Eliminate the Pain of Contact Stress



Safety Talk

Tom didn’t realize it, but he was a victim of contact stress. For the past year the electronics assembly worker developed painful symptoms merely by resting his forearms against the edge of his workbench. It was starting to take a nasty toll.

Contact stress occurs when a hard surface, such as the edge of a desk, digs into the body and causes pressure on nerve endings. For example, when you repeatedly press hard on the handle of a screwdriver or power tool, pain can result.

The long-term effect of contact stress is repetitive strain injury (RSI), a disorder that occurs over time as a result of repetitive, forceful or awkward body movements. An RSI can damage nerves, tendons and muscles, and can cause numbness, stiffness and inflammation.

Making contact
The following are other actions that cause contact stress:

- Resting the wrist, forearm or elbow on a desk surface or edge
- Continuous leg contact with the edge of a chair
- Using your hand as a hammer to strike objects
- Working on your knees
- Prolonged sitting
- Extensive use of wire cutters
- Carrying a heavy pane of glass
- Holding a nut while turning the bolt
- Wearing overly-tight gloves
- Hoisting heavy objects with ropes
- Prolonged use of a computer keyboard and mouse

Poor tool design can often lead to contact stress. For example, handles with ridges or knurls can dig into the skin and cause pain. After extensive use, this could inflame tendons, bruise muscles and restrict blood flow.

Workers who use their knees to position themselves for tasks are at high risk for contact stress. Sitting on your knees while installing carpets is a good example.

Contact stress can turn extreme when a worker uses his or her hand to strike objects to move or align them. A rubber mallet should be used for these jobs.

Other solutions
There are many ways to reduce or eliminate contact stress on the job. These include:

- Taking periodic rest breaks
- Utilizing a wrist rest when using a keyboard and mouse
- Rounding sharp edges with padding
- Increasing the size and length of tool handles
- Using personal protective equipment, such as kneepads and gloves
- Avoiding striking objects with your hands
- Rearranging your workstation to eliminate contact stress points
- Using tools with better-designed grips

Save yourself a lot of discomfort and pain by confronting contact stress with a little foresight and knowledge.