Protection correction

There may not be much movement over requirements surrounding the use of personal protective equipment (PPE), but John Challen uncovers evidence of change in adoption rates and practices in the workshop environment

The old adage, 'You can lead a horse to water, but you can't make it drink', could be an apt metaphor for some operators and their attempts to equip technicians with the right personal protective equipment (PPE). While there has been change in the attitude to equipment mechanics are required to wear, the Health and Safety Executive's (HSE) Andrew Lake is aware of people's unwillingness to regulate how their staff protect themselves.

"PPE is always regarded as the last resort," says Lake, drawing attention to equipment required when working with substances hazardous to health. "These regulations require dust masks and gloves to be used, but there is a hierarchy of control methods to avoid them. First, you try to substitute the material for one that is safer, before moving to controls, such as more ventilation, and finally trying to reduce people's exposure, through job rotation."

Lake understands why PPE is always at the

Lowering the refrigeration risks

One company that has changed its approach to health and safety issues is Carrier Transicold. "One of our engineers fell off a cab roof, and broke his pelvis and lost two fingers," recalls Scott Dargan, operations director of Carrier Transicold. That accident helped put refrigerated transportation on the HSE's radar. "Health and safety isn't something that we sell, but, in refrigeration maintenance, many guys stand on a cab roof, and all it takes is one step back and they fall three metres."

In searching for something available on the market that could help make the process safer, Dargan drew a blank. "We then decided to design a system ourselves that allows the engineer to be fixed onto the cab roof, via a harness system," he explains. "It is adjustable, so the engineer is free to move, as well as access the side of the unit to get to the control system. But it stops him falling off."

Dargan admits that the solution is a relatively simplistic approach, but there was nothing like it on the market, he insists.

Another development is a platform designed to overcome access issues with 3D aerofoils on trucks. "We got in touch with Hatch Components and jointly designed a system that fits onto the truck," explains Dargan, confirming that the unit is available as original equipment or as a retrofitted item. "It sits on the aerofoil system, with a couple of gas struts to tilt it forward, making it a safe working platform.

Dargan says that, following rollout of the systems to its 175 engineers, there has been big interest from a number of operators. DHL is just one of the many to have specified it on all of its refrigeration units.

Having got a taste of health and safety in practice, Dargan says his next project is a code of conduct for the transport industry, in relation to refrigeration engineers working in a safe environment. "We are doing the background work at the moment and hope to launch it next year," he confirms.

"The importance of it is justified, because engineers are working at heights and on ladders – and with refrigeration gases, which can be harmful to the environment. They're also working in yards where trucks are driving in different directions."

Photos: courtesy of HSE (HSG 261)

bottom of the pile: "Unless people know how to wear it correctly, and equipment is kept and maintained properly, it will fail examination. Many see the best chance of pass rate success as going down another route," he concedes.

Attitudes are changing, though – witness the growing popularity of disposable gloves in workshops. "When I started inspecting premises over 20 years ago, people didn't wear gloves. But these days, all new entrants to the industry wear gloves, probably because the companies they work for are so service orientated. People also take personal welfare more seriously and strive for a more professional image. In this respect, disposable gloves in workshops are a godsend."

Education, education, education

However, says Lake, the level of protection required for any task still needs education from operators. "They need to explain the limitations of the protection you get [when wearing gloves or masks]," he says. "If you don't choose the right glove type for the specific job, it won't protect you. It's like wearing a glove with holes in. Some gloves are good, but some give you no protection at all. You may not physically see them, but substances, such as solvents, can permeate through onto skin, without technicians knowing."

Lake understands that, notwithstanding the importance of PPE, there may still be resistance from those who should be using it, but he insists that operators must shoulder some level of responsibility for changing hearts and minds. He also says he has evidence that resistance can be relatively easy to overcome.

"We've been called into disputes where operators say they can't force their staff to wear the equipment and you find that the employees aren't involved in the purchasing process," says Lake. "If you have a range of products for people to sample for comfort and dexterity beforehand, you have a much better chance of people using them. On the other hand, if you give them no choice, people will often resist, because they believe it stops them doing their job properly."

Step-by-step improvements

Meanwhile, Lake says one of the biggest developments to note has been in footwear, following an innovative testing procedure by the HSE Laboratory (HSL). "The HSE lab has done a lot of work in the evaluation of shoe testing, especially with regard to the grip pattern," he reveals. The need for more work arose because people misread labelling, describing some footwear as oil resistant, to mean slip resistant.

"What that label relates to is the type of compound used in the shoe; in that case, one that won't deteriorate when it comes into contact with oil," he explains. In response, HSL devised an in-house testing method that involves a subject standing on a steep ramp, showered in running water. Test operators then run various types of contaminant down the ramp and see how long it takes before that person slips.

"The results have almost caused a revolution in shoe design," states Lake. "What the testers found was that the level of slip resistance improved tremendously when both the compound and grip pattern on the sole of the shoe were changed." Lake says that the results have helped bring about a step-change in preventing slips and trips – still by far the biggest cause of accidents, serious and not, in the workplace. TE

Protect yourself

A good source of information, available as a free download, is HSG261 'Health and safety in motor repair business and associated industries', published in October 2009, and which replaces two publications produced in the early 1990s. It can be downloaded from www.hse.gov.uk/pubns/priced/hsg261.pdf