

## EMPLOYEE TRAINING RECORD

**TRAINING TITLE**      Ergonomics of Power Tool Design

### KEY TEACHING POINTS

- Bend the tools, not your wrist.
- Choose tools which can be used without bending the wrist. Hand tools should be designed so that the operator can grasp, hold, and use the tool with minimal bending of the wrist.
- Select the tool with the workplace layout and job design in mind. Sometimes a tool is correct for one operation and incorrect for another.
- Keep the weight of hand tools to a minimum. Tools used on a repetitive basis and weighing over 1 pound should be counter balanced. The center of gravity of the tool should be as close to the center of the grip as possible.
- Reduce power to the lowest possible setting to complete the job. This reduces tool vibration at the source.
- Choose tools that have increased handle mass relative to tool body, to reduce vibration.
- Choose tool handles that are covered with cork, rubber, plastic or plastic bonded to steel to reduce vibration.
- Choose hand tools with two handles to permit better manipulation and easier holding of the tool.
- Choose tools with a trigger strip, rather than trigger button. This will allow more force to be exerted over a greater area of the hand, reducing muscle fatigue.
- Ensure that the trigger works easily. This reduces the effort needed to operate it.

### TEST

| QUESTION   | ANSWERS                |       |
|--|------------------------|-------|
|  | TRUE                   | FALSE |
| 1. Bend the tool, not the wrist.   |                        |       |
| 2. If a tool is correct for one application, it is correct for all.            |                        |       |
| 3. One handed tools permit better manipulation and easier holding of the tool. |                        |       |
| 4. Use power tools on the lowest possible setting.                             |                        |       |
| 5. Ensure that the trigger works easily on power tools.                        |                        |       |
| EMPLOYEE'S NAME  | EMPLOYEE'S SIGNATURE   | DATE  |
| INSTRUCTOR'S NAME  | INSTRUCTOR'S SIGNATURE | DATE  |

|   |
|---|
| 1. True 2. False 3. False 4. True 5. True |
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