

# HIGH-TECH PROTECTIVE GEAR: TRANSFORMING CONSTRUCTION SAFETY

Every  
**10 Minutes**

**One fatal accident occurs on construction sites around the world.**

The International Labour Organization (ILO) estimates at least **60,000 fatal accidents** occur in the construction industry annually worldwide.

**Modern personal protective equipment (PPE) has evolved beyond traditional hard hats and boots.**

Today's PPE incorporates smart technology, real-time data and ergonomic designs that prevent injuries and enhance productivity. These innovative advancements improve safety for heavy equipment operators and worksite personnel daily and will continue to do so in the future.

## Smart Glasses

Offer hands-free access to designs and real-time guidance, reducing errors and enhancing efficiency with Augmented reality (AR) and remote communication.

## Exoskeletons

Support workers by enhancing strength, reducing fatigue and minimizing injury risks during heavy lifting and repetitive tasks, while boosting productivity.

## Smart Vests

Help prevent fatigue, overheating and accidents by monitoring workers' health and safety in real time with biometric sensors, GPS tracking and alert systems.

## Smart Helmets

Enhance safety, reduce errors and improve efficiency with environmental sensors and AR displays.

## Advanced Hearing Gear

Protects hearing with noise-canceling and enables team communication via Bluetooth.

## Sensor-Embedded Boots

Improve safety by detecting falls, warning of hazards and enhancing comfort and durability.

## Benefits

- ✓ **Injury Prevention:** Real-time alerts reduce accidents
- ✓ **Comfort & Ergonomics:** Smart materials ease strain
- ✓ **Efficiency & Communication:** Faster decisions, better teamwork
- ✓ **Productivity:** Tech-assisted gear supports longer, safer work

**Train on Cat® Simulators in a safe, virtual environment to effectively learn heavy equipment operations.**

Developed with Caterpillar experts, these advanced simulators use authentic Cat® controls, providing practical hands-on training to ensure safe and efficient machine operation.

## CAT® SIMULATORS

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