



Factors in Ergonomically Optimizing Your Workplace

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Providing a safe, comfortable and happy working environment is essential for encouraging high performance and productivity. This can be achieved by providing equipment and furnishings that enable workers to perform their jobs efficiently with as little stress and discomfort as possible, which is the basis of good ergonomics.

Ergonomically designed furniture enables workers to customize their work area so they can perform tasks comfortably without placing strain on their backs, necks and other limbs. Perhaps the most important items for good workplace ergonomics are the chairs.

Chairs

Over the course of the day employees will be constantly moving around so their chair has to be ergonomically designed to keep them comfortable and to maintain their posture.

Ergonomically designed chairs are height adjustable and provide separate support to the lower spine. The chairs shape should enable workers to sit with their upper back slightly reclined, rather than bolt upright, and their elbows and knees at a 90° angle with their forearms resting on the table.

Feet should be able to comfortably touch the ground. Otherwise an ergonomic footrest can be used if the chair is too high.

Workbenches

In electronics manufacturing workbenches are not just desks but flexible work surfaces. Ergonomic workbenches are height adjustable, using an allen key, crank or electric motor, and provide generous worktop space to ensure components are always within easy reach.(1)

Modular designed workbenches are also customizable with adjustable 'modules', such as document holders, shelving for trays and tool panels, to enable a variety of tasks to be performed. Modular designed workbenches enable workers to be able to customize their work area and limit the strain of reaching for objects placed in awkward positions.

Ergonomic, modular designed workbenches not only makes life more comfortable for the worker, but also enhances the flexibility of your electronic manufacturing plant and the variety of tasks that can be performed.

Sound and Light

Ergonomics is not just about the furniture, but all the other factors that impact the comfort for your workers, such as dim lighting and constant noise.

Low quality flickering lights are one of the leading causes of physical stress in the workplace. Poor lighting causes eye strain, headaches and even absenteeism.(2) Therefore the provision of high frequency, non-flickering task lights to illuminate a work space can help improve productivity as well as mood.(3)

It's no surprise that excessive noise can also adversely affect mood and worker performance; noise over 85 decibels is potentially hazardous.(4) The noise generated by machinery can be limited by regular maintenance checks to tighten loose parts and the use of soundproofing. If loud noise can't be prevented, then secluded, quiet areas should be provided for workers to take regular breaks and limit their exposure to excessive noise.(5)

Skilled workers are arguably a manufacturing plant's biggest assets. So in order to maximize the return on your human investment you should provide them with an ergonomic working environment that maximizes their comfort, productivity and increases profits as a result.

References

- 1) <http://www.trestonltd.co.uk/articles/how-ergonomic-workstations-increase-profits.html>
- 2) http://findarticles.com/p/articles/mi_m1608/is_8_19/ai_105853435
- 3) <http://www.trestonltd.co.uk/articles/task-lights-and-productivity.html>
- 4) http://jclauson.com/msqa/term_papers/developing_and_implementing_an_ergonomic_audit_for_manufacturing.pdf
- 5) <http://www.silent.se/ergonomics.php>

