

# Case Study

Hitachi Astemo Reduces MSD Risk By More Than Half Using TuMeke





# HITACHI Astemo

Company Name

Hitachi Astemo

Company size

10,001+ Employees

Industry

Automotive

Learn More

hitachiastemo.com

#### Introduction

**Hitachi Astemo Americas**, a key player in the automotive industry, manufactures and markets engine management, electric powertrain and integrated vehicle control for major automotive manufacturers worldwide.

Zane White, an HSE Manager at Hitachi Astemo, is actively involved in safety audits, inspections, and crisis management. As part of his job, Zane was tasked with helping the organization foster a healthy and proactive safety culture, while raising awareness about the positive impact of ergonomic improvements

#### Risk Reduction

57%

Reduction in risk across multiple workstations

 Data-driven insights guided the strategic raising of work surfaces using steel tables

50%

Reduction in MSD risk for metal tube retrieval process

 Devised a solution to stack objects more effectively, drastically reducing the amount of bending

## Challenges

Hitachi Astemo had significant opportunities for ergonomic and safety improvements within its operations. Key challenges included addressing musculoskeletal disorders (MSD) and risks related to upper limbs, back, and lifting difficulties. Zane emphasized the profound impact these challenges have on employee satisfaction, job tenure, and overall workforce dynamics.

As the search for the right ergonomics partner commenced, Hitachi Astemo outlined specific criteria for the selected tool:

#### Key Objectives

- 01 Helps proactively assess high MSD risk activities.
- O2 Supports developing solution to ensure employee safety and prevent MSD injuries.

## Choosing TuMeke

To meet these criteria, Hitachi
Astemo turned to TuMeke for its
ability to streamline the assessment
process and provide actionable,
easy-to-understand data. TuMeke
became the catalyst for a shift from
reactive incident responses to
proactive prevention. This started
with the Health, Safety, and
Environmental (HSE) department
and gained momentum across
other departments.

TuMeke's user-friendly interface facilitated seamless recommendations for making work processes more ergonomically sound. Additionally, TuMeke illustrated the positive impact of implemented changes and helped with prioritization of further improvements.



# Implementing TuMeke

Here are some instances showcasing how TuMeke effectively enhanced various safety projects.

#### Optimizing PEPS Gear Packing Process

+ TuMeke identified heightened MSD risks and fatigue among operators involved in PEPS gear packing due to excessive bending. Data-driven insights led to the raising of work surfaces using steel tables, resulting in a remarkable 57% reduction in risk across multiple workstations.

This improved safety led to a substantial ROI for the workstations, showcasing the benefits of these interventions on both operator well-being and the organization's bottom line.

#### Improving Metal Tubes Retrieval Process

+ TuMeke also facilitated another 50% reduction in MSD risk for Hitachi's metal tube retrieval process, specifically addressing trunk and upper arm concerns. Using TuMeke's insights, employees devised a solution to stack objects more effectively, drastically reducing the amount of bending required.

This was yet another example of how TuMeke helped improve employee engagement and its role in encouraging practical solutions.

#### Workflow Optimization for Dunnage Preparation

+ While accounting for 30% of the overall process cycle, dunnage preparation and the removal of old labels from pallets led to strain on the upper arms and shoulders. Factors like human error, fatigue, and time constraints exacerbated these challenges.

TuMeke played a crucial role in highlighting the ergonomic concerns of the task, helping persuade leadership to revamp the workflow. The changes made significantly improved both safety and productivity, ultimately accelerating the cycle time.

#### Results

The implementation of TuMeke ushered in a wave of positive outcomes. Beyond the reduction of ergonomic risks and the redesign of workstations for enhanced safety, there was a palpable improvement in employee satisfaction.

Zane emphasized the tool's usefulness, highlighting both the quantitative and qualitative aspects of the successful partnerships between TuMeke and Hitachi Astemo. He said, "TuMeke has enabled us to easily identify and prioritize the highest risk tasks faster. Now we can spend more time focused on devising solutions, and less time doing manual assessments."

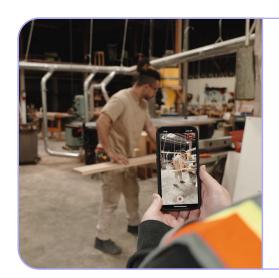
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#### **ZANE WHITE**

HSE Manager at Hitachi Astemo

## Next Steps

Driven by the success achieved, Hitachi Astemo now envisions expanding TuMeke's reach across multiple departments, including Production and Quality. The tool is poised to continue its crucial role in assessing new and ongoing processes for ergonomic concerns, reinforcing its status as an indispensable component of the organization's safety initiatives.



At TuMeke, we are on a mission to eliminate workplace musculoskeletal injuries.

Our innovative solution blends cutting-edge technology with a user-friendly experience to help you identify and mitigate ergonomic risk faster while maximizing efficiency and ROI.

To learn more, visit tumeke.io.

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# Thank You