

Sit-Stand Workstations

If you are currently happy with your workstation design, experience little or no back discomfort, have a job that requires you to frequently leave your desk during the course of the day, or have flexibility in your work schedule to leave your desk when you want, then you are most likely not a candidate for a sit-stand workstation.

If you currently experience difficulty sitting for 30 minutes or less, you are likely a candidate for a sit-stand workstation. We also recommend that if a sit-stand workstation is being purchased, that it is easy to adjust and encourages an individual to change positions frequently.

Posture

You must be in a good standing posture when working at a sit-stand workstation.

Be sure your neck is not tilted up or down when looking at the monitor, your arms and forearm are in a neutral posture, elbows at your side, and your feet are firmly on the floor. Also keep in mind that research on sit-stand workstations is not complete. Although evidence suggests that there may be a reduction in back discomfort, the literature notes that past studies have not used adequate comparison groups. Additionally, there is no evidence that sit-stand workstations improve wrist posture when typing or using the mouse. Logically, the real benefit of sit-stand workstations is just that, changing between sitting and standing.

Designing a Sit-Stand Workstation

Alternating between sitting and standing can reduce pressure on the vertebrae and increase circulation to the legs, as well as virtually eliminate lower back pain. A well-designed sit-stand workstation incorporates:

1. Exceptional height ranges to accommodate all workers; from approximately 23 inches to 49 inches high
2. Easy to move positions to make minor adjustments throughout the day to increase comfort.
3. Easy to reach work equipment and other items within the normal reach zone.

These design features can be accomplished many ways by the use of one or more of the following items: bi-level adjustable desk, keyboard tray with at least a 12-inch



vertical range of motion, monitor arms, and, if allowed, wireless keyboards and input devices.

Benefits

There is a perception that sitting is not hard on the back, but this is not entirely true. Sitting when working involves a backward rotation of the pelvis which, in turn, alters the curve of the back creating more disc pressure. The backward rotation of the pelvis causes the curvature of the lumbar vertebrae to flatten.

Standing when working can cause stress to the back because muscle groups in the legs, hips, back, and neck are tensed when standing for a long period of time. Also, maintaining the same standing posture for long periods of time places the muscles in a constant state of contraction.

A sit-stand workstation was developed to incorporate the benefits of both a seated and standing posture, with the ultimate goal being a computer user not having to choose between sitting or standing. A good ergonomic practice is adopting a variety of good postures throughout the workday. In fact, some ergonomists say “your best posture is your next posture.” Below is a list of features that should be considered in selecting a sit-stand workstation.

1. Noise level of adjusting the workstation either up or down for sitting or standing
2. Speed and ease of adjustment for the appropriate sitting or standing position
3. Manual or electronic adjustment of the desk, monitor and keyboard height
4. Ability to program height preferences to eliminate the guesswork of every changing adjustment

NOTE

Adapted from a Fact Sheet developed by the US Army Public Health Command – Ergonomics entitled:

“Pros and Cons of a Sit-Stand Workstation”

