

CONSTRUCTIVE IDEAS

Innovative ideas to reduce soft tissue injuries in the construction industry



Job rotation gives the body a break

Doing the same task continuously throughout the work day can tire muscles, which can lead to injuries such as tendonitis, bursitis, or back strain. Working continuously in awkward positions, such as low-level or overhead positions, can cause the muscles to work even harder. Job rotation may be a solution, for it not only reduces muscle fatigue and discomfort but also provides relief from monotonous tasks.

Tips for rotating jobs

- Determine from the workers involved the most demanding tasks of the job.
- Develop a rotation cycle that schedules a lighter task following a demanding task to give muscles recovery time.
- The length of time each task is performed before rotating should be based on the most demanding task. For heavy, demanding tasks shorter work rotations are desirable.
- Alternate low-level crouching and stooping tasks with ones that require standing or reaching overhead.
- Co-ordinate workers so that the timing and sequence make sense and the job is done efficiently.

Example: Drywalling

In drywalling, the work is completed in stages. Cutting and installing boards, taping, and mudding are followed by sanding. On a large job, a worker could be doing one task, such as cutting and installing boards, taping and mudding, or sanding, for the entire shift. The task is even more demanding if all the lower level installation is done at one time, followed by the overhead installation. The worker can spend long periods of time stooping and crouching, and can then switch to spending long periods of time with arms overhead and neck bent back.

Task rotation helps to give muscles recovery time. One drywalling team decided to approach their work in a different manner and was able to maintain efficiency. Instead of completing all of the low-level work before moving on to the overhead work, the pair alternated between the two levels as they progressed through the job.

They would stoop and crouch for a while, performing the low-level tasks. They would then give their legs and backs relief from the awkward position by working at higher levels for a period of time.

Example: Stripping forms

Stripping concrete slab beams all day can be very demanding, especially when the same actions are repeated throughout the day. Similarly, if it were your job to prepare the forms for reuse, your muscles would complete the same actions all day. Doing the same task throughout the workday without a change is hard work for the muscles.

One contractor successfully rotates workers every two hours, through each of the following distinct tasks:

- Stripping slab beams
- Scraping concrete and pulling nails so the boards can be reused
- Disposing of the waste
- Delivering materials to the next work level for new form construction

In both of these examples, co-ordination was needed between workers. There will always be a transition period when adopting a new approach to work. Work rotation is one approach that provides your body with the recovery time it needs.

Think about your work activities. Rotation might be a solution to reduce muscle fatigue and discomfort.