

**Loss Control Bulletin #19**



Modern production operations require the use of power driven machinery. Injuries caused by machines are typically severe, costly, and they are nearly always preventable.

**Machine operators can and must be protected from machine moving parts or process that can cause serious injury.**

**Hazardous machinery exposures are associated with:**

- Power Transmission Equipment
- The Point of Operation
- Other Moving Parts

**Power transmission equipment and other moving parts** are often guarded by physical barriers or enclosures. These barriers or enclosures may have doors or openings with removable covers to facilitate lubrication or other maintenance. Typically, electronic power interlocking switches are installed on doors and openings to shut off power to the equipment

whenever the access door is opened. There are comprehensive State and Federal standards that govern the design and use of such guards and enclosures.

**Point of operation guarding** presents a far more complex problem. This is due to the enormous variety of machines in use compounded by the limitless sizes and shapes of materials machined on the equipment. The machines can be large or small, intricate or simple. They perform a wide range of operations including: abrading, bending, boring, casting, compressing and baling, combining, cutting, forging, polishing, punching, sawing, spinning and turning etc.

Points of operation do not have standard configurations. They vary by machine, by the material worked on, and by the type of operation performed. Two out of ten employers, especially those in industries that are not primarily engineering oriented, will depend upon "Standard" guards, either supplied with the machine, or taken "Off the Shelf" and added to the machine. This can be dangerous. An inadequate guarding system, or one that is improperly adjusted, is a trap for an unwary worker who can become a victim.

*Every point of operation must be carefully analyzed and a safeguarding system must be designed and/or adapted to ensure protection without depending upon the operator's dexterity, skill or alertness.*

State and Federal safety codes and standards have been written and they apply to many situations. Compliance with them is essential and provides employers with an excellent starting point in setting up equipment guarding.

Just as there is a wide range and variety of point of operation exposures, so are there many systems of equipment guarding. Selection and the use of the most appropriate system may require a qualified professional. The continued effective use of the guarding system is a most important management responsibility.

This bulletin is a brief introduction to a very complicated subject. If your operations involve the use of power driven machinery, as most do today, you are urged to inspect them for appropriate guarding.

If you would like assistance, please call Republic Indemnity's loss control department.

The guidelines provided in this bulletin are only intended to provide an overview of some of the more important steps that can be taken by management to establish a safe workplace. The guidelines are not considered exhaustive of all measures and controls that can be implemented by management to address all potential loss or injury producing causes. Ultimately it is the responsibility of management to take the necessary steps to provide for employee and customer safety.