

A black and white photograph of an industrial robotic arm in a factory. The arm is positioned horizontally, with its joints and cables visible. The background shows the complex structure of the factory, including beams and other machinery.

# WEARABLE TECH USE CASES: MANUFACTURING



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# WEARABLE USE CASE EXAMPLES

## MANUFACTURING



MākuSafe is proud to work with manufacturers and industrial organizations globally. Our clients range from heavy industrial to light manufacturers, fabricators, assembly, millwork, consumer goods, and more.



### SPRAIN/STRAIN

#### Equipment Manufacturer

Based on motion data collected by the MākuSafe wearable, a safety manager was able to identify an employee using an implement with excessive, repetitive force. The safety manager took action on this 'Good Catch' and addressed how the job could be performed differently before an injury occurred.

**POTENTIAL LOSS**  
**AVOIDANCE: \$30K avg.**



### HEARING LOSS

#### Metal Fabrication

A worker who is responsible for running an industrial power washer was routinely experiencing 200%+ of his allowable sound dosage within the first few hours of his shift (8 hour time weighted average as specified by OSHA.) Safety leadership took note of the hazard and hearing protection was reevaluated for this role.

**POTENTIAL LOSS**  
**AVOIDANCE: \$10K-\$30K**



### SPRAIN/STRAIN

#### Commercial Textiles

The MākuSafe wearable identified high force unclassified push/pull motion from an aging worker. The safety manager discussed with the worker and learned that the heavy cart they pulled all day from area to area had damaged casters. They noted the hazard and assigned to maintenance.

**POTENTIAL LOSS**  
**AVOIDANCE: \$12K-\$25K**



### SPRAIN/FRACTURE

#### Steel Foundry

Shift Supervisor was notified of a hazardous motion via MākuSmart. The Supervisor and Safety Director discussed the incident with the worker and determined he tripped on the new small ergonomic mat in his work area. Larger mats were deemed as more appropriate, and replacements made.

**POTENTIAL LOSS**  
**AVOIDANCE: \$46K avg.**



### AIR QUALITY ISSUE

#### CPG Manufacturer

Safety leader noticed high TVOC's/CO2 detected. Discussion between the shift supervisor and worker pointed to raw materials from a supplier smelling differently. They created a plan to leave a voice memo whenever material smelled unusual to track quality concerns through production, and address the supplier issue.

**POTENTIAL: ???**

# WEARABLE USE CASE EXAMPLES

## MANUFACTURING



### EXERTION INJURY

Commercial Textiles

Safety leader compared workers in the same job role across 4 different sites that have deployed MākuSafe. Based on the motion data gathered, they were able to see that workers at one location were doing their job **750%** more physically than the other locations!

**POTENTIAL LOSS**

**AVOIDANCE: ???**



### ARM INJURY

Food Packaging

A production line worker used the voice memo feature on her wearable to recommend adding padding to a machine where her co-worker had bruised her arm.

The safety manager investigated the situation and found this to be widespread among workers. Padding was installed. Listening to workers also uncovered a process improvement suggestion which eliminated an awkward lifting motion.

**POTENTIAL LOSS**

**AVOIDANCE: ???**



### SPRAIN/STRAIN

Equipment Manufacturer

A worker's wearable picked up hazardous motion when an employee was using a potentially hazardous force to repeatedly swing parts from a pallet to a shelf.

**POTENTIAL LOSS**

**AVOIDANCE:**

**\$30K avg.**



### SPRAIN/FRACTURE

CPG Manufacturer

MākuSafe customer success team reviewed movement data using the MākuSmart analytics platform and contacted a shift supervisor who in turn interviewed the employee. The employee indicated they had indeed slipped and fallen during their normal work station process.

**POTENTIAL LOSS**

**AVOIDANCE:**

**\$46K avg.**



### SPRAIN/FRACTURE

CPG Manufacturer

A production worker was removing plastic wrap/package from a pallet, stepped on the plastic wrap and fell to the ground. The shift supervisor validated that the employee did indeed trip and fall but was not injured. A change was implemented to make the process safer.

**POTENTIAL LOSS**

**AVOIDANCE: \$46K avg.**