Koppers Reduces Strains and Sprains Across 12 Sites with TuMeke

Overview

Koppers, a global leader in treated wood products and chemicals, set out to reduce the strains and sprains that had become their top recordable injuries. With many tasks involving heavy, manual handling of railroad ties and large utility poles, traditional engineering controls couldn't fully remove the human factor. To better protect their employees and proactively identify risk, Koppers turned to TuMeke's AI-powered ergonomics platform.

Challenge

Strains and sprains accounted for a significant portion of Koppers' recordable injuries. Many operations required physical handling that couldn't be automated or redesigned without major capital investment.

Prior to TuMeke, the company relied on third-party ergonomic assessments that were expensive and slow, with limited actionable outcomes. Another software trial offered some promise but lacked flexibility and engagement. Koppers needed a scalable, intuitive tool to make ergonomics part of their day-to-day safety culture.

"Certain operations simply can't be engineered to remove the human factor. We needed a way to identify and reduce risk where people are physically moving heavy materials every day."

Blayne Darnell
Corporate Safety & Health Manager, Koppers

Solution

Koppers launched a pilot with six sites—five in the U.S. and one in Australia—using TuMeke's Risk Suite platform and mobile application to conduct ergonomic assessments across operations that posed the highest risk of strains and sprains.

One early success came from the Huntington, West Virginia site, where a local safety professional used TuMeke to identify and validate a safer way to roll and handle heavy drums. The solution reduced risk scores and allowed the task to be performed by one worker instead of two. The modification was later shared company-wide through Koppers' internal innovation platform.

Results

1. **Expansion to 12 sites**, including four in Australia
2. **High employee engagement**, driven by visible risk comparisons & privacy features (such as facial blurring)
3. **Improved site-level ownership**, with safety leaders using AI-generated recommendations as a practical starting point for improvements
4. **Positive cultural shift** toward proactive ergonomics within the "Zero Harm" initiative

Koppers has already seen a measurable **downward trend in strain and sprain injuries**, with more consistent risk analysis across facilities.

Favorite Features

- **Native Mobile App:** Enables direct video capture and analysis without extra uploads
- **AI-Generated Recommendations:** Provides practical ideas that guide site-level improvements
- **Administrative Dashboard:** Offers visibility into assessments across all locations
- **Real-Time Visual Feedback:** Helps workers understand movement risks instantly

> "People really like seeing the risk scores and where they can improve. It's sparked healthy competition between sites and made ergonomics approachable."

Blayne Darnell
Corporate Safety & Health Manager, Koppers

Next Steps

Koppers plans to continue expanding TuMeke's use and explore integrations with their incident management system to track ergonomic activities as **leading indicators.** Darnell also sees future potential for AI-generated diagrams and stretch visuals to support task coaching and warm-up routines.

Conclusion

For Koppers, TuMeke has become a cornerstone of proactive injury prevention—empowering teams to identify risk, engage workers, and drive safer performance in environments where manual work will always be part of the job.