

Classification System for Tools – Shops and Retail

Device Class	1	2	3	4	5
Power	Low power hand / small bench tools (2 - 4 amp @ 120 VAC, 18V or less cordless)	Medium power tools (¼ to ½ hp) (< 10 amp @ 120 VAC, >18V and up to 24V cordless);	Powerful portable and small benchtop tools (> ½ hp) (10-15 amps @ 120 V AC, 24V-36V portable, pneumatics, hydraulics)	Light industrial tools (typically benchtop, > ½ hp, pneumatics, hydraulics)	Large industrial tools (manual and CNC-controlled) (some of these tools may be off-limits to any student use) Highest hazard tools in bold
Common Examples	<ul style="list-style-type: none"> • Dremel tool • Cordless drills 18V or less • Palm sanders • Soldering irons and guns • Heat guns • Hot melt glue guns • Manual hand tools 	<ul style="list-style-type: none"> • Jig saw • 3/8" hand drill • Corded devices < 1/3 hp • Cordless drills greater than 18V and up to 24V • Benchtop and self-standing manual tools • Barrel top parts washer 	<ul style="list-style-type: none"> • Circular saw • Belt sander • Framing nailer • ½ hp geared drill • Reciprocating saw • > 24V cordless tools • Chop / miter saws • Routers • Mini-lathe • Angle grinders 	<ul style="list-style-type: none"> • Small bandsaw • Small drill press • Small/benchtop milling machines • Small/benchtop metal lathes • Woodturning lathes • Belt/disc sander • Horizontal saw • Scroll saw • Planer, jointer • Panel saw • Bench grinder • Iron worker • Tablesaw 	<ul style="list-style-type: none"> • Full sized milling machine • Full sized metal lathe • Hydraulic Press • Radial arm saw • Flywheel grinder • Large drill press • Large band saw • Balancer • Surface grinder • Shaper/moulder • Power shear
User Training	<ul style="list-style-type: none"> • Introduction to shop safety and individual tools by shop supervisor / manager • Directions in manual or on wall postings • Required to read operator manual 	<ul style="list-style-type: none"> • Introduction to shop safety and individual tools by shop supervisor / manager • Signed agreement regarding code of conduct. 	<ul style="list-style-type: none"> • Basic shop safety orientation by shop supervisor / manager • Individual tool instruction • Demonstrate proficiency by performing certain operations to specified accuracy • Signed agreement regarding code of conduct. 	<ul style="list-style-type: none"> • Basic shop safety orientation by shop supervisor / manager • Individual tool instruction • Hands-on use training/ experience • Demonstrate proficiency by performing certain operations to specified accuracy • Signed agreement regarding code of conduct. 	<ul style="list-style-type: none"> • Basic shop safety orientation by shop supervisor / manager • Individual tool instruction • Extended hands-on training/ experience • Demonstrate proficiency by performing certain operations to specified accuracy • Signed agreement regarding code of conduct.
Emergency Shut-Offs					Room-level emergency shut-offs for electrical power to Class 5 tools