Computer Workstations

Design of computer workstations is slowly becoming more innovative, like the technology that sits on top of it. In the process of making workstations “ergonomically correct,” more consideration has been given to the variety of potential users. This has worked to the advantage of people with disabilities since many workstations are now more “adjustable.” Still, many of the workstations available may not address the placement, ease and accessibility of office equipment for the user with a disability. In such cases, workstations specifically designed for people with disabilities may be the best option. The products described in this article may accommodate users with or without disabilities and it is suggested that the reader call the individual companies to further investigate the equipment of interest.

Frequently Asked Questions

What are adjustable workstations?
Any single level or multilevel computer station that offers a height adjustment feature fits in this category. Most often this adjustment is accomplished via a manual crank or switch that operates a motor. These workstations may accommodate a wide range of users, including a person of short stature who may need to work at a lower level, or a large person in a power wheelchair that may require higher leg clearance. Another option to consider is the more permanent, modular/panel type workstations which are height adjustable during initial setup, and best of all, often provide a lot of leg clearance under the desk.

Will the monitor and keyboard surface be adjustable too?
If the workstation has a single flat surface and the monitor sitting on it is too low, a monitor platform or monitor arm may need to be added to achieve the proper height. Similarly, a keyboard platform or arm can be attached to most work surfaces to achieve the desired keyboard/mouse position. Unlike a single level surface workstation, most bi-level workstations will allow the user to fix and adjust the monitor shelf and keyboard shelf independently to obtain the desired position.
Are height adjustable workstations more expensive than non-adjustable ones?
Not necessarily. Prices vary greatly in office furniture, as they would in other types of furniture. The most significant cost difference is between a manually adjusted workstation and power driven adjustable workstations. Although motorized workstations are not as expensive as they were years ago, it still may not be worth the additional cost if the surface is to remain fixed after the initial adjustment.

Can my old desk be adapted to accommodate my wheelchair?
There are some low tech, inexpensive ways to adjust the height of a desk or work surface that has fixed legs. Besides using wood blocks, leg extenders, designed especially for this purpose, can boost the height 3” to 5”.

What are recessed workstations?
Some workstations are designed with recessed compartments that house the monitor and sit “down in the desk.” Often there is some flexibility in the angling of the monitor and for some individuals, this positioning may reduce neck, eye and/or back strain. Another appealing feature of utilizing this type of workstation is the resulting unobstructed view. For this reason, recessed workstations may be desirable for training or educational settings.

What are the advantages of mobile workstations?
The obvious perk is the ability to move these castor-based units to other areas of the office, but there may be other advantages as well. A tight office budget may necessitate the sharing of technology between different users. Also, since many of the mobile units on the market are compact in size, they may be desirable in smaller or tight workstations. Most of these units also have adjustable height surfaces and can accommodate a wheelchair user.

What are sit/stand workstations?
These workstations are usually fairly compact and convert from a sitting to a standing height and anywhere in between. A majority of the sit/stand stations are adjusted at the touch of a button, but a few are manual. They are usually narrow and would need to be at least 30” wide to accommodate a wheelchair, although this width may not leave a lot of room for maneuverability. An alternative is to
purchase a monitor riser and keyboard riser that turns a standard workstation into one that can be used from a standing position.

What is a wall or ceiling mounted workstation?
These units may be found in industrial, manufacturing or health care settings and are ideally designed for brief or intermittent data entry. There is no desktop, but rather an arm that attaches to a wall and supports the monitor and keyboard, without any additional work surface. Ceiling mounted units function the same way, except they are even more mobile via a tracking system. All these units are adjustable in all directions for the optimum ergonomic positioning of the user, standing or sitting. In addition, they are very space efficient and can be easily moved out of the way. Some units, with flat screen monitors, can even be folded up flat against the wall. Given the clear floor space and adjustability features of these workstations, they may be desirable to wheelchair or scooter users in the appropriate setting.

What workstations have features that specifically address the needs of an individual who uses a wheelchair?
There are a few manufacturers whose workstations are designed primarily for people with disabilities:

• A bi-level, adjustable height workstation with a lower (keyboard) shelf that has a maximum tilt of 85 degrees. This accommodates a mouthstick typist, placing the keyboard in a near vertical position once secured in place. (Daedalus Technologies, Inc. – www.daessy.com)
• A height-adjustable, completely wall-mounted desk, completely free of any obstructions beneath the “desk,” offering easy wheelchair access in and out. (AD-AS – www.ad-as.com)
• A workstation with a wheelchair track on the floor that allows the user to easily slide side-to-side along the track while working at a horizontal workstation. (Wheelchair Workstations)
• A desk with one or two turntable surfaces for someone with limited or no reaching ability. Rotating surfaces make desktop components or equipment more accessible. (Extensions for Independence, www.mouthstick.net)
What type of workstation can accommodate a user who cannot sit upright?

For individuals with orthopedic back conditions, there are a few companies that make workstations that recline to varying degrees, offering an option to computing from an office chair:

- A self-contained workstation and chair with headrest, attached as one unit that moves simultaneously to a semi-reclining position of 20 degrees or forward tilt of 10 degrees. (Aptus – www.aptus.com)
- A mobile, tilting computer support frame that straddles to the user’s own bed or recliner. (ErgoPod – www.freedomofspeech.com)
- A portable work surface that resembles a tilted TV tray that is designed to hold a book or laptop computer while the user is reclining on a couch or bed. (Laptop Laid-Back, KayJae – www.laptop-laidback.com or www.kayjae.com)
- A hospital over-the-bed table with a tilting feature to allow a laptop user to work from a somewhat reclined position. Some models may not have a “lip” along the edge to hold the laptop in place while tilted, so try securing the bottom with Velcro. (BackSaver – www.backsaver.com, Sammons Preston – www.sammonspreston.com)
- A steel frame which supports an adjustable CRT arm and attached pull-out keyboard tray that is positioned over the user’s recliner or easy chair. (EasyChair Workstation – www.members.ee.net/mdbailey)
Product Links

AD-AS, Furniture Solutions of Universal Design:
Wall-mounted, height-adjustable desk.
800/208-2020
www.ad-as.com

AliMed (Ergonomics), Medical & Ergonomic Products for the Healthcare and Business Professional:
Workstations and miscellaneous accessories.
800/225-2610
www.alimed.com

Anthro Corporation, Modular Computer Furniture:
Mobile workstations; bi-level workstations.
800/325-3841
www.anthro.com

Apex Medical Corp., Self-Care Products:
Tilting over the bed table.
800/328-2935
www.apexmedical.com

BackSaver, Fitness & Relief Solutions for Home & Office:
“Mobile recliner desk” or tilting over the bed table with lip; sit-stand workstation.
800/251-2225
www.backsaver.com

Daedalus Technologies, Mounting Systems & Work Stations:
Manual bi-level adjustable height workstation.
604/244-8443
www.daessy.com

Ergotron, Computer Mounting Solutions and Furniture:
Wall and ceiling mounted monitor/keyboard.
800/888-8458
www.ergotron.com
ErgoQuest, Recliner Workstations:
“ErgoPod,” reclining computer support frame; sit-stand workstations.
888/298-2898
www.ergoquest.com

Ergotect, Ergonomic Products and Workstations:
Height adjustable workstations; drafting table.
214/747-3746
www.ergotect.com

Extensions for Independence, Home Office Equipment for the Disabled:
Accessible workstation with rotating surfaces.
610/388-2037
www.mouthstick.net

Freedom Accentz, Computer Furniture:
Recessed desks; sit-stand desks; mobile workstations; bi-level workstations.
901/388-0133
www.freedomaccentz.com

KayJae, Portable Tables:
Work surface for holding laptop in reclining position.
888/4-KAYJAE
www.kaejae.com

Keysan, Computer and Office Furniture and Supplies:
Mobile workstations; sit-stand workstations; height adjustable workstations.
800/069-5397
www.keysan.com

Laptop Laidback, Portable Tables:
Portable tilting tray for laptop.
902/226-3092
www.laptop-laidback.com

Mack Bailey Enterprises, Computer Workstations:
EasyChair Workstation.
614/899-0974
www.members.ee.net/mdbailey

North Coast Medical, Workplace Ergonomics:
Monitor arms/risers; keyboard trays; mobile workstations.
800/277-6826
www.besafeatwork.com

Sammons Preston, Workstations:
Tilting over the bed table; leg extenders.
800/323-5547
www.accessinc.com

Source Ergonomic, Office Products & Workstations:
Height adjustable workstations.
610/265-2620
www.source-ergo.com

Smart Desks, Computer Workstations:
Recessed desks.
800/770-7042
www.smartdesks.com

Viking Acoustical Group, Ergonomic Furniture:
Monitor arms; keyboard trays; adjustable height workstations.
800/328-8385
www.vikingusa.com

Wheelchair Workstations
Wheelchair tracking system for “sliding along” a horizontal workstation.
310/973-0384
www.computerfurniture4less.com/newautotable.html
Additional Resources

Assistive Technology Partners
601 E. 18th Ave., Suite 130
Denver, CO 80203
303/315-1280 Main
800/255-3477
303/837-8964 TTY
303/837-1208 FAX
www.uchsc.edu/atp

Assistive Technology Partners
Western Slope Technical Assistance Center (WesTAC)
2897 North Ave., Module 3A
Grand Junction, CO 81501
970/248-0876 Main
970/248-0877 FAX/TTY
www.uchsc.edu/atp

For more information contact:

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