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UNDER CONSTRUCTION

Working at height; a different angle

Experienced engineer Richard Vann, managing director of specialist decommissioning consultancy RVA Group, considers the work at height dangers that still exist when erecting, operating or maintaining plant and equipment

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Work at Height Regulations are widely communicated within the construction and demolition environment, given the potential dangers that exist when operating on fragile roofs or near unfenced edges for example.

Over time the concept has become more comprehensively understood. Industry managers and employees are increasingly, albeit slowly, acknowledging that working at height considerations must cover every scenario where they could fall and become injured. Yet still it remains a root cause of many major injuries and fatalities, which shows further work is needed.

One area where work at height considerations have taken longer to come to the fore is the maintenance of plant and machinery, with cranes or 360° excavators being a perfect example.

When operatives are rigging cranes or excavators, connecting hoses or conducting routine maintenance operations such as refuelling for instance, they often have to climb up onto equipment which can be a significant distance above ground, therefore putting themselves in danger. Even cab access or egress presents potential risks.

Generally speaking, machinery manufacturers have worked hard to design and implement more safety features on their equipment, including railings, non-slip walkways and rigging winches.

The European Union Machinery Directive 2006/42/EC was influential here, stating that: "Parts of the machinery where persons are liable to move about or stand must be designed and constructed in such a way as to prevent persons slipping, tripping or falling on these parts."

Slips and trips

Considering slips and trips were identified as the most common cause of major injuries to employees in a 2011/12 HSE report, it is important that equipment manufacturers are taking note of this EU guidance.

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But perhaps the actions of manufacturers should go beyond simple legislative compliance, which in truth ensures only the minimum acceptable standards. Manufacturers are perfectly placed to further heighten site safety, but health and safety professionals within the industry need to apply pressure on them to do this.

Ultimately, no-one would purchase a car without a seatbelt, so contractors should not have to even contemplate an investment in equipment that does not have equivalent safety features. The cost to retrofit handrails for example is very minimal, but it mitigates a very large risk. The industry needs to be less accepting of manufacturers' dismissal of their obligations.

Older equipment

The fact that many pieces of plant were built before the introduction of Work at Height Regulations (2005) also presents problems, as does the delayed implementation of these safety and risk management principles amongst other manufacturers.

A significant retrofit requirement perhaps consequently exists. Some contractors can only afford to purchase such older plant elements, but they still require protection.

We have to move away from the opinion that enhanced safety mechanisms can be optional extras. All companies are understandably trying to work smarter following an extended period of economic difficulty and squeezed margins, but this cannot be to the detriment of safety.

Of course, some projects present extraordinary and uncharted working conditions, and in such instances a collaborative approach between the equipment manufacturer, contractor and project consultant or manager will encourage the development of a bespoke solution.

A new attitude

It is important to note that the finger should not simply be pointed at crane and excavator manufacturers and users; their inclusion here is purely for illustrative purposes. In truth there is work to be done to improve the mindset throughout the construction and demolition industries.

A scaffolding contractor may provide an incredibly helpful, compliant and safe product for a building firm to utilise, but that same contractor may neglect to recognise his own work at height risk when climbing up on to his trailer to actually remove the poles before erection. The fringes of any job must be considered in addition to the most obvious project risks.

The salient point is that the most effective accident prevention mechanism is education. The greater the awareness of varied work at height dangers, the more our mindset is switched on to identify, plan for and mitigate risk. We all have a moral duty to protect ourselves and others from accident and injury and we need to maintain momentum in this important field.

Richard Vann has 30 years experience in demolition and decommissioning. He has worked with some of the world's leading organisations, in sectors including oil and gas, power and energy, chemical and petrochemical, pharmaceutical, manufacturing, local authority and housing.