

# APEX



#### FREEDOM OF MOVEMENT

- Lightweight, high-tech textiles
- No interference for maximum mobility
- Small profile for work in tight spaces



#### **ASSISTIVE**

- Reduce fatigue
- Lower risk of injuries
- Improve quality of life



#### **COMFORT**

- All-day wearability
- No heavy motors or batteries
- Modular design with 50+ custom fit combinations

The Apex back-assist exosuit reduces strain on the back without getting in the way. Working men and women deserve tough gear that helps them tackle tough jobs. The Apex reduces strain on the back by 30-40% with every bend and lift.

#### Reduce Strain. Reduce Fatigue.



#### The Challenge:

Without assistance, there's no point. Without comfort, no one will want to wear it. Without freedom of movement, it will slow workers down and hurt productivity.

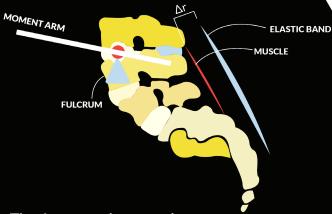
#### The Solution:

The Apex is the first exosuit on the market that not only offloads 30-40% of back strain, but is built as a modular system to ensure that it is comfortable for users of all sizes and shapes. The high-tech textile design with no motors or batteries means users can move naturally, including in tight spaces. All while working safer than ever before.



### THE SCIENCE BEHIND THE EXOSUIT

## DISCOVER HOW THE APEX WORKS



The Apex employs passive elastic bands that act in synergy with the major muscle groups responsible for bending and lifting. The exosuit's design uses the advantage of an extended moment arm to decrease total forces in the system, meaning the same work can be done with less total force applied. This also reduces spinal compression forces, in addition to reducing back strain and fatigue.

Born at one of the world's leading research institutions for biomechanics, the Apex excelled not only during initial studies (Lamers, Yang & Zelik 2019, Lamers et al. 2020) but those results have been verified by an independent, peer-reviewed scientific publication (Goršič et al 2021). More importantly, more than 150 users in real-world field studies reported reduction in discomfort and fatigue after using the Apex.

## REDUCED RISK OF INJURY FOR WORKERS



The HeroWear Apex exosuit reduces about 30% - 40% of peak muscle forces applied and reduces fatigue by up to 40%. Back pain costs industries in the USA over \$100 billion a year for medical care, workers' compensation payments, and time lost from work. The Apex offers working men and women worldwide assistance they need to sustain strength and work more safely.