

## PLANER SAFETY GUIDELINES

Planers are used to machine surfaces in the horizontal, vertical, and diagonal planes. They can handle pieces that are too large, too heavy, or too awkward to be machined on other machines. Planers present some hazards of crushing or pushing the part off the table, because they can generate extremely high cutting forces in the table drive.

- 1). Hazards associated with the metal planers are:
  - a). Crushing or being struck by the moving table and stationary parts of the machine.
  - b). Being struck by flying chips or brushing against sharp machined edges.
  - c). Improper loading or unloading of the work table.
  - d). Improper clamping of the work to the table.
  
- 2). The operator shall insure that:
  - a). Guards are in place
  - b). Stop pegs are in place
  - c). Safety dogs are properly located & secured
  - d). The tool block works freely in clapper box
  - e). Clearances are adequate between planner frame & cross rails
  - f). Proper cutting tools are used
  - g). Tool is securely clamped in tool holder
  - h). Planer table is free of all loose tools
  - i). The planer is idle when adjustments are made to the table stroke
  - j). Before leaving, the machine is in neutral and the power is shut off
  
- 3). In clamping the work on the table, the operator is to:
  - a). Place clamps so they will have full purchase on the work and will not spring it out of shape or alignment.
  - b). Take care to see that the fork end of any U-clamp is on the work.
  - c). Never use bolts or nuts with stripped threads to hold down clamps.

- d). After the work is fastened, check to see that it amply clears the crossrails and other obstructions.
  - e). Secure safety dogs in position at each end of the planer table to prevent it from running off the bed.
- 4). Before attempting to raise or lower the crossrail, the operator must make certain that the crossrail clamps have been loosened. Before retightening the crossrail clamps in the desired position, it is necessary to take the slack out of the gears and elevating screws, especially when the crossrail has been lowered.
- 5). Further precautions for the operator are:
- When loosening tool holders, support the tool with one hand or place a wooden support under it.
  - Make sure that cutting tools are set in such a position that if they shift, they will raise away from the cut and not dig into the work.
  - Check to see that the tool projects only the shortest possible distance beyond its point of support.
- 6). Some of the items an operator must learn to check before starting the planer are:
- a). Are all guards in good condition and in place?
  - b). Are stop pegs in place in the planer table?
  - c). Are safety dogs properly located and secured?
  - d). Does the tool block work freely in the clapper box?
  - e). Are clearances ample between the work and planer frame? Crossrail? Other possible obstructions?
  - f). Are the work, tool holder, tool and crossrail securely clamped in their proper places?
  - g). Are the feed rod and its attachment in work order?
  - h). If a magnetic clutch is used, is the electric current on?
  - i). Are proper cutting tools used?
  - j). Is the machine properly oiled?
  - k). Are the planer and work free of all loose tools or other loose objects?
  - l). Is the work in safe condition and have other safety precautions been taken that experience proves necessary?

- 7). When the planer is in motion, the operator must never attempt to shift the safety dogs, tighten down work or tools, ride the planer table, make any adjustments to the planer or the work, oil the planer or reach over the job to brush away chips.
- 8). The planer must be idle when adjusting the length of bed stroke and speed of machine to suit work, when oiling the machine and when brushing away chips. (the operator is to use a brush or similar tool to remove chips to avoid cutting his or her hand on machined edges.
- 9). Whenever leaving the machine, the operator is to set the shift mechanism in the neutral position and shut off the power. Lock out the unit prior to service or maintenance.
- 10). Always keep safety in mind.
- 11). Do not wear neckties, wristwatches, rings, jewelry, gloves, etc. when operating the machine. Long sleeve shirts will be rolled above the elbows.
- 12). 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.
- 13). Do not use compressed air to blow chips from the table machine surfaces, controls, or the floor around the machine.
- 14). For normal lifting, use leg, not back, muscles. For heavy lifting, use a hoist.
- 15). When work platforms are used around the machine, they should be extremely sturdy, safe, and with anti-slip surfaces.
- 16). Clear floor around table of any and all obstructions. Wrenches, tools, and other miscellaneous equipment should be kept off the machine table as well .

- 17). Be mentally alert on the job, always sober, and never dulled by the influence of drugs, prescribed or otherwise.
- 18). Report any unsafe conditions to your supervisor.
- 19). Only qualified personnel should perform maintenance repair work.
- 20). Clean machine and area after each use.
- 21). **Make sure Ram and tooling clears table and work**
- 22). **Make sure stops are set well within limits of table stroke.**
- 23). **Make sure work is securely fastened to table.**
- 24). Make sure all lock handles are tight on ram.
- 25). After positioning tool, stand away from table and engage.
- 26). Always watch cut from side of machine, not over the top.
- 27). Always stop machine when checking workpiece.
- 28). Use appropriate PPE.
- 29). Use brush to removed chips, never use air gun or hands.
- 30). Use safety cones for caution barriers between moving table and aisle.

### **Do's and Don'ts**

**DO** get thoroughly familiar with the STOP lever.

**DO** make sure that the work is held securely before engaging the cutter with it.

DO make sure that all tools and machine parts are clear of the cutter before starting the machine.

DO keep your hands away from the cutting tool and the moving workpiece and table

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.

