

1.7.5. Ergonomic Risks

Ergonomics; human adaptation to human-machine by examining the physical and psychological characteristics is a collection of research and development work in the natural and technical. As of hands Ergonomics definition encompasses many different areas ranging from transport thermal comfort and lighting works. Construction, mining, health services, logistics, furniture, textile industries and areas of activity such as office work is frequently encountered with ergonomic risk factors.

Ergonomic risk factors are listed below.

- **Material storage and manual handling tasks;**
 - Raised load heavy, large, difficult to grasp if unstable and shifting the contents, and particularly in locations that require bending and twisting can lead to back injury.
 - The body injuries and back loads carried by one side, the shoulder may lead to neck pain.
 - unsuitable working position during transport of the material back, neck and shoulders can cause discomfort.
 - uneven or slippery slipping, tripping and falling risks, such as may be encountered.

- **The use of hand tools;**
 - vibration caused by the tendon of hand tools, can damage nerves and blood vessels.
 - In working with heavy tools, non-repetitive and continuous use with the appropriate working postures may cause musculoskeletal disorders.

- Use machines and looms;
- The working area of the machine and machine tools, not designed in accordance with the employee's body measurements, incorrect positioning or misuse of buttons and pedals can cause musculoskeletal disorders.
- The use of the machine requires a special pedal position and this is particularly restrict the movement of workers standing operator. One foot pedal continuous use can lead to one-sided stress and strain and back pain.
- In the work area;
- Employees below the level of the waist and shoulders above the level of his work can lead to musculoskeletal disorders.
- Temperature, humidity and ventilation conditions are not suitable to musculoskeletal disorders are at increased risk.
- not given enough breaks for the rest of the muscles in the musculoskeletal disorders,
repetitive work if seen.

The protection of workers from musculoskeletal disorders, it is necessary to take into account the individual risk factors. the employee performs the same activities; physical characteristics, gender, age, education, and risk factors due to differences such knowledge can vary from person to person.