

Ergonomics

Ergonomics is the art and science of designing the workplace to fit the worker. The goal of ergonomics is to allow work to be done without undue physical stress, thereby reducing injuries and cumulative-trauma disease.

The human body can endure considerable discomfort and stress and can perform many awkward and unnatural movements for a limited period of time. However, when awkward conditions or motions are continued for prolonged periods, the physiological limitations of the employee can be exceeded. To ensure a high level of performance, work systems must be tailored to human capabilities and limitations.

- A. Each job has its own set of actions and its own level of stress. The amount of physical stress is determined by several factors. Three of these factors are especially significant:
1. The amount of weight handled;
 2. The force needed to perform the job task;
 3. The degree of repetition.
- B. Physical or mental stress can result from a poorly-designed workplace. A workplace (or workstation) is defined as the place in which the employee spends most of his or her time while performing the duties of the job. The workplace of a police officer may be a patrol car. The workplaces of computer operators are the desks, chairs, and computer equipment they use. If a workplace does not properly fit the person, stress or injury-causing stress can result.

The following questions should give an idea of what might cause physical stress in a given job:

1. Does the employee sit or stand on the job? Does the job require both sitting and standing?
2. Is the employee stationary while doing the job? Or does the employee move about?
3. Does the job require a great deal of strength or power?
4. Can any necessary reaching be done comfortably by most employees? (Or must the employee work for long periods of time at a too-low desk, for example).
5. Are job tasks extremely repetitive?
6. Does the employee have any control over the pace of the job?

7. Is the work environment uncomfortable for the employee? Poorly lighted? Too cold? Too hot? Too humid? Is there proper ventilation?

Any of the above conditions, or combination of conditions, could be the cause of physical stress to employees. Many of these conditions can be relieved by redesigning the job to fit the employee and by training the employee to notice and alter the stress-causing conditions.

- C. If you notice undue stresses from or problems with your workstations and cannot resolve the situation on your own, your supervisor may be able to help you with solutions. The Human Resource Department will schedule a work-site evaluation by our insurance carrier (if requested) to help find solutions.

