Ergonomics and Manual Handling Meeting Kit

ERGONOMICS

Ergonomics is the science of fitting the job to the worker. Designing workstations and tools to reduce work-related musculoskeletal disorders (MSDs) can help workers stay healthy and companies to reduce or eliminate the high costs associated with MSDs.

Scientific evidence shows that effective ergonomic interventions can lower the physical demands of manual material handling (MMH) work tasks, thereby lowering the incidence and severity of the musculoskeletal injuries they can cause. Their potential for reducing injury related costs alone make ergonomic interventions a useful tool for improving a company’s productivity, product quality, and overall business competitiveness. But very often productivity gets an additional and solid shot in the arm when managers and workers take a fresh look at how best to use energy, equipment, and exertion to get the job done in the most efficient and effective way possible.

MANUAL HANDLING

“Manual handling” means using your body to exert force to handle, support or restrain any object, and includes not only lifting and carrying but also repetitive tasks. A manual handling task that has the potential to cause injury is a “hazardous manual handling task”. Manual handling includes computer use and workstation ergonomics.

MUSCULOSKELETAL DISORDERS AND MANUAL

MATERIAL HANDLING WORK

Manual material handling work contributes to a large percentage of reported musculoskeletal disorders. Musculoskeletal disorders often involve strains and sprains to the lower back, shoulders, and upper limbs. They can result in protracted pain, disability, medical treatment, and financial stress for those afflicted with them.

ERGONOMIC FACTORS THAT CAUSE MSDs.

- Exerting excessive force.
- Excessive repetition of movements that can irritate tendons and increase pressure on nerves.
- Awkward postures, or unsupported positions that stretch physical limits, can compress nerves and irritate tendons.
- Static postures, or positions that a worker must hold for long periods of time, can restrict blood flow and damage muscles.
- Motion, such as increased speed or acceleration when bending and twisting, can increase the amount of force exerted on the body.
- Compression, from grasping sharp edges like tool handles, can concentrate force on small areas of the body, reduce blood flow, nerve transmission and damage tendon sheaths.
- Inadequate recovery time due to overtime, lack of breaks and failure to vary tasks, leave inadequate time for tissue healing.

EMPLOYEE TRAINING

Employees who have been trained to identify and avoid ergonomic hazards are better able to avoid hazards. Employees should be aware of:

- Common MSDs and their signs and symptoms.
- The importance of reporting MSDs, and signs and symptoms, as soon as possible.

- How to report MSDs in the workplace.
- Risk factors and work activities associated with MSDs hazards.

BEST PRACTICES TO REDUCE OR ELIMINATE MANUAL HANDLING RISKS

- Change the task – ask ‘Does this task need to be carried out? If so, does it have to be done this way?’
- Change the object – for example, repack a heavy load into smaller parcels
- Change the workspace – for example, use ergonomic furniture and make sure work benches are at optimum heights to limit bending or stretching
- Change the environmental conditions – including heat, cold and vibration
- Use mechanical aids – such as wheelbarrows, conveyor belts, cranes or forklifts
- Change the nature of the work – for example, offer frequent breaks or the chance to do different tasks
- Offer proper training – inexperienced workers are more likely to be injured.

FINAL WORD

In addition to reducing the risk of injury, good ergonomics and a healthy work environment can increase productivity, improve quality, reduce rework, lower employee turnover rates, reduce training costs and improve workplace morale. That’s an excellent return on investment!