



Ergo Tip of the Month - September 2007

Office Ergonomics & the Overweight Worker

When considering office environments, the size of the obese worker and the fit with their equipment may be inadvertently overlooked.

According to the Center for Disease Control (CDC), 64% of the American population is overweight or obese. The obese worker has specific needs based on the anthropometrics of their body. Some considerations to accommodate the needs of the obese worker include the following:

Upper Body:

The breadth of the upper body may cause the natural carrying angle of the shoulder to be moved into an abducted posture. In this position, the employee is unable to operate the standard keyboard using neutral postures in the forearm and wrist. To operate the keyboard, the obese worker typically works in a state of wrist pronation and ulnar deviation, which may lead to the development of various musculoskeletal injuries including carpal tunnel syndrome. To minimize these issues you may wish to consider various "ergonomic" keyboards which present the keys in angulated/split designs to facilitate more neutral upper limb postures.

Back:

The size of the lower body of the obese worker may require an office chair which has a wider seat pan, a larger range of adjustability in the depth of the seat pan and a larger range of height and depth of the lumbar support. An office chair with these features will assist the obese worker to position themselves comfortably, while obtaining appropriate support for their legs and lower back. Another consideration is the cylinder rating of the chair. Typically the cylinders are equipped to accommodate a worker up to approximately 270lbs. Various Big and Tall type of chairs are available on the market which are equipped with cylinders rated up to 600lbs. When considering chairs to accommodate the obese worker, cylinder ratings and adjustability features are important, however, it is also recommended to consider the "look" of the chair in relation to the typical chair in your workplace. Look for chairs that are similar in fabric, color, shape and overall appearance to your typical office chair to address the psychological impact of the chair on the employee.

With the prevalence of obesity in the American population, accommodating the specific ergonomic needs of the overweight office worker may assist in reducing the incidence of discomfort and injury in this population. Another factor to consider is providing the opportunity for the worker to get up and move periodically throughout the day to increase activity levels and provide a change and rest to the working muscles.

References:

Bossen, Drew-- Atlas Ergonomics *The Issue: Obesity Addressing the Needs of Today's Call Center Workers* Copyright 2005.

Center for Disease Control data reported in the *Prevalence of Overweight and Obesity Among Adults: United States, 1999-2000*.

Sandalwood Enterprises is a consulting firm that specializes in Ergonomics, Process Optimization, and Information Management. The Ergo Tip of the Month is offered to our customers and friends for the benefit of the Ergonomics community.

ContactUs@Sandalwood.com—(248) 848-9500—www.Sandalwood.com