

HORIZONTAL MILL SAFETY GUIDELINES

The Horizontal Mill is used for boring, drilling, face milling, tapping and similar operations. The principle hazards associated with the operation of horizontal machines are:

- Tools or materials dropped on the feet and toes.
- Flying chips or scale from boring and facing operations and flying fragments from a broken tool.
- Contact with unguarded moving parts or with pinch points between a tool and the work.
- Work pieces thrown from the worktable if they are not secured properly.

- 1). Before starting the machine, the operator will make certain that conditions are such that neither he/she nor a fellow worker will be injured by the operation of the machine. Among the items to be checked are:
 - All guards are in good condition and in place.
 - Proper cutting tool, correctly sharpened, is used.
 - Tool is securely fastened.
 - Machine has been properly lubricated.
 - Work has been properly secured in place, and bolts and other holding devices are such that they will not be caught or come into contact with moving parts of the machine.
 - Table feeds, proper cutting speeds and all machine attachments are correctly set and in proper working order.
 - Tools or other loose objects are not lying about where they may fall or be caught and thrown, with injury to the operator or others or with damage to the machine or to the work.
- 2). Before leaving the machine for any reason, the operator is to make sure the machine is stopped and the power shut off.
- 3). Wear eye protection and safety shoes at all times.
- 4). Do not wear neckties, wristwatches, rings, jewelry, gloves, etc. when operating the machine. Long sleeve shirts will be rolled above the elbows. Do not wear loose clothing.
- 5). The area around the machine should be free of oil or coolant spills (avoid a slippery floor) and as free as possible from obstructions. Keep the area clean at all times.

- 6). **Do not use compressed air to blow chips from the spindle/table machine surfaces, cabinets, controls, or the floor around the machine.**
- 7). For normal lifting, use leg, not back muscles. For heavy lifting, use a hoist.
- 8). Illuminating lamps should be adjusted so light is not directed into operator's eyes.
- 9). When work platforms are used around the machine, they should be extremely sturdy, safe, and with anti-slip surfaces.
- 10). Wrenches, tools, and other miscellaneous equipment should be kept off all moving units of the machine.
- 11). Be mentally alert on the job, always sober, and never dulled by the influence of drugs, prescribed or otherwise.
- 12). Use the proper hand tools for each job.
- 13). Only qualified personnel should perform maintenance repair work.
- 14). Report any unsafe conditions to your supervisor.
- 15). Keep machinery clean.
- 16). Clean machine and area after each use.
- 17). **Before starting clear area and table of obstructions.**
- 18). Use appropriate lifting device for fixtures, rotary tables, angle plates and large work pieces.
- 19). Make sure all changeable tooling is properly secured.
- 20). **Remove levers, handles, and cranks before engaging feed or rapid traverse.**
- 21). **Stop spindle when removing chips, changing or measuring parts and/or adjusting setups.**
- 22). **Use a magnetic shield when necessary.**
- 23). Use appropriate PPE for the job.

- 24). Do not operate under restrictive medications and/or use of alcohol or drugs.
- 25). Report any safety discrepancies to the shop supervisor.

Do's and Don'ts

DO get thoroughly familiar with the STOP lever or button.

DO keep your hands away from the revolving items (cutters & spindles)

DO handle all cutters carefully to guard against injury to yourself and others.

DON'T under any circumstances attempt to operate any machine unless you are thoroughly familiar with it.

DON'T move any lever unless you know exactly what is going to happen when it is moved.

DON'T play around with the lever of any machine.

DON'T attempt to remove chips from the machine with your bare hands or fingers. Use a brush or other suitable implement.

DON'T go away, even for a moment, and leave the machine running.

DON'T try to operate the machine and engage fellow workers in conversation at the same time. Keep your mind on your work and let the other fellow do the same.

DON'T attempt to oil the machine while it is in operation.

