# TOOL AND CUTTER 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). Illuminating lamps should be adjusted so light is not directed into operator's eyes.

7). Wrenches, tools, and other miscellaneous equipment should be kept off the machine spindle/table as well as off all moving units of the machine.

8). Be mentally alert on the job, always sober, and never dulled by the influence of drugs, prescribed or otherwise.

9). Use the proper hand tools for each job.

10). Only qualified personnel should perform maintenance repair work.

11). Report any unsafe conditions to your supervisor.

12). Keep machinery well lubricated and clean.

**13). Make sure main power panel is shut off before changing grinding wheel.**

**14). Make sure grinding wheels selected are never used faster than manufacturers specified R.P.M, check pulley combinations.**

15). Do select a free, cool cutting wheel of the correct shape.

**16). Always ring test and visually inspect wheels before mounting and/or using.**

**17). Never use damaged or chipped wheels.**

**18). Never mount a grinding wheel without using the correct wheel blotters.**

19). Make sure flange nut is secure, but do not over tighten as this could result in cracking of wheel.

20). **Make sure after changing grinding wheels, proper shield is in place.**

21). **Stand off to the side of grinding wheel before starting.**

22). Let grinding wheel run for one (1) minute before dressing or before applying it to the work.

23). Never grind with the side of the wheel, unless the wheel was designed for it.

24). **Keep all flammable materials clear from sparks generated by grinding.**

25). Use appropriate collet or chuck to hold workpiece.

26). Make sure tool indexing pawl is engaged before grinding tool.

27). Do mount the tooth rest correctly.

28). Use a dust mask and face shield.

29). Don't use heavy pressure when hand dressing a wheel having a thin cross section.

30). **Don't be a victim of hand or finger lacerations through careless handling of the sharpened tools.**

31). Clean machine and area after each use.

## 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 grinding wheel before starting the machine.

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

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

**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.