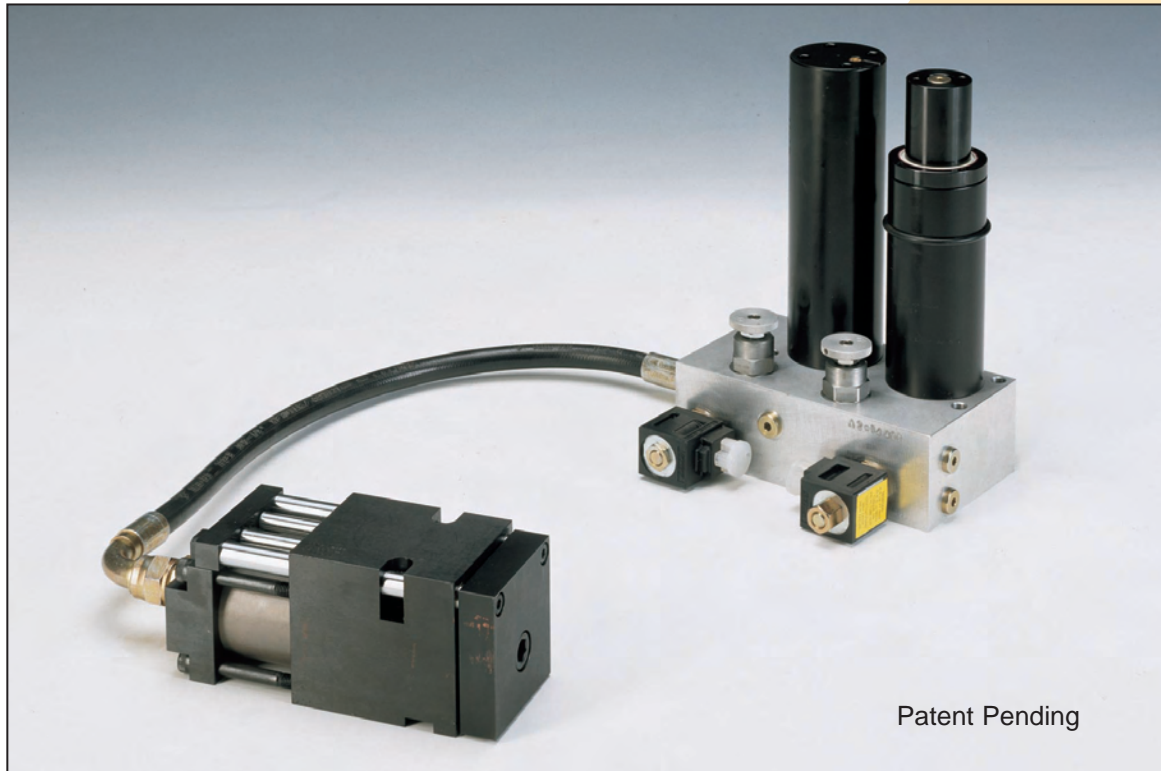


# Controllable Cam System



Now you can store the energy from the downward motion of the ram and use it later in the press cycle with the Dyne-A-Cam™ Controllable Cam System from Hyson Products. This system stores pressurized fluid in an accumulator and controls the flow to the remotely mounted cam using solenoid valves and adjustable flow controls. It gives you increased die design flexibility by controlling the timing and/or speed of events during the work stroke, allowing combined operations of the metalforming process in fewer, less complex and lower cost dies.

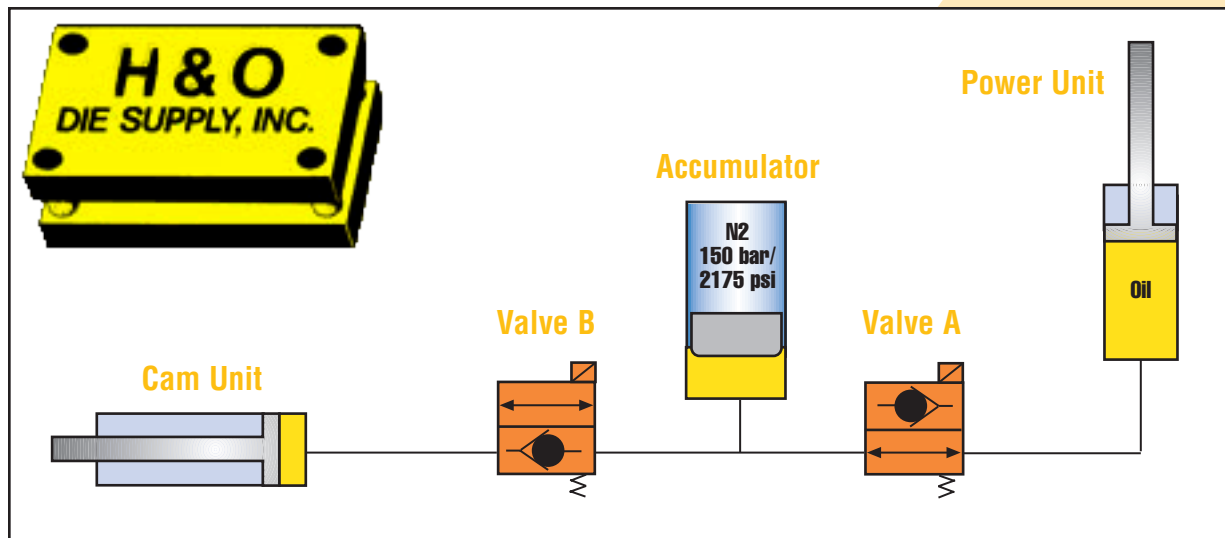
Applicable in a variety of operations, the Dyne-A-Cam Controllable Cam System is especially useful for delayed piercing where, for instance, the pierce area of the sheet metal is in motion during the primary forming operation. In such a case, the piercing operation would take place immediately after bottom dead center (bdc) and while the blank holder or upper die is still holding the sheet metal.

The Dyne-A-Cam Controllable Cam System consists of a compact power unit and a cam unit/force cylinder that performs the working operation. Included in the power unit is an accumulator with a valve package that stores standard weight ISO 32 fluid.

**Hyson™ Products**  
Associated Spring 

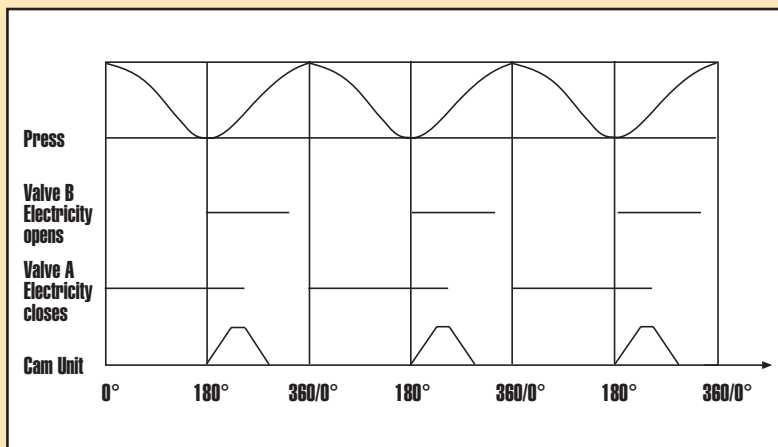


# Controllable Cam System



## The Work Cycle

1. Solenoid valves A (normally open) and B (normally closed) are both closed at top die center or 0°. As the ram of the press contacts the power unit cylinder, fluid flow is directed into the power unit accumulator and is pressurized to 150 bar (2175 psi).
2. At 180°, an electrical signal energizes or opens valve B which allows fluid to flow from the accumulator out to the cam. At this point, actual work can take place.
3. At approximately 240°, an electrical signal de-energizes or opens valve A which allows fluid to flow from the cam back to the power unit cylinder.
4. At approximately 345°, an electrical signal de-energizes or closes valve B. At this point, the next cycle can begin.



Call **1-800-876-4976** today for more information on the Dyne-A-Cam controllable cam or the complete line of Dyne-A-Cam systems.