## 4.5 MACHINE GUARDING

Machine guarding is required by OSHA under 29 CFR 1910.211. A guard is a barrier that prevents the entry of the operator's hands or fingers into any part of a machine or piece of equipment where they may be cut or caught between moving parts, between moving and stationary parts, or between the material and moving parts of the machine.

Guarding is required of machine tools. Hand-held, portable power tools, or manual tools are not required to be guarded.

Machine guarding provided by the manufacturer should never be removed from the machine.

## 4.6 LOCKOUT/TAGOUT

Listed below are general procedures and rules for lockout/tagout required by the OSHA standard.

 All equipment shall be locked or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel.

No one shall attempt to operate any switch, valve, or other energy isolating device where it is locked or tagged out.

- Lockout (vs. tagout) must be used when the energy isolating device is capable of being locked out.
- Tagout without lockout shall only be used when the energy isolating device is not capable of being locked out. When tagout alone is used, the following conditions must be met:
  - The tagout device must be attached at the same location the lockout device would have been attached.