Pinch Points

To most of us a pinch doesn’t sound too serious. A pinch on the cheek or a friendly pinch for fun is one thing, but the pinches you get on the job are something else.

Recently, a worker was crushed to death against a wall by a huge truck that was backing up. That was a pinch point accident.

In another instance, a pair of pliers slipped and pinched a worker’s hand, which caused a blood blister.

Between these two extremes lie hundreds of pinch point situations in industry. And there are just as many examples of injuries sustained because of these pinch points on record.

Pinch point conditions are one of the most difficult hazards to guard. For example, let’s look at a set of two in-running calendar rolls used to finish cloth or manufacture paper or rubber. The material in the process must reach the in-running rolls to be carried through; no guard can be placed at the immediate point. There are some partial guards on such equipment, but operators must exercise extreme caution and alertness when these rolls are running, which is usually at a very high speed and under considerable pressure.

Closely stored 55-gallon steel drums, when moved or handled, create pinch points between each other or the dolly being used to move them. Because the drums are round, they are more difficult to handle and control in many cases. Here the only protection is care and alertness.

The same thing applies to heavy crates, castings and boxes that are stacked close to each other.

Improperly guarded punch presses can inflict more serious injuries. However, most punch presses are well guarded by a two-hand trip and photoelectric beams. These must be used with part-revolution presses; they cannot be used with full-revolution presses. Full revolution presses must have a guard – barrier, two-hand control or similar positive device. Proper guarding prevents entry over, under, around, and through.

It is dangerous to work around machinery that has oscillating or reciprocating parts or elements. Of course, most of these areas are guarded, but in cases when guards are removed to do work or make adjustments, be sure the parts cannot move or be moved. Tag out or lock out the equipment and be sure the machinery cannot cycle if it is off balance or activated by accident.

There are many commonplace things that are potential pinch points, like heavy steel doors or heavy covers for bins and hopper, and often there is no way to guard these hazards. Care is your only safeguard. Even extension ladders can create serious pinch points; the rungs sliding past each other can catch fingers, hands and feet.

Roller, belt or chain conveyors create many pinch points. On a roller-skate-wheel conveyor, heavy crate, castings and other materials that are too close together can even cut off a finger. Powered conveyors are most dangerous at floor openings and at the beginnings and ends if they run inclined between different levels.

A little thought will bring to mind the many pinch points (sometimes called nip points) here in our own operation. Let's discuss some of them now.