

**INDUSTRY:**  
Manufacturing**SOLUTION:**  
Pre-screening and Production Simulation

## Reducing Injuries by Effective Screening: The Results Are Impressive

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### THE SITUATION

People who work in a high paced manufacturing environment that requires lifting, squatting, twisting, and turning many times a day are more susceptible to injuries than those in less physically demanding environments. Even in the best engineered, most ergonomically friendly environments, injuries are often hard to avoid.

According to the Occupational Health and Safety Administration (OSHA), indirect costs of incidents are 1 to 5 times higher than direct costs associated with every incident. OSHA also estimates that for every dollar spent on medical expenses for a workers' compensation claim, an additional \$4 for indirect workers' compensation costs is incurred. Additionally, for every dollar of disability (lost time) expenses paid for a workers' compensation claim OSHA estimates an additional \$2 to \$10 is incurred in indirect workers' compensation costs. Considering that in 2015, the average workers' compensation claim was \$36,894, the total cost (direct and indirect) could easily be over \$200,000.

### THE SOLUTION

Select International worked closely with an auto manufacturing organization to install a very sophisticated pre-employment process. The process was multi-faceted and multi-stage. It focused on a wide range of factors associated with success on the job, as well as safety orientation. Part of the process also included a 6-hour production simulation that replicated many of the core physical skills of the jobs.

Because the facility was quite large and employed almost 4,000 hourly production employees, a new hire might be assigned to one of over three dozen specific jobs. For that reason, the assessment focused on the core activities required by all of the different positions.

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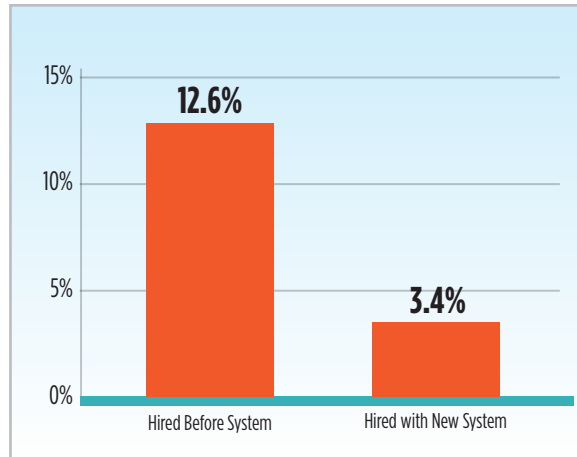
To track the success of the new selection process, the organization's Health and Safety group monitored injury data for a one-year period for employees hire before the system was implemented as well as those employees hired using the new selection process.

Two major categories of injuries were tracked by the organization:

- Acute Strain: These refer to any injuries due to a one-time event such as a muscle tears, wrenching a knee, etc.
- RSI: These are repetitive strain injuries, such as chronic bad backs, continuous soreness, or ongoing aches and pains related to repetitive motions.

## OUTCOMES

The results were dramatic and can be seen in the following graph:



During this one-year period, 497 individuals from a group of 3,932 employees hired prior to the new selection process reported an injury of one type or another. During that same time period, only 10 out of a group of 294 individuals hired using the new process reported injuries. In other words, individuals hired using the new process were 4 times less likely to suffer an injury.

Not all injuries are severe and require days off of work. However, to be recorded, these injuries needed to have been severe enough to be reported to the Health and Safety group at this organization and require some form of downtime.

Reducing injuries by this level would **save this organization ~\$13.8 million** on a yearly basis.

Even if you considered only the cost of the average workers' compensation claim, and no additional indirect costs, reducing injuries by this level would save this organization approximately \$13.8 million on a yearly basis (\$18,336,318 vs. \$4,584,079).

There are many reasons why accidents happen. It's clear that at least some of them can be prevented by doing a better job of screening candidates before they are hired in the first place.