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FAST FACT: SIT-STAND WORKSTATIONS

This fast fact was developed to assist employers understand the benefits and limitations of Sit-Stand workstations so that they may determine whether a sit-stand workstation is the right solution for their work environment and their employees

POSTURAL CHANGE

Changing postures throughout the day is beneficial for all workers. Hedge's "Ideal working pattern" suggests that for every 30 minutes of work, 20 minutes should be spent sitting in neutral postures (this can be accomplished by having an ergonomically adjusted workstation), 8 minutes should be spent standing in neutral postures, and 2 minutes should be spent moving and stretching. Other research suggests sit/stand ratios of 1:1 (equal sitting and standing time) up to 1:3 (15 minutes of sitting and 45 minutes of standing per hour).

WHAT IS A SIT-STAND WORKSTATION?

This is a workstation that changes in height to allow the worker to work comfortably in both sitting and standing.

Research suggests sit/stand ratios of 1:1 (equal sitting and standing time) up to 1:3 (15 minutes of sitting and 45 minutes of standing per hour).

TYPES OF SIT-STAND WORKSTATIONS

There are two categories of sit-stand workstations: height adjustable tables, and desk attachments.

HEIGHT ADJUSTABLE TABLE (HAT)

The entire work-surface adjusts in height, either by hand-crank, or electronically. Height adjustable tables come in a variety of configurations and sizes, including (but not limited to) standard, straight edged desk (i.e. 30x72") and L-shaped. Many manufacturers will customize the work surface to meet the employer's needs with respect to available office space and weight-bearing capacity (support of heavy equipment such as printers). An existing desk may be retrofitted to a height-adjustable table by keeping the desk surface and replacing the gables with height adjustable legs.

Many height adjustable tables allow the user(s) to program sitting and standing heights for easy adjustment between settings.



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When selecting a height adjustable table, workstation layout and job task requirements should be taken into account such as location of paper documents, monitor position and keyboard location (keyboard tray vs desktop).

Cost varies depending on the size, mechanism of adjustment and weight bearing capacity of the HAT.



DESK ATTACHMENT

This type of sit-stand workstation attaches to the existing desk and can be raised (typically manually) to allow the worker to alternate between seated and standing postures.

With this type of workstation, the existing monitor is mounted to the desk attachment and the worker's keyboard is placed on the integrated adjustable keyboard platform.

The desk attachment sit-stand workstation may have an option for an integrated work platform to support minimal paper documents.



WHO MIGHT BENEFIT FROM A SIT-STAND WORKSTATION?

Can the worker achieve the ideal working pattern (20 min sitting, 8 min standing, 2 min movement) by alternating their job tasks and routine using their current workstation?

- If yes, are there opportunities to add movement to the workday, such as walking to the printer, standing when talking on the phone, walking meetings etc?
- If not, one way of achieving an ideal working pattern throughout the day is to provide workers with a sit-stand workstation.
- Does the worker experience pain or discomfort during sitting? If yes, what is their sitting tolerance, or how long can they sit for?

Often, the issue of a sit-stand workstation will be brought to the employer's attention as a result of a healthcare practitioner's note. In instances of individual medical accommodations, we recommend that the employer consult a professional ergonomist.

WHAT TYPE OF SIT-STAND WORKSTATION IS BEST?

Do workers require substantial working surface for paper documents or other equipment?

- If documents such as architectural drawings for plans examiner, reference materials, printouts of budgets in an accounting/finance role are required, a height adjustable table is preferred.

Would it be beneficial for the monitor depth to be adjustable?

- If monitor depth needs to be adjusted, a height adjustable table is preferable to a desk attachment, as these often have fixed monitor depth.

Is an electric height adjustment mechanism preferred over a manual mechanism?

- Where multiple users will work at a workstation within a shift, height adjustment should be possible within 10 seconds. Controls should be intuitive, visible and clearly labeled.

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WHAT IF THERE ARE MULTIPLE END-USERS?

If multiple workers will be using the sit-stand workstation (hoteling workstation, shared workstation), the range of height adjustability is important to consider. To accommodate 95% of the working population, height adjustability should range from

- 57 cm (22.4") to 123 cm (48.5") for the keyboard surface (measured from the floor to the surface that the keyboard sits on), and
- 106 cm (41.8") to 178 cm (70.2") from the floor to the top of the monitor, for single vision lens or non-corrected vision workers. Those workers who wear progressive or multi-focal lenses will require a lower monitor height to maintain neutral neck postures while viewing the screen.

WORKER ANTHROPOMETRICS

When purchasing a sit-stand workstation for a single user, the user's anthropometrics (sitting and standing elbow height, sitting and standing eye height) should be considered to ensure that the range of adjustment is appropriate for the user.

PROVIDING EDUCATION ON THE SIT-STAND IS REQUIRED

If a sit-stand workstation is provided, research has found that simply providing the new desk or desk attachment is not effective. Workers need to receive education and training on

- Why the sit-stand was provided
- How to make adjustments
- Ideal working postures

Scenario 1:	Scenario 2:
<p>Mary is 4'11" and works an 8 hour shift at a 24 hour call centre. She is required to be at her workstation for the full shift with the exception of scheduled 15 minute breaks in the morning and afternoon and a 30 minute lunch break. Mary's headset is wired to her console, and she shares her workstation with two other workers; one is 5'8" and one is 6'2".</p> <p>In this scenario, Mary is unable to achieve the ideal working pattern by alternating her work tasks and posture. She would therefore benefit from a sit-stand workstation so that she can alternate her posture throughout her shift. She does not have any paper documents to reference, so either a desk attachment or a height adjustable table would be suitable. The sit-stand workstation provided should have a range of adjustment to accommodate Mary and her coworkers in sitting and standing.</p>	<p>Jack is 5'11" and works in an IT role. Jack has his own computer, as well as several additional computers and components for repair on his desk at any given time. Jack is very busy throughout his shift and recently sustained a back injury that limits his ability to sit for long periods of time or lift heavy objects. Jack is the only worker that works at his workstation and he often uses an external keyboard and mouse to input data into the computer.</p> <p>Jack would benefit from a sit-stand workstation so that he can alternate between sitting and standing. Jack requires an electric height adjustable table with a large work surface that is capable of supporting the heavy computer equipment. When purchasing the height adjustable table, the table should be large enough to support a keyboard and mouse, or support an adjustable keyboard tray. The table should adjust in height so that Jack can work comfortably in both sitting and standing.</p>

FOR ADDITIONAL RESOURCES OR ERGONOMIST SUPPORT, PLEASE CONTACT YOUR LOCAL PSHSA CONSULTANT.

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