

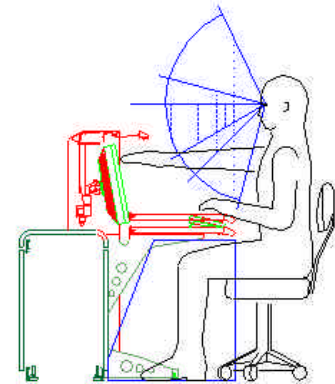
Ergonomics has become an integral part of the design of office and control center equipment and environments. Implementation of proper ergonomics has been shown to lead to increased user productivity and work quality, in addition to diminished worker compensation claims, resulting in immediate payback for the employer.

The Importance of Ergonomics in Product Design

Over the past few decades, ergonomics has grown to be a commonality in product and workplace design. In particular, ergonomics has become an integral aspect in the design of office furniture. The emergence of computers in the office environment has changed the way that people work. For the most part, this change has led to individuals spending more time in static postures while undertaking repetitive tasks such as keyboarding and mouse use. Musculoskeletal disorders in the hands and back, in addition to eyestrain have become a common complaint of office workers. In fact, the Liberty Mutual Insurance Company has reported that workers compensation claims for musculoskeletal injuries are rising (Kromer, 2001).

The most common ergonomic risk factors within the office environment include:

- Repetitive Tasks – tasks or movements carried out repeatedly
- Awkward Postures – such as twisting the neck or extended reaching
- Static Forces – maintenance of a posture for a prolonged period of time (Occupational Health Clinic for Ontario Workers Inc., 2004)



Research continues to show that maintaining any one posture for a prolonged period of time can lead to pain and discomfort, particularly compression of tissue, decreased metabolism, deficiency in blood circulation and an accumulation of extracellular fluid in the lower legs (Kromer, 2001). Therefore, office furniture should be designed to allow the user to move and change posture throughout the day.

The primary purpose of ergonomics is to design the work environment in such a way as to minimize the inherent risks involved. A properly implemented ergonomics program can lead employees to be more productive, healthy, satisfied and free of discomfort. More specifically, a reduction in musculoskeletal discomfort, improved worker performance and a reduction in worker error have been shown to be the direct result of successful ergonomics (CSA Z412, 2000).

The incorporation of ergonomics has been shown to result in large paybacks for many businesses. For example, one large company showed an 80% reduction in musculoskeletal compensation claims in addition to a 42% decrease in reported pain and fatigue (CSA Z412, 2000). Ergonomics programs not only improve workplace morale, but such programs have also resulted in increased production and decreased compensation claims. Ultimately, *Good Ergonomics is Good Economics* (Hendrick, 1996)

Incorporation of Ergonomics Design Principles by Evans Consoles Corporation

Evans Consoles Corporation incorporates the latest in ergonomic design philosophy.

At Evans Consoles Corporation great lengths have been taken to ensure that our products are designed with current ergonomic standards and guidelines in mind. Consideration is given to various international and North American standards such as the ISO, CSA, BIFMA and ANSI/BSR. In addition, our products can be modified to meet specific ergonomic guidelines that may be requested. Evans offers a variety of console units, such as the Response unit below, that are both flexible and adaptable in an effort to meet the diverse physical make-up of potential users. In addition, the many versatile and adjustable components available on our consoles ensure the utmost comfort for the individual user. Some options include:

- Adjustable Worksurfaces – Assures that the widest range of users can be accommodated.
- Monitor Swivel Arm – Allows the monitor to be moved such that appropriate sight lines and viewing angles are achieved.
- Task Lighting – Ensures sufficient lighting while limiting glare.
- Sit-stand Unit – The ultimate in ergonomic design. User can effortlessly adjust the console from a sitting unit to a standing unit with the touch of a button.



Without question, ergonomic consideration is imperative to the design of command and control center equipment. Proper implementation of ergonomics not only enhances the health and well-being of the operator, but also the productivity and efficiency of the company as a whole. Evans Consoles Corporation realizes the great importance of ergonomics and has consequently adopted an ergonomic approach to its design philosophy.