

Controls for Hand Work and Gripping

- Provide tools that allow workers to grip the tool using a power grip.
- Eliminate the use of pinch or key grips as much as possible.
- Choose tools that have triggers that allow for the use of multiple fingers rather than one finger or a thumb.
- Choose tools that can be used with the wrist straight.
- Choose tools with vibration-reducing features.
- Choose tools that are lighter and designed to reduce hand torque and kickback.
- Ensure the tool is balanced and does not require static muscular effort to hold it in position.
- Ensure the handle of a tool does not create pressure points in the palm of the hand.
- Use tools with handles that fit the hand. For example, use a smooth, cushioned hand grip rather than one with hard ridges that space the fingers.
- Provide rubber or sponge-type grips on tool handles.
- Provide tools that can be safely used by either left-handed or right-handed workers.
- Maintain tools regularly.
- Inspect tools regularly. Ensure worn or damaged tools are fixed or replaced.

Marklin R. General Knowledge Regarding Engineering Controls in Interventions, controls and Applications in Occupational ergonomics, Marass and Karwowski (eds), CRC, 2006.