

Strong Arm Tech V22

Incorrect lifting is the number one cause of workplace injury in the United States. The StrongArm V22 lifting device provides real-time lifting assistance and has the potential to meet and exceed NIOSH lifting standards. StrongArm was founded in 20XX by two men who grew up with fathers whose bodies endured enormous physical strain at their blue-collar jobs. StrongArm's mission is to invent devices and methods to bridge the gap between performance and safety for industrial workers.

The StrongArm Vest works in harmony with a worker's body and tasks to improve lifting techniques and reduce the load simultaneously. The technology bolsters a worker's musculoskeletal system making lifting more natural, safe and powerful. The **Strong**Arm Vest addresses the four factors that OSHA associates with back disorders: reaching, twisting, bad body mechanics and posture. Because arm fatigue also leads to back injury, StrongArm includes it as a fifth factor.

Equipped with a **Strong**Arm Vest, a worker can dramatically reduce the stress of loads that are typically absorbed by his/her weaker hands, arms, neck and lower-back by redistributing them to the stronger areas of the torso. Throughout a lift, **Strong**Arm shifts the load from injury-prone areas to three strategic leverage points on the back and torso. This reduces fatigue and guides the lifter into the proper posture throughout the lift, reducing the potential of back injury.

StrongArm strategically targeted the "StrongArm Muscle Group" as the primary set of lifting muscles to work with the StrongArm Vest. These muscles last longer, recover more quickly and can endure greater stress. By using these muscles with the Vest, users can work longer at a more consistent rate. The "Mismatch Muscle Group," the most commonly used group of lifting muscles in the arms, back and shoulders, is not suited for repetitive lifting.

The StrongArm Vest uses a three-point V-shaped cord connection between the lower back and shoulders to limit the user's ability to twist, providing dynamic core stability. The StrongArm Vest's FLX-Form provides a custom fit that keeps the body in an appropriate posture for lifting.

After the StrongArm vest's core technology was completed, hundreds of Fortune 500 workers and three ergonomic design firms with clients such as Reebok, Adidas and 3M, were instrumental in making 22 improvements to the StrongArm vest's original design.

Based on data from leading companies and ergonomic research labs, the StrongArm Vest is poised to dramatically improve the health, productivity and longevity for workers and companies that make it a standard operating procedure.

The StrongArm Vest reinforces and fosters proper lifting, working hand-in-hand with ergonomic employee training. When training is over, **Strong**Arm reinforces proper lifting every time it is used. Commercially available **Strong**Arm Vests are engineered to perform for a minimum of 2 years.

The Power-Control function helps the operator transfer and reduce load forces more safely and efficiently by directing 80-90% of the load force to the stronger muscles in the legs and buttocks, and by transferring 50-75% of the force from the weaker muscles and tissues in the hands, arms, and lower back.

The Safety-Control function provides control limits, ensuring compliance with safe lifting practices and delivering sensory feedback to pressure points to help the operator maintain an upright posture and spine position.

Formed in 20xx, StrongArm Technologies won the Rochester and New York State Business Plan Competitions for its innovative new product, the Strong Arm Vest. Strong Arm also won Best Pitch from The Bright Forum in Buffalo and was recently accepted into the Mass Challenge, a four month competition during which the Strong Arm team spent time in Boston. StrongArm Technologies also won Best Pitch and Best Technological Innovation from the NCIIA in California and has been asked to present at the Ergonomics Conference and Exposition. Strong Arm is working with one of several major big box stores to develop the Strong Arm Vest and bring it to market.

