Soter Analytics

The Soter Tech in Action

5 Industries
5 Success Stories

Contents

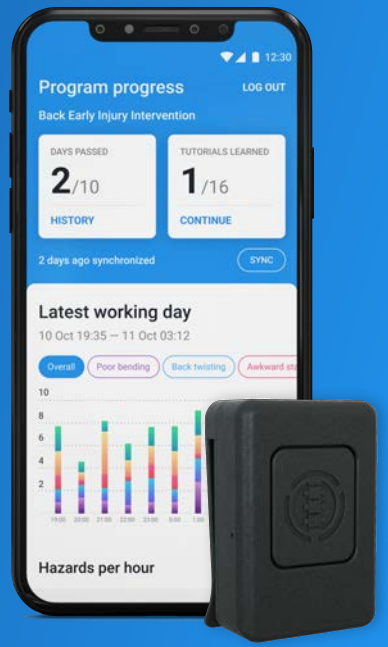
Soter Solutions Overview

SoterTask - AI-driven vision processing technology to assess ergonomic risk within tasks in minutes and on-the-go.

The video & data of workplace tasks is available on the online dashboard.

SoterCoach - the world's first wearable solution & coaching program that uses AI to improve an individual's ergonomic safety.

Workers self-correct their movements in real-time, preventing back & shoulder ergonomic injuries by 55%.



Warehouse Used Insightful Data From SoterCoach Safety Wearables To Make Simple, Effective Ergonomic Adjustments

Situation

An online retailer with a large warehouse noticed something interesting in the data after implementing **SoterCoach** wearables across their facility. Data from workers assigned to stuff tote bags indicated more hazardous movements per hour when compared to others.

1

Action

Further investigation revealed a high incidence of repetitive bending and twisting as the workers reached for items on the lower shelves. The warehouse management worked with the team of experts at **Soter Analytics** and implemented a few simple adjustments to the shelf placement of items.

2

Result

The **SoterCoach** technology facilitated insightful data comparison examining the pre-change and post-change hazardous movements per hour. The layout change significantly reduced the hazardous movements per hour for the group of workers allocated to the task.

3

Hospital Used SoterCoach To Reduce Repetitive, Hazardous Shoulder Movements

1

Situation

A hospital in Australia noticed that caregivers in the Endoscopy department were suffering a higher rate of shoulder and elbow injuries. The workers were unsure how they sustained these injuries. The hospital partnered with Soter Analytics and fitted 10 workers in this department with wearable safety devices.

2

Action

The data collected showed that on their busiest days, they could perform up to 53 hazardous movements per hour. Comparable labour intensive departments would normally perform only 5 hazardous movements per hour. Combined with participant feedback the data highlighted one specific task aligned with the Soter report of excess arm elevation. The high result coincided with when caregivers were hanging scopes in drying cabinets.

3

Result

The hospital implemented a small modification to the task by adjusting how caregivers hold the scopes when placing them in the drying cabinets. After applying this simple strategy the hazardous movements per hour were reduced to just 4.2 per hour and there have been no reported injuries to date.

Manufacturer Identified And Addressed Disproportionate Ergonomic Risk To New Starters Through SoterCoach Wearables

Situation

A manufacturer adopted **SoterCoach** wearable technology into their safety practices for workers on their production lines. The data collected from the devices indicated significant differences in the number of hazardous movements per hour depending where the worker was placed along the conveyor belt.

Action

Using the data to zero in on specific zones of the production line, the manufacturer identified a disproportionate number of hazardous movements amongst new starters. Working with the team of ergonomic experts at **Soter Analytics** they implemented effective manual handling training to improve the fitness of new workers.

Result

The result was an overall reduction in hazardous movements per hour as well as a more even distribution of demanding physical labour along all areas of the production line.

1 2 3

Agricultural Association Used SoterCoach Safety Wearables To Pinpoint Problematic Task And Decrease Hazardous Movements

1

Situation

An agricultural association adopted **SoterCoach** wearables to improve ergonomic safety. Upon inspecting the collected data, they found that one particular task was resulting in a high number of hazardous movements per hour. Workers were seated in a chair and reaching for materials in a box on the floor. The result was a dangerous repetitive bending and twisting motion.

2

Action

The insight enabled the association to make a simple adjustment to their operations; introducing a table to avoid bending. The outcome was a significant reduction in hazardous movements per hour.

3

Result

Without the data from **SoterCoach** this problem would have gone unchecked for much longer increasing the likelihood of a serious and costly back or shoulder injury.

Pallet Repair Facility Used SoterTask & Wearables to Prove Cost Justification of New Engineering Tool

Situation

When a pallet repair facility started using **SoterCoach** wearables they found a pattern of increased hazardous movements on a particular area of their conveyor belt. On closer investigation they learned the cause; a repetitive movement that placed significant force on the elbow, shoulder and wrist.

A new solution was needed to address the problem so they designed their own tool internally. However, to implement this new tool in all their facilities across the US required a large capital investment. Serious justification was required for executive leadership to invest millions into making this new tool and process change.

1

Action

To build a cost justification for the new tool, both Soter wearables and SoterTask were employed. Wearables collected data to gain an understanding of the angles and frequency of the movement. **SoterTask** quantified the risk reduction. Videos of workers performing the task with and without the new prototype tool were captured and compared.

2

Result

The results showed that the new tool eliminated over 150 arm movements per hour, and improved the overall task safety by 45%. This significant result supported by clear, reliable data analytics justified the cost of the tool.

3

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