

## **New workstation design that might reduce Ergonomic injuries among Off-loaders in a mail distribution company in Toronto**

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Manual offloading the trucks in mail distribution companies is quite strenuous and automatic handling is recommended to be one of the best solutions. Workers are at risk for the development of fatigue and Musculoskeletal Disorders (MSDs) due to frequent awkward lifting and carrying of parcels. They are also exposed to high volume of noise as well as heat and cold stress in different seasons. Three off-loaders performed their regular tasks while were videotaped and then the postures were analysed using 3DSSPP software. Joint moments and forces were normalized based on body height and weight of each participants. The results proved that all of the participants were at risk. This study aimed to provide a temporary solution while the company is getting ready in their long term plan to implement automatic solutions. It is believed the current solution might reduce injury up to 50%.