

Case Study: Conveyor Belt Failure in Multinational Retailer's Fulfillment Center

Friction-caused belt wear identified by MSAI Connect



TIMELINE OF EVENTS

MSAI Connect identified a hotspot on a conveyor belt. Visual investigation found two packages jammed in the guard, rubbing against the belt and causing the raise in temperature on the exit side of the conveyor.

ACTIONS TAKEN

Lock out, tag out was applied and packages were removed and returned to problem solve. Visual inspections of the belt were performed to check for damage. MSAI Connect continuously monitored the belt for any tracking issues and signs of belt damage thereafter.

POTENTIAL IMPACT

The MSAI Connect platform was able to identify the hotspot immediately, avoiding failure of the belt and associated downtime. The conveyor is single point of failure on route to the main flat sorter and belt replacement would take four hours, classified as a high severity event.

- **The avoided cost of replacing the belt was \$6,500**
- Four hours of downtime was avoided for 120 workers, averaging a burdened labor cost of \$50 per hour, per laborer, **for a total downtime cost savings of \$24,000.**



Visible Inspection of Guard