace, it is little wonder that the Health and Safety Executive (HSE) is dedicating the majority of its time and effort to educating operators of these vehicles, as well as anyone that may come into contact with them. Data from the HSE shows that many of the accidents occurring as a result of lifting and handling operations could be eliminated. Whether it be more common sense used by drivers, loaders or unloaders, a more careful approach to work, or even just having the right safety equipment, the organisation says the emphasis is clearly on the individual.

“One of the biggest problems we see is part of the load falling off vehicles,” says Carol Grainger, workplace transport policy manager, HSE. “We are about to launch a campaign relating to issues revolving around people being struck by falling loads and people falling from vehicles. They have normally got up onto the load bed to rearrange the load, because it has shifted in transit

and can’t be unloaded mechanically – since it wasn’t loaded correctly in the first place.”

This situation, says Grainger, could easily be avoided. Indeed, one recent HSE study looked into



214 accident reports and found that risk assessments had not been carried out, or were inadequate, in 86 cases (40%), while in 41 cases (19%), there was no or inadequate segregation of traffic and pedestrians. As a result, HSE promptly proposed carrying out a proper risk assessment, developing a safe system of work and site rules – and implementing proper supervision of people, so that they follow the system and the rules.

Further HSE investigations have confirmed that there is a common culprit in accident causation.

“By far the greatest number of accidents and injuries in the workplace are caused by counterbalanced trucks, rather than more specialist trucks – simply because they account for a larger proportion of the



hands



fleet,” reveals Grainger. “The most common type of injury is people being struck and knocked over by them. We want to figure out how we are going to help people and keep their staff safe.”

One event being planned by the HSE is aimed primarily at small businesses – although it is open to anyone with an interest – to discuss the issues of dealing with forklift trucks, as well as training operators. “We need to clarify the issues we should be thinking about,” continues Grainger. “Is the legal requirement in the L117 code of practice [rider-operated lift trucks] right, or should we change it and extend the principles within it to other types of mobile plant? We are currently collecting ideas, but that is one of several things we are considering doing to try and help employers look after their staff when they are using forklift trucks.”

Away from forklifts, the Association of Lorry Loaders, Manufacturers and Importers (ALLMI) promotes the safe use of lorry loaders – an area the HSE doesn’t get too involved in, because, according to Grainger, it focuses its activity on “those areas where accidents are more common”. Her point: You get more bang for your buck, if you look at common accidents with common equipment, because then you have maximum opportunity to reduce accident figures. “If we look at an uncommon machine, the results are going to be less effective.”

Fortunately, ALLMI offers training courses, regulatory updates and guidance notes on a wide range of issues surrounding operation of a lorry loader. Alan Johnson is ALLMI’s technical director and is pleased to see change on the horizon to help improve and clarify health and safety issues. “One of the main events that will see a big step forward, in terms of the development of safety, is the revision of the British standard 7121 part 4, which relates to lorry loaders,” he explains.

Last revised in 1997, the regulations have since seen the arrival of the continually evolved Machinery Directive 98/37/EC and other related legislation coming into force – so a new version of BS 7121 part 4 was long overdue.

Lorry loading legislation

“A lot of the emphasis is on the lift planning requirement that brings lorry loader applications into line with mobile cranes,” explains Johnson, who reveals that the final draft of the revision has now been approved and is currently with the British Standards Institute (BSI), awaiting publication. He believes it should be implemented by early spring 2010.

“One of the issues that comes from an emphasis on lift planning requirements is the formation of the hierarchy, so the role of a ‘point person’ is going to come to the fore,” predicts Johnson. “As a trade association, we are introducing a point person training course, just for lorry loaders, around the same time as the introduction of the new part 4 regs.”

The ALLMI man also says that any of the association’s training providers will be able to deliver the training, which will be targeted at transport managers and plant managers, as well as individuals responsible for lifting operations. “We have also produced a best practice guide that is easier to read, so it might have more appeal than the formal regulation material,” promises Johnson.

On a smaller scale than your typical forklift truck, Penny Hydraulics offers health and safety solutions that are less to do with loading and moving heavy weights, but more to do with ensuring accessibility and manoeuvrability. The decision of Robin Penny, Penny Hydraulics’

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health and safety
record, forklifts are
coming under the
HSE’s scrutiny**





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Think health and safety first

When choosing handling equipment, make sure you have health and safety in mind, says Robin Penny, Penny Hydraulics' production director. He believes that careful research from the outset will help later down the line. "Get on site, and see the job and the location," he says. "Talk to the operators, get people involved and seek expert help, if necessary. Simply replacing a forklift truck, for loading goods onto a mezzanine floor, with a similarly rated goods lift, is not straightforward and [as with any lifting problem] many factors need to be taken into account."

Penny says the question of what is to be lifted might seem an obvious one, but it is also one that can get ignored, because there is often no straight answer. "The stock answer is, 'Very heavy – about one tonne, because it takes two men can carry it'. They must be big men then," offers Penny. "It is quite alarming how little customers often know about the lifting task they intend to carry out."

The type of loading is also an area that needs careful attention, says Penny: "Is it acceptable for the operator to hook and unhook the item on the back of the vehicle?" he asks. "Is the toe on the tail-lift platform shallow enough to require only reasonable loads to push the pallet truck up?"

Considering who exactly is going to be using the equipment is also paramount in your selection policy, especially if they require extra training: "Young staff are a more difficult proposition to an experienced engineer in a factory," he says. "Can the general public have access to the device and, if so, does it need to be locked after use?"

"Also, how is it going to be installed? It is one thing making a machine in the factory, but it has to be able to be safely handled into position and subsequently assembled. Any interface between a crane or lift needs very careful consideration."

And there are other important issues – such as how is it going to be serviced? The nature of lifting machines means that there will always be a change in level, and so often risks associated with working at height come into play, especially for service engineers. "The manufacturer, service agent and operator have a duty of care to co-operate to set up safe systems, even if that means changes to the vehicle," exhorts Penny.

Then again, how often will your lifting equipment need examining? The designers need to stipulate a minimum inspection and service regime, which cannot be less than any statutory minimum – and then any regime laid down by the designer must be followed.

How long is your equipment designed to last? Every lifting machine must have a design life. This does not mean it then has to be thrown away. But, depending on the machine, it should be stripped, tested for structural integrity and given a new lease of life.

How should it be treated at the end of its life? "We have a policy of offering to take back any item that we manufacture. We have various systems in place to refurbish and recycle most materials in our machines. The choice of material at the design stage is crucial, but end-of-life plans also have to be a high consideration."



production director, to start his company was born out of the potential for improving health and safety issues with materials handling.

"We originally started looking at small cranes and machines that could lift things that one or two men could just lift on their own, but that would, over time, result in damaged backs," he recalls. "We realised there was a gap in the market for small cranes capable of handling up to half

a tonne and a lot of the machines that we produce now are only rated at 125kg."

Penny highlights practical issues he has come across, such as gas bottles being lifted out of a hole in the ground, with the real fear that they could impact on fibre optic cables underneath. "More recently, we have been doing more with gully-cleaning vehicles," he says.

One of the most successful products to appear on the aforementioned class of vehicle has been the GridLift, which can quickly and easily pull up a grate to allow for gully cleaning. "They increase productivity by 50%. It has a ram that pulls the grate up, instead of the men expending a lot of effort doing it themselves," explains Penny.

The benefits can easily be seen, both from a productivity point of view, and the health and safety standpoint – through fewer injuries or accidents from trying to force grids out of their position.

As in most walks of life, simple solutions are often the ones that make the most sense. **TE**

