**Abstract**

Many small construction companies have difficulty providing a safe working environment for their employees because of their lack of resources. There is a need to provide a manual for small construction companies employing 10 or fewer workers with the best ergonomic solutions of the top most common injuries. Accidents in the construction field are very high with nearly 175,00 nonfatal injuries and 1,121 deaths in 2002. The nonfatal cases occur 7.1 times per 100 full time workers, while serious injuries occur 2.8 times per 100 full time workers. This information reveled the importance of focusing on minor injuries in order to reduce costs. Research provided that the most common injuries on the job site were lacerations, lumbar spine, upper extremities, and eye injuries. An analysis was done on the data found to calculate the total cost of each injury in order to determine the total cost of injury per year. Some examples of ergonomic alternatives to each injury was found and used in order to determine the total cost of protection. The cost of protection was determined through purchasing the right number of equipment for the individuals on the job site. After a cost analysis, a manual was created with the top most common injuries and the cost associated with each. The manual also provided companies with the steps to implement a safety plan, the benefits of protecting employees, and a summary of the OSHA regulations for the construction sector. A study was done on a small electrical engineering company in Los Angeles, XYZ. The company was researched prior to the creation of the manual in order to better understand the needs of small construction organizations. After the creation of the manual, the company was given a copy in order to provide critique and implementation information. The manual critique resulted in a few changed that would better help struggling companies with more explanations of injury protection benefits. The final edited manual was reviewed by the manager of the company and because of its value will be used in training seminars in the future.