



BOSTONtec



Ergonomic Workstations

Apparel Retailer Lost-Time Reduction Initiative

Challenges

Over a two-year period, a national outdoor apparel retailer determined that 70% of its manufacturing lost-time claims were classified as work-related musculoskeletal disorders (WMSDs). Further, the company found that the claims were predominantly for injuries to the upper extremities and the back.

Solution

The company researched OSHA logs, workers' compensation data and videotapes of jobs to analyze ergonomic problems. Some of the workstation conditions identified in the research were:

- incorrect workstation height
- excess repetitions
- excessive lift loads
- awkward reaches
- excessive forces
- incorrect tool angle

Once the issues were identified, they created an ergonomics design team, consisting of an ergonomics specialist, a standards analyst/engineer, an occupational health nurse and a member of the maintenance department to create solutions. The team partnered with BOSTONtec to address these issues applying basic principles of the ergonomic reach zones.

To restructure workstations the team placed high-use items within the primary zone, medium use items in the secondary zone and seldom accessed items in furthest or storage area. They also converted to electric height adjustable workstations that allow each operator to easily position the station for their individual comfort.

BOSTONtec height adjustable workstation benefits

Effort to reduce operator movement decreased lost-time incidents due to work-related musculoskeletal disorders by 79%

Results

The redesign concentrated on reducing or eliminating several aspects of the company's existing workstations, including excess force, angle problems, repetitions, and awkward unsupported postures. As a result, lost-time incidents due to work-related musculoskeletal disorders were reduced by 79% and have remained low in subsequent years.