

INNOVATION IN THE FIELD: OVERHEAD EXOSKELETON

LEADING WITH SAFETY IN MISSION CRITICAL

CONTRIBUTORS

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The Weitz Company continually strives to put safety at the forefront of our projects. Safety innovation is part of our culture. Mission Critical jobsite teams enjoy the challenge of taking a mundane or difficult task and making it more user-friendly. Occasionally, there are companies that align with these values and they create incredibly useful pieces of equipment to aid our teams in safety, improve task performance, and innovate our projects.

In the summer of 2021, Hilti released an innovative product called the EXO-01 Overhead Exoskeleton. The Exoskeleton system aids tradespeople while performing overhead work. This wearable technology helps the user prevent injuries, and reduces fatigue.

THE BENEFITS OF OVERHEAD LIFT SUPPORT

One of the main tasks on a data center jobsite is overhead work. With a multitude of power running through these buildings, thousands of electrical wires need a safe place to be stored while also being easily accessible. Overhead installation of electrical wiring, air ducts, and ventilation is an enormous task on our projects. But keeping arms overhead for extended periods of time, not only causes fatigue, it increases the risk of injury. Short of taking regular breaks while performing this work, there are limited solutions for this obstacle.

Hilti's wearable Exoskeleton device helps our Mission Critical jobsites mitigate the risk of ergonomic injuries in the workplace. This human augmentation tool reduces strain and fatigue for users. The Exoskeleton equipment focuses on overhead and shoulder height work or above applications because this type of motion is highly intensive and fatiguing.

HOW IT WORKS

This 4.4 pound device provides all-day comfort while also being lightweight. It gives the wearer dynamic support without limiting the range of motion for the task at hand. This device is designed to aid virtually any overhead work, with its versatility.





SEE A DEMONSTRATION OF THE EXOSKELETON!

HOW IT WORKS

The Exoskeleton straps around the user's waist, shoulders, and arms in order to provide lift support. The weight of the user's upper body is then distributed in order to reduce pressure. No batteries are needed, and it's cordless in order to prevent power location limitations. There is no power source to charge and no motors to maintain on this device.

The potential reduction in muscle injuries, extended fatigue, and delays in work completion makes this device well worth the purchase.

UNIVERSAL BENEFITS

Whether a beginner, or an expert trade-person, this device will aid in task performance and increase the length of time the user can spend with their arms overhead. In a time where talented labor is a challenge on virtually all jobsites, having this device increases the value of every team member using it.

Basic Safe reports that 90% of all workplace injuries are the result of unsafe actions by the worker due to complacency, frustration, fatigue, and laziness. The Exoskeleton can aid the user in most, if not all of these while performing their overhead tasks.

90% of all workplace injuries are a result of unsafe actions by the worker due to:



APPLICATIONS

- + *Installing overhead electrical*
- + *Installing overhead air ducts and ventilation equipment*
- + *Installing overhead sprinklers*
- + *Installing overhead piping*
- + *Fastening overhead cables and conduits*
- + *Hanging drywall*

NO MATTER WHAT COMPANY YOU WORK FOR, EVERYONE DESERVES A SAFE WORKPLACE

WHY WEITZ USES THIS PRODUCT

Doing something just because that's the way we've always done it isn't how we operate at Weitz. "In our Mission Critical Business Unit, safety is at the foundation of everything we do - especially when it comes to our employees. We're always investing in new ways to keep our team safe, and this device helps us prevent musculoskeletal injuries." Gabriel Nido goes on to emphasize the importance of valuing all team members. "No matter what company you work for, everyone deserves a safe workplace."

ABOUT THE WEITZ COMPANY

Founded in 1855, The Weitz Company is a full-service construction company, general contractor, design builder and construction manager that serves all 50 U.S. states. Weitz is one of the oldest general contractors in the United States and an industry leader in lean construction; senior living; sustainable building; and virtual design and construction. Headquartered in Des Moines, Iowa, The Weitz Company annually ranks in the top tier of Engineering News-Record (ENR) magazine's Top 400 Contractors and Building Design+Construction's Giants 300 Contractors lists. **For more about Weitz, visit www.weitz.com.**

About Our Contributor

Gabe joined the Weitz company in 2021. Before his current role, he worked in multiple hyper-scale data center projects across the nation with some of the Fortune 500 computer software and information companies. He possesses several credentials from the Board of Certified Safety Professionals, and he is a constant advocate for safe job sites and encourages world-class safety cultures within his project teams. Gabriel currently oversees four confidential projects in Des Moines for the Mission Critical Business Unit at The Weitz Company.