

O.D. GRINDER SAFETY GUIDELINES

Operators must carefully read, understand, and fully comply with all machine mounted warning and instruction plates.

Do not operate the machine with safety guards, shields, barriers, covers, and protective devices disconnected, removed, or out of place.

Do not remove or bypass safety disengagements or interlocks provided on handwheels.

When setting up or adjusting a workpiece or fixture, be certain it is a safe distance away from the cutting tool. Always retract the workpiece a safe distance from the cutting tool when loading and unloading.

Do not attempt to brake or slow down moving machinery with your hand or with some makeshift device. Never attempt to use machine power to remove a nut from any shaft. The spindle and slides must be stopped when measuring workpieces, changing tools, or removing chips and grit. Remove chips and grit with a chip rake or brush, not with your hands.

Keep all parts of your body off the machine table, table edge, out of the path of moving units, trip dogs, trip plungers, and out of the "machining area" during machining operations. Never lean on a machine or reach over or through a machine – you can become entangled in tooling and other moving elements or you may accidentally activate start buttons, feed controls, rapid traverse controls, power work holding controls, or similar devices.

During operation, be attentive to the machining process. Excessive vibration, unusual sounds, etc., can indicate problems requiring your immediate attention. Watch for conditions such as packed chips or grit, which can cause breakage of tooling or machine elements.

Shut off power to your machine when you leave the operating area or at the end of your work period; never leave a machine running unattended. Turn the master disconnect device to the OFF position before cleaning the machine at the end of the working day or when guards or covers are removed that expose hazardous areas.

- 1). Always keep safety in mind.
- 2). Wear eye protection and safety shoes at all times.

- 3). Do not wear neckties, wristwatches, rings, jewelry, etc., when operating the machine. Long sleeve shirts will be rolled above the elbows.
- 4). 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.
- 5). **Do not use compressed air to blow chips from the spindle/table machine surfaces, cabinets, controls, or the floor around the machine.**
- 6). For normal lifting, use leg, not back muscles. For heavy lifting, use a hoist.
- 7). Illuminating lamps should be adjusted so light is not directed into operator's eyes.
- 8). When work platforms are used around the machine, they should be extremely sturdy, safe, and with anti-slip surfaces.
- 9). Wrenches, tools, and other miscellaneous equipment should be kept off the machine spindle/table as well as off all moving units of the machine.
- 10). Be mentally alert on the job, always sober, and never dulled by the influence of drugs, prescribed or otherwise.
- 11). Use the proper hand tools for each job.
- 12). Only qualified personnel should perform maintenance repair work.
- 13). Report any unsafe conditions to your supervisor.
- 14). Keep machinery well lubricated and clean.
- 15). Clean machine and area after each use.
- 16). **Make sure grinding wheels selected are used at manufactures specified R.P.M. never faster, check pulley combinations.**
- 17). **Always ring test and visually inspect wheels before mounting and/or using**
- 18). **Never mount a grinding wheel without using the correct wheel blotters, they are to be 1/16 larger than the flange.**

- 19). **Never use damaged or chipped wheels.**
- 20). Make sure flange nut is secure, but do not over tighten, as this could result in cracking of wheel.
- 21). **Stand off to the side of the grinding wheel before starting.**
- 22). Let grinding wheel run for 1 minute before dressing or before applying it to the work.
- 23). **Make sure after changing grinding wheel, proper shield is in place.**
- 24). **Make sure main power panel is shut off before changing grinding wheel.**
- 25). Use appropriate PPE, face shield required.
- 26). **If coolant is not used, wear the appropriate dust mask for the material being ground.**
- 27). Keep clear all flammable materials from sparks generated by grinding.
- 28). Use appropriate collet, chuck, fixture, centers, or drive dog to hold workpiece.
- 29). Stop spindle and part rotation when removing grinding swarf, changing or measuring workpiece and/or adjusting setups.
- 30). Check setup for clearance between workpiece, fixturing and the machine parts.

Do's and Don'ts

DO get thoroughly familiar with the STOP button.

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

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

DO keep your hands away from the revolving items (wheels, spindles, work pieces, etc.)

DO keep the shirt sleeves rolled up above the elbows and wear close fitting shop aprons or coats.

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 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.