



Application

Press Safety

Products Used1980

Problem

To meet OSHA Federal Register Sub-Part O, 1910.217 and ANSI B 11.1 safety standards, a customer is required to either have a mechanical cam limit switch on the press or a dual micro-processor based press control system.

Solution

The 1980 cam limit switches offer control reliability. The 1980 offers a relatively stable mechanical design with N.C. and N.O. contacts which can be checked for proper operation each time the press strokes. Solid state devices offer better longevity and versatility than these mechanical devices, yet cannot offer the fail safe ability without great cost. A mechanical press is controlled by a clutch/brake combination unit connected to the crank. This assembly is an air over mechanical device in most cases. When no air is applied, springs in the assembly activate the brake. Air applied overrides the springs and energizes the clutch. The 1980 generates the contact closures based on crank (ram) position to activate the brake in the proper position of the stroke to stop the ram on top. The cam limit switch is also commonly used for the anti-repeat circuit and the top-stop monitor circuit. The anti-repeat circuit insures that the user can not tie down the two hand control buttons to keep the press cycling. The top-stop monitor circuit will not allow the press to cycle again if the last stroke stopped the press beyond 5-7 degrees over top.

Benefits

- Exclusive 3 year warranty on cam boxes. Applies to entire unit.
- Largest selection of standard and custom products. With over 1,000,000 possible combinations in our standard units alone, we are certain to have a cam box for your specific application.

Conclusion

Rotating cam limit switches have been the heart of mechanical press control circuitry for over 50 years for one reason...control reliability. If this portion of the press control fails, a dangerous runaway condition could occur.



Metal Forming



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