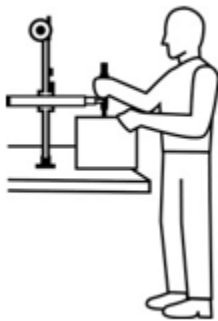


Challenge:

Repeated use of heavy tools throughout the work shift can contribute to localized muscle fatigue in the back, shoulders, elbows, wrists, and hands. In ergonomic terms, any tool that weighs more than two pounds is considered heavy for one-handed operation, especially when used more than 33 percent of the day. Tolerance for tool use becomes less if the employee must hold the tool with any reach greater than 14 inches from the body or above 60 degrees of shoulder flexion (upward shoulder movement). This can be further compounded by also dealing with the weight of airlines or power cords. These tool attachments also create trip hazards.

Solution: Tool Balancers

Install an overhead rail or other anchorage point sufficient to support the weight of both the tool and cords. The balancer should be adjusted so there's minimal effort required to move the tool into and out of position (i.e., employees shouldn't feel they're fighting with the tool suspension method).



Install a torque-arm to support the weight of both the tool and cords. This will eliminate the tool's torque reaction and reduce some of the tool's vibration output to employees.



Benefits:

- Tools are more accessible.
- Fatigue from manually lifting and holding tools is reduced.
- Trip hazards from cords draped across the floor are eliminated.
- Exposure to tool vibration is reduced (with torque-arm installation).
- Exposure to tool torque reaction is eliminated (with torque-arm installation).