

HOW DO ERGONOMICS RELATE TO GUARDING?

DEFINED - Ergonomics is matching the job to the worker and the product to the user. Ergonomic hazards refer to workplace conditions that pose the risk of injury to the musculoskeletal system of the worker. Ergonomic hazards include repetitive and forceful movements, vibration, temperature extremes, and awkward postures that arise from improper methods and improperly designed workstations, tools, and equipment.

DON'T GUARDS JUST PREVENT ACCESS TO DANGER ZONES?

To answer this question we need to look at the life cycle of typical guarding. All guarding requires initial installation, either by the original manufacturer, outside contractors or by your in house workers. These guards are lifted and carried to the desired location, and fastened in position using some form of hardware. Routinely these guards are removed for housekeeping and maintenance activities as well as equipment repairs and modifications. All too often these activities are not factored into guarding design and functionality.

WORKERS SHOULD NOT HAVE TO:

- › Struggle or strain to handle heavy/awkward guards
- › Perform repetitive motions, such as tightening and loosening nuts or bolts
- › Carry a full tool box around to accommodate a variety of fasteners
- › Risk injury due to poor design

WHAT ERGONOMIC FACTORS SHOULD BE INCORPORATED INTO GUARDS?

- › A single guard should weigh no more than 50 lbs. This allows lifting and installation by one person.
- › Mounting hardware should be easy to use and repetitive hand/finger movements should be minimized
- › When possible, guards should have extra mounting holes that facilitate more than one mounting arrangement. The installer can then choose mounting points for easy access and eliminate reaching
- › Handles should be an option, preferably with a universal mounting design so they can be mounted in any direction, anywhere on the guard for positioning in the best possible location.

WHAT ARE THE BENEFITS OF ERGONOMICALLY FRIENDLY GUARDS?

- › Reduce the risk of workplace injuries
- › Improve productivity
- › Prevent costly downtime
- › Improve worker morale
- › Reduce absenteeism
- › Workers will reinstall guards that are easy to use

WHAT ARE THE MOST COMMON WORK RELATED INJURIES?

Most workplace injuries involve backs, shoulders, and necks. Poor lifting techniques, poor product design, and poor process design can contribute to musculoskeletal injuries. Consistent application of well designed products that are ergonomically friendly will help to reduce or eliminate these injuries. Manufacturers of poorly designed guards place all workers at risk of injury. The next time you are looking to build or outsource guards, take the time to ensure ergonomics has been a factor in the design, and fabrication. Your safety record will improve and so will your bottom line.

