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insights into the behavior of your laborers, skilled tradespeople, and equipment operators.

One wearable that targets high-risk movements is the Ref ex device by Kinetic, which is designed for construction and industrial applications.

The ruggedized device looks like an old-school pager and clips onto a waistband or belt. It warns users about risky movements and teaches them how to self-correct, says Haytham Elhawary, CEO and co-founder of Kinetic.

“When you bend oddly or twist your spine, the device will vibrate,” said Elhawary.

Users notice what kinds of movements trigger an alert, like if they lift or reach for materials or parts incorrectly. They then can try to figure out what to do in order to eliminate the device’s response.

A display at the top of the Ref ex device also tracks steps and real-time counts of high-risk movements.

Activity data uploads to the Kinetic platform when devices are docked in their charging stations at the end of a shift. Online dashboards highlight trends and areas of concern for management, who then can intervene to help resolve any issues.

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Preventing overexertion on construction sites in the past primarily involved demonstrating how to lift heavy materials or reach for tools. And then hoping your crews remember.

Wearable technology lets crews feel what they are doing right or wrong.

So how effective can wearables be at reducing injuries?

Just take a look at the results of a six-week study of the Ref ex device.

The pilot, which had a goal of reporting a 20% improvement of high-risk postures, saw behaviors improve 38%, Oakman says.

Construction companies could see similar safety benefits from wearables for reducing awkward lifting and postures that use too much force.

But how do you get your crews on board? Initially, Metz says she did face some questions from employees about the Ref ex

devices and how they would be used.

“One of the first things they asked was, ‘Is this Big Brother watching us?’” she said. “They wanted to know if they were going to get in trouble for standing still and stuff like that. That is far from what this device does.”

The Ref ex, which crews report is comfortable and easy to wear, does not use GPS or any cameras or microphones.

Once crews understand the technology is designed to protect them, Metz says they embrace it. JLG now uses 400 devices





About the Author

As director of marketing, Americas, at the Oshkosh Access Segment, Jennifer Stiansen leads marketing and communications initiatives for the North American and Latin American regions for the JLG and Jerr-Dan brands. Stiansen holds a master's degree in media studies from William Paterson University and a bachelor's degree in communications from Elizabethtown College. She is a member of the Association of Equipment Manufacturers, Associated Equipment Distributors, and Construction Writers Association. Visit jlg.com.

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