

## New Study Confirms Ergonomics in Delivery Operations Improves Driver Safety and Morale

# Duo Proves Itself as a Safer Delivery Option

A recent ergonomic study conducted with a leading beverage company assessed the hazards associated with the physical demands of maneuvering deliveries and identified notable findings. It was discovered that when delivering to stores, delivery drivers often push their rolling stock under various conditions, posing significant safety risks. Additionally, the study tested multiple lifts and determined that the Duo Lift offered exceptional ergonomic advantages, surpassing other's safety standards and setting new benchmarks for efficiency.

### **Analysis Findings:**

- Only 5% of the female population can handle 45 lbs. without significant injury risk<sup>1</sup>
- Only 0.1% of women and 29.4% of men can handle 100 lbs. or more on inclines without risk of injury<sup>2</sup>
- Tasks requiring more than 25% of the population to exert themselves beyond capacity are hazardous and not inclusive<sup>3</sup>
- Safely accommodating at least 75% of the female population reduces injury risk, is beneficial for EEOC compliance, and expands the labor pool.



#### Pushing and pulling activities:

- Are responsible for 9 to 18% of back strains and sprains<sup>3</sup>
- Are cited in 9% of workers' compensation claims<sup>7</sup>



## Pushing or pulling loads exceeding 110 lbs. results in a:

- 42% increase in low back discomfort<sup>4</sup>
- 115% increase in high-intensity low back pain<sup>4</sup>
- 125% increase in severe low back disability<sup>4</sup>
- 109% increase in shoulder discomfort<sup>4</sup>
- 537% increase in high-intensity shoulder pain<sup>4</sup>
- 523% increase in disability risks<sup>4</sup>

"The single most important factor affecting the risk of a musculoskeletal injury to the low back and shoulders is the ability of the delivery drivers to use motorized material handling equipment."

- Mark Heidebrecht, MSE, ACSM-EP, CHFP Board Certified American College of Sports Medicine/Board Certified Human Factors Professional

## Safer Operations. Faster Deliveries. Healthier Drivers.

The study specifically tested the Duo Lift against other competitors and found that it demonstrated notable efficiency and ergonomic benefits, exceeding industry standards. The Duo Lift's potential to enhance productivity and reduce physical strain on operators makes it a viable option for improving material handling operations, with results including:

#### **Decreased Injury Risk**

The Duo Lift's design eliminates awkward shoulder postures, significantly reducing the risk of lower back and shoulder injuries for delivery drivers, especially in high-exertion scenarios.

#### Lower Workers' Compensation Claims

By minimizing workplace injuries, the Duo Lift helps reduce workers' compensation claims, leading to lower medical, legal, and compensation costs substantial savings for companies.

#### **Expanded Labor Pool**

The Duo Lift's ergonomic benefits allow more women to perform delivery tasks without injury risk, boosting morale and productivity. This expands the applicant pool and enhances job retention.

#### **Smoother Deliveries**

The Duo Lift minimizes product damage and delivery delays by smoothly navigating challenging surfaces and handling tactile bumps from a stopped position without causing trip hazards.

#### **Enhanced Maneuverability**

With its ability to effortlessly handle sharp 90-degree turns, the Duo Lift demonstrates superior maneuverability, reducing the need for additional force from the delivery driver.

## S Time Efficiency

Completing delivery circuits in 11 minutes and 31 seconds—2 minutes and 31 seconds faster than its competitors—the Duo Lift showcases its speed, streamlining delivery processes.

"The Duo Lift did successfully complete the circuit and did not fail any of the tests. In my opinion, the Duo Lift does significantly reduce the risk of low back and shoulder injuries."

Mark Heidebrecht, MSE, ACSM-EP, CHFP
Board Certified American College of Sports Medicine/Board Certified Human
Factors Professional

### Duo Lift: Safety and Versatility in Beverage Delivery

Rehrig Pacific's Duo Lift is a groundbreaking innovation in beverage delivery. This system is the first to feature an adjustable tine span, designed to enhance delivery efficiency while minimizing the risk of driver injuries. In addition, the Duo Lift ensures smooth transitions from truck to cooler and offers unmatched versatility with its ability to adjust to various pallet sizes, revolutionizing how beverages are delivered.

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- 2. The Liberty Mutual Manual Materials Handling (LM-MMH) Equations
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- 4. Pepsi Delivery Driver Manual Handling, Equipment Study, Mark Heidebrecht, MSE, ACSM-EP, CHFP
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