What is an ergonomics audit

An **ergonomics audit** provides a snapshot in time of how well workplaces, equipment and tasks have been designed to prevent injuries.

How will this audit be used

The purpose of the audit tool is to improve job design by providing suggested practices for reducing injury risks due to ergonomics deficiencies for:

- Bagging operations
- Haul trucks
- Maintenance and repair in preparation and minerals processing plants

This audit tool will be provided in modules so users can tailor it to individual mine site needs.

We need participants!

- Participation is voluntary
- All participants will remain anonymous
- All participants will need to sign informed consent and talent waivers

The ultimate success of the audit tool is largely dependent on your assistance and cooperation. Please feel free to contact us and we will be happy to answer any questions you may have.

Patrick Dempsey
MSD Prevention Team
PDempsey@cdc.gov
(412) 386 – 6480

www.cdc.gov/niosh/mining

National Institute for Occupational Safety and Health

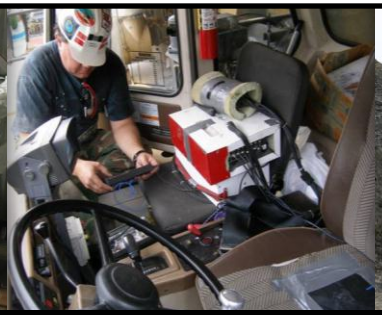
Office of Mine Safety and Health Research

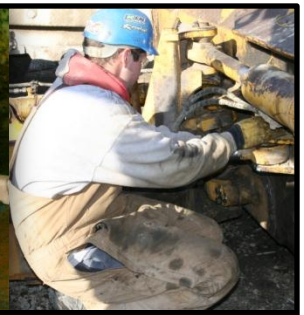
Human Factors Branch

Musculoskeletal Disorder Prevention Team

Development of an Ergonomics Audit for Mining





Bagging

Goal: To assess bagging and palletizing systems design and ergonomics issues associated with both small and bulk bagging operations

How you can help

- We need volunteers willing to allow us to videotape and photograph their bagging and palletizing systems and to collect physiological and biomechanical data during various bagging and palletizing tasks.
- If you have ideas for cost effective means of changing existing bagging stations to improve safety, let us know!

Overview of field visits

Our visit will take 1-2 days and during that time, we will collect the following types of data:

- Videotape of various aspects of the bagging and palletizing operations
- Measurements of workers' posture, muscle activity, breathing, and heart rate for certain physically demanding tasks
- Photograph, measure, and use checklists to evaluate features of the bagging and palletizing systems

Haul Trucks

Goal: To assess ingress/egress system design and ergonomics issues associated with both getting on and off and operating a haul truck

How you can help

- We need volunteers willing to allow us to videotape and photograph their haul truck ingress/ egress systems and collect vibration, postural stability, grip strength and tactile sensation data.
- If you have attempted to make changes to haul trucks to improve safety during ingress/egress and/or decrease vibration exposure to operators, we want to know!

Overview of field visits

Our visit will typically take 1-4 days and during that time, we will collect the following types of data:

- Videotape of haul truck operators getting on and off their equipment
- Vibration exposure from haul truck cabs during a typical shift
- Measurements of postural stability, grip strength, and tactile sensation of the fingers pre-, mid-, and post-shift. These measurements will take 15 to 20 minutes.
- Photograph haul truck ingress/egress systems

Maintenance and Repair

Goal: To assess the ergonomics issues associated with maintenance and repair in preparation and minerals processing plants

How you can help

- We need volunteers willing to allow us to videotape and outfit their workers with measuring devices as they perform maintenance and repair work.
- We are interested in maintenance records and injury reports that will aide in the development of the audit tool.
- If you have made any changes to your equipment to improve safety, we want to hear about it!

Overview of field visits

Our visit will take 1-2 days and during that time, we will collect the following types of data:

- Videotape of workers performing maintenance and repair work
- Measurements of joint angles and forces at the feet
- Size and weight measurements of tools utilized to perform maintenance and repair work