Sit/Stand Workstations - Guidelines for Selecting

The benefits of alternating standing with sitting throughout the day include reduced fatigue, improved mood, reduced static posture and stiff muscles. For employees with occupational and non-occupational injuries, a sit/stand workstation can improve rehabilitation. If your organization is considering offering sit/stand workstations to employees, there are several factors to evaluate prior to purchasing.

There are two primary options on the market: adjustable height desk and standing desk converters. To determine which is best, evaluate each solution carefully.

ADJUSTABLE HEIGHT DESK

Manufactures offer these desks with a manual crank, pneumatic lift and electric lift. Price should not be the sole factor when deciding on which option to choose. Equipment placed on the desktop (dual monitors, files, phone, and keyboard), will increase the weight, thus the effort it may require to lift or crank. Placement of the lift is just as important. Bending over to reach the release lever(s) and pull up may be difficult for those with lower back discomfort or injuries.

To ensure adequate distance from the keyboard and monitors, desk depth should be no less than 30 inches.

The most important point to consider is will it "fit" your workforce? The average female height in the United States is 5'4"**,** while the average male is 5'10". This requires a minimum work surface height of 24.5" while seated and 45" when standing. These averages address the 50th percentile of the workforce and does not take into account the extremes of the shortest and the tallest (5th to 95th percentile*). To accommodate the full range of statures it's best to have adjustable height desks with a range of 22.5" to 48.5"*.

STANDING DESK CONVERTERS

While desktop units are appealing in cost and convenience, there are several factors to consider before ordering a "one size fits all" unit.

- **Where will the unit be placed**? Some desktop converter units are wide and take up a good portion of the desk and must be positioned in the corner. Measure the workstation first – particularly the depth. If the employee has desk files, a phone, and requires space to write, this may narrow your choices

- **How tall is the employee using it?** The average desk height is 29 inches, too high for the average female to maintain neutral sitting posture (see photo below). **Adding a desktop converter increases the height even more**. These changes can increase the risk factors that may eventually lead to injury. Below are some guidelines to consider:

  - Employees who are taller (5'8" to 6') should be able to work well with a desktop converter.
  - Those who are 5'5" to 5'8" may find it challenging unless their chair height is raised and a footrest is provided.
  - When desktop converter unit is folded flat, the area where keyboard is placed should not be raised above desk height more than 1 inch.
  - For petite employees (<5'4"), a standing desktop converter is not recommended unless the workstation has a keyboard tray to place keyboard and mouse.

Note elbows are lower than keyboard height. Continued use with this posture may result in shoulder, wrist and forearm discomfort.

Chair height must be raised with added footrest to support feet.

- **What are the options for petite employees?** Consider a desktop unit that has an adjustable height keyboard tray that can drop below the height of the desk. **Features should include:**

  - Adjustable monitor height range (8-10 inches)
  - Adjustable monitor depth (if purchasing a unit where monitors attach to arms)
  - Keyboard tray height adjustment (3-4 inches)
  - Keyboard tray minimum dimensions (25"W x 10 ½"D)
  - Standing keyboard height that can reach 48 inches (for taller employees)
  - Rectangular shaped keyboard tray surface (without curved front)

Example of standing desk converter (clamp) with keyboard tray that extends below desk height.

Frequently Asked Questions (FAQs)

Q. How long should I stand?

A: This is a question that comes up often. As a guideline, 10-15 minutes of standing every hour is best. If possible, walk around for a minute, then sit for 30-45 minutes. The goal is to avoid being in one static position for more than 45 minutes.

Q: My employee is 5'2" and has a non-occupational lower back injury. She is requesting an adjustable height workstation that goes on top of the desk. What do you recommend?

A: Standing desktop converters placed on top of the desk is rarely the best option for employees that are petite, unless they already have an articulating keyboard tray installed at their workstation. Consider an electric or light weight unit rather than a pneumatic one to reduce exposure of (re)injury.

Q: Employees are requesting anti-fatigue mats while they are standing. Is this a good idea?

A: Anti-fatigue mats were designed for employees who must stand while working for prolonged periods of time. Since it isn't recommended that employees stand for longer than 15 minutes at a time, anti-fatigue mats aren't generally a good idea. If you have an employee returning to work from a back injury and has a doctor's note, an accommodation should be made under the Americans with Disabilities Act (ADA) requirement.

STATURE	KEYBOARD/MOUSE AT ELBOW HEIGHT	EQUIPMENT RECOMMENDATION
4'10" – 5'	No	• Standing desktop converter not recommended unless a single surface keyboard tray is present for keyboard/mouse. • Adjustable height desk with a minimum height of 22.5 inches
5'1" – 5'7"	No	• Standing desktop converter with clamp and keyboard that extends below desk height **OR** • Adjustable height desk
	Yes	• Standing desktop converter is okay - place keyboard on platform while standing only. **OR** • Adjustable height desk
5'8" – 6'	No	• Standing desktop converter – will need to raise chair height • Standing desktop converter that clamps to desk • Adjustable height desk with maximum height of 48.5 inches
	Yes	• Standing desktop converter or one that clamps to the desk. Keyboard placement height • Adjustable height desk with maximum height of
6'1" – 6'4"	-------	• Standing desktop converter (designed for tall people) that extends up to 23 inches • Adjustable height desk (designed for tall people) – extends up to 53 inches.