

Horizontal Milling Machine Notes

Requirements:

Proper eye protection must be worn—operate only with instructor's permission and after proper instructions have been received.

1. As with any machine you must wear proper eye protection, pass ALL tests with 100 percent, and have your teacher's permission to operate it.
2. Turn the power OFF before you make any measurements or adjustments.
3. Be sure cutter/tooling is tightly secured to machine spindle or arbor.
4. Be sure the holding device is mounted solidly to the table and the work is held firmly.
5. Never reach over or near the rotating center.
6. Cutters should not be handled with bare hands, make sure that you are wearing protective gloves.
7. Always use a small brush like a table broom to remove chips and never clear chips away while the machine is in operation. Don't remove chips with hand as they are sharp and will cut.
8. Do not leave the machine while it is working. Remain with the machine for the duration of the cut.
9. Keep the floor around the machine clear of chips, and wipe up spilled cutting fluid immediately.
10. Make sure that you store all oily rags used to wipe down the machine in an approved metal container that can be closed tightly.

Horizontal Milling Machine Written Test

Use the correct heading and write the answers on your own paper. Use the BEST answer to complete the following:

1. Turn the power (**On** **Off**) before you make any measurements or adjustments.
2. Be sure the holding device (**Is** **Is not**) mounted solidly to the table and the work is held firmly.
3. You (**Can** **Cannot**) SAFELY reach over or near the rotating center.
4. Cutters should be handled with (**Bare** **Gloved**) hands.
5. You (**Should** **Should not**) use a small brush like a table broom to remove chips.
6. It (**Is** **Is not**) SAFE to clear chips away while the machine is in operation.
7. It is (**Safe** **Unsafe**) to leave the machine while it is working.
8. Keep the floor around the machine (**Clean** **Messy**).
9. You (**Do** **Do not**) need to wipe up spilled cutting fluid immediately.
10. Make sure that you store all oily rags used to wipe down the machine in an approved (**Rubber** **Metal**) container that can be closed tightly.

List five SAFETY procedures you should do before you operate this machine:

11. _____
12. _____
13. _____
14. _____
15. _____

Horizontal Milling Machine Written Test Key

1. Off
2. Is
3. Cannot
4. Gloved
5. Should
6. Is not
7. Unsafe
8. Clean
9. Do
10. Metal

List five safety procedures you should do before you operate this or any machine:

1. Tuck in your shirt.
2. Secure your hair.
3. Remove jewelry.
4. Wear Z87 safety glasses.
5. Work with a partner.
6. Listen for and report any problems immediately.
7. Make sure that all guards are in place and working.
8. No horseplay.
9. Keep work area clean.
10. Protect hands.

Horizontal Milling Machine Hands-On Test

Name: _____ Date: _____

Subject: _____ Per: _____

1. What does it do? _____

2. Why is it useful? _____

3. Can the student identify this machine (point to it)? (Yes No)

4. Identify the following parts:

- | | | |
|---------------------------------------|--|--|
| <input type="checkbox"/> Over arm | <input type="checkbox"/> Cross-feed hand wheel | <input type="checkbox"/> Arbor support bracket |
| <input type="checkbox"/> Table | <input type="checkbox"/> Table-raising crank | <input type="checkbox"/> Level for back gear |
| <input type="checkbox"/> Cabinet base | <input type="checkbox"/> Power table feed | <input type="checkbox"/> Longitudinal feed handwheel |
| <input type="checkbox"/> Arbor | <input type="checkbox"/> Saddle | <input type="checkbox"/> Knee |

5. Safety procedures followed before using the machine:

- | | |
|--|---|
| <input type="checkbox"/> Shirt tucked in | <input type="checkbox"/> Z87 safety glasses |
| <input type="checkbox"/> Hair secured | <input type="checkbox"/> Checks kick-back zone |
| <input type="checkbox"/> Remove jewelry | <input type="checkbox"/> Gets help from/helps partner as needed |

6. Procedures for operating machine (teacher designate):

- _____
- _____
- _____
- _____
- _____
- _____

7. Makes two safe and successful operations:

- a) Yes No
- b) Yes No

8. Makes sure that the machine has been shut down properly, that the area is clean, and puts tools away. Yes No