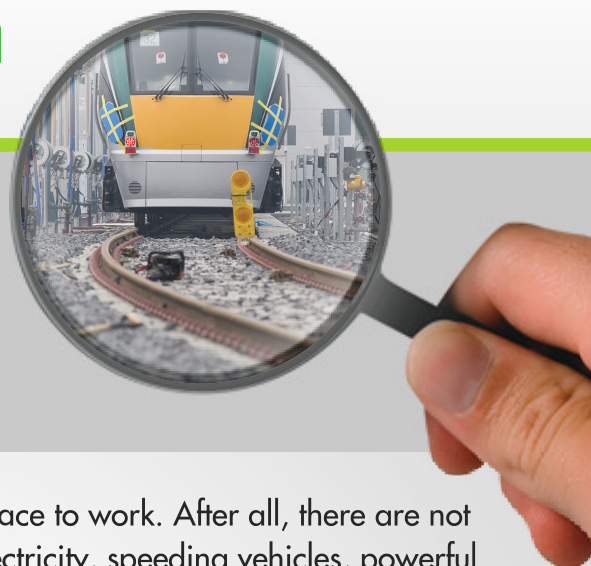




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Shunter Safety:

The industry's hidden concern

There is no doubt that the rail industry is a potentially dangerous place to work. After all, there are not many industries that expect employees to deal with high voltage electricity, speeding vehicles, powerful machinery and thousands of members of the public on a daily basis.

Because of the obvious dangers, the industry as a whole is very aware of the need for the implementation of highly-tuned systems in order to guarantee the safety of both the public and those employed to keep the UK's rail infrastructure on track. However, despite this, there are still areas of the industry that remain a dangerous place to work.

According to a recent study carried out by the Rail Safety and Standards Board (RSSB) shunter safety still remains a serious concern across the board in the UK rail industry.



Risk and effect

Shunters are very much 'on the ground' and working in the thick of the action, and the RSSB's report showed that the rates of shunter fatalities and RIDDOR-reportable injuries suggest a significantly higher level of risk than other workforce groups.

According to the study, the average FOC shunter loses 0.7 working days a year as a result of injuries sustained whilst at work, whilst on average a TOC shunter reported to lose around 0.2 days.

Occupational health risks that such a job entails are great. Operating heavy manual points, sometimes when standing on an uneven surface or working in poor conditions, could lead to lasting damage to the back, neck or shoulders, which not only causes the employee suffering and lost working days, but could also lead to a more serious accident.





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More serious accidents are thankfully less common, but still very much in evidence, with the rate of RIDDOR-reportable injuries reported by shunters in 2008 to be nearly twice that of the next highest category, the track worker.

RIDDOR-reportable injuries are not something to be taken lightly, and include traumas such as: fractures; amputation; dislocation of the shoulder, hip, knee or spine; temporary or permanent loss of sight; penetrating injury or burn to the eye; electrical shock or burn resulting in unconsciousness, resuscitation or the need for 24 hour hospital admittance; heat or cold induced illness resulting in unconsciousness, resuscitation or the need for 24 hour hospital admittance; unconsciousness caused by asphyxia or any injury that results in workforce lost-time of over three days.

Shunters reported RIDDOR-reportable injury rate of over 20 per 1000 workers per year, compared to only around 7 per 1000 train drivers, and 10 per 1000 track workers. Considering the safety requirements that are put into place across the rail network, it seems impossible that this very high figure is possible in this day and age.

Accidents

Research has shown that 25% of the accidents that caused shunters to lose working days were attributed to slips, trips and falls sustained whilst moving between work areas. Of course, part of the shunter's job can require them to move about in the depot in order to operate hand points and switches. Negotiating rails, ballast, cabling and potential hazards that may be in their way is an occupational hazard, and whilst shunters still have to move around in the depot, these dangers will remain.

Fatalities are also a huge concern. Between 1998 and 2008 there were four reported shunter fatalities, all involving FOC shunters who lost their lives whilst working on the ground.



Although when related to the injury rate, the fatality rate is comparably low, the fatality risk for a shunter compared to other railway occupations is still startlingly high. According to data taken from an RSSB survey carried out for the 5½ -year period between January 2002 and June 2007, the average fatality risk per worker was 1 in 5,200 for a shunter, compared with 1 in 7,500 for a track worker and only 1 in 28,000 for a train driver. Whilst the comparison with the train driver is somewhat more understandable, the disparity in risk between the shunter and the track worker shows the stark reality facing the industry. Something needs to be done in order to improve safety for shunters.



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Solving the problem

One of the simplest ways to improve safety is to remove individuals from situations that have proved to be the most dangerous. Recent advances in technology now offer the opportunity to reduce the dangers faced by shunters, with the implementation of systems such as Zonegreen's Points Converter.



The system has been designed to increase railway depot and sidings safety and efficiency, and allows the automation and remote operation of manual/hand point/switches and rail road crossings. It can be controlled by an operator from a remote location using a portable or cab mounted device, removing the need for an individual to have to negotiate difficult terrain, rails or other potential hazards, thus minimising the risk of slips, trips and falls. Such a system allows the shunter to operate the points from a safe distance, thus reducing risk and lowering the accident rate.

As well as assisting in the prevention of such accidents, a system such as the Zonegreen Points Converter also greatly reduces the significant physical strains that shunters face with regards to operating points manually and the lasting damage this can have on the body, particularly the back and neck.



In order to change the industry, one of the key considerations is changing the way the people within it think. Understanding the human factor behind accidents can help the industry as a whole go some way to understanding incidents and implementing new products and guidelines to ensure that the same situation needn't happen again. Technology such as the Points Converter from Zonegreen has been developed with the needs of a fast-paced, developing industry in mind and it is clear that in order to maintain the safety standards that the UK rail industry is proud to uphold, action needs to be taken.