

INDUSTRY:
Oil, Gas, & Mining

SOLUTION:
SecureFit®

Reducing Safety-Related Incidents in the Workplace Using SecureFit®

Authors: Jessica Petor, M.S., Amie Lawrence, Ph.D., Kristin Delgado, M.S., & Esteban Tristan, Ph.D.

THE SITUATION

A large international provider of engineering, maintenance, and construction services wanted to improve the quality of their workforce. Specifically, they wanted to reduce workplace safety incidents as well as the costs associated with them.

THE SOLUTION

This organization partnered with Select International, to design, implement and maintain an assessment that identifies individuals who will work safely and productively in an accurate and legally defensible manner. Select worked with them to design a system that could be integrated with their existing hiring process. The assessment system was then implemented at three facilities in North America. SecureFit®, a short, online, pre-hire assessment, was included in the hiring process to screen out high risk candidates.

To further investigate the effectiveness of the assessment in predicting safe behavior, an empirical study was conducted. Incident and injury records were gathered on a total of 366 employees who were hired during the previous three years using SecureFit. The assessment results and safety outcomes were then compared.

The average direct
cost of injury has been
estimated by OSHA to be
\$46,000

OUTCOMES

The SecureFit assessment places individuals into one of four categories based on their assessment scores: Very Good Fit, Good Fit, Potential Fit, and Poor Fit. Typically, individuals in the Poor Fit category are not progressed to the next stage of the hiring process.

In this study, candidates' assessment scores were compared with their incident and injury records. The results were very compelling. The assessment accurately predicted safety incidents and injuries. Specifically, individuals who scored lower on the assessment consistently tended to have higher rates of first aid and recordable injuries.

At one of the facilities, for example, results showed that candidates who were categorized as **Poor Fit would have had at least 9 times more safety incidents than Good Fit and Very Good Fit candidates** if they had been hired.

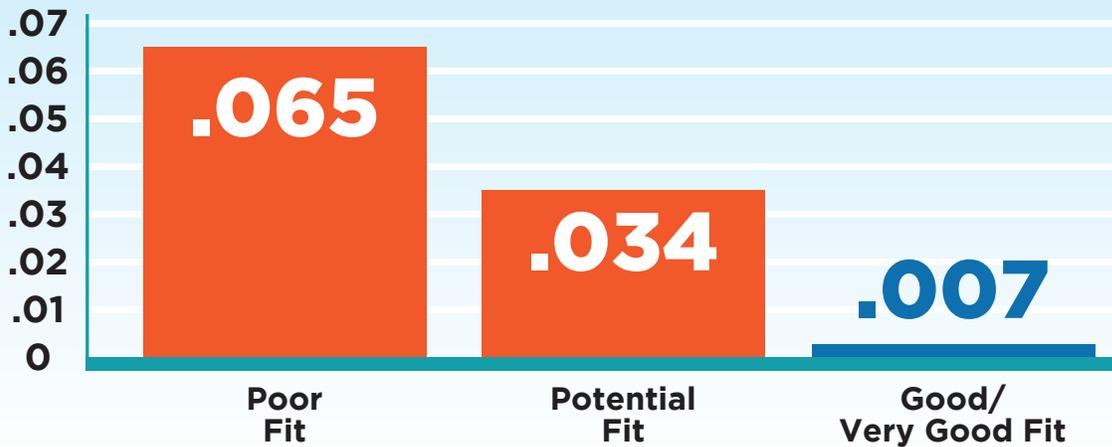
DIRECT COSTS OF ACCIDENTS

- Medical costs
- Indemnity payments for injured workers

INDIRECT COST OF ACCIDENTS

- Training and compensation for replacement work
- Schedule delays
- Added administrative time
- Time to conduct incident investigations
- Increased absenteeism
- Poorer customer relations

PERCENT OF INDIVIDUALS WITH INCIDENTS RESULTING IN AT LEAST FIRST AID



IMPLICATIONS

Based on the injury rates in the sample, we estimate that, if hired, Poor Fit candidates would have incurred approximately 48 injuries (36 First Aids and 12 Recordables). By just screening out Poor Fit individuals, the company avoided hiring individuals who likely would have been involved in workplace incidents resulting in injury.

This translates into **a potential \$2,208,000 in direct cost savings** (using the \$46,000 OSHA estimate for average direct cost of injury).

Using cost data provided directly from the client organization, it is estimated that using *SecureFit* as part

of the company's selection process at one particular site resulted in approximately \$720,000 in direct cost savings.

Incidents and accidents are undesirable for both the organization and its employees. Investing in prevention should be a high priority. Various studies have shown **\$1 invested in injury prevention returns between \$2 and \$6** (National Safety Council, 2014). Using *SecureFit* can significantly reduce the chances of hiring high risk employees who are likely to be involved in safety-related incidents.