

Application Note

Multipress Builds Fast and Flexible Machines

At a Glance

- **Project:** To build hydraulic presses based on flexible architecture
- Company: Multipress, Inc.
- Location: Columbus, Ohio
- Challenges:

 To control smooth transitions
 between a press's different modes of operation
- Solution: Delta's RMC75 offers adaptable speed, precision and is easy to use and tune.
- Benefits: In addition to meeting the specification of its customer's, Delta's RMC75 afforded Multipress cost and energy savings



Summary:

Multipress builds hydraulic presses based on flexible architectures for a diverse number of applications; two recent projects were for hydraulic presses that move quickly and precisely in order to form metal components for the automotive industry. Multipress designed the mechanical components of the press and collaborated with systems integrator Advanced Industrial Products for the electronic and hydraulic components of the presses.

Challenge:

To control the hydraulics of a press designed to operate at multiple speeds, Multipress needed a programmable, electronic motion controller that could smoothly transition between several different modes of operation.

Solution:

Multipress needed open loop control when the press moves fast. Near the end of the process, Delta's RMC75 delivers closed loop control that enables final positioning of the axis within .001 inch of target values. The programming of the RMC75 allows the user to choose different modes of operation and is easily accessed through the HMI located on the operator's screen. Tuning the system was also easy to do through use of Delta's Plot Manager and Autotuning wizards.

Benefits:

Delta's RMC75's adaptability allowed Multipress to create a flexible, precise, multi-speed press that met the customer's specifications for speed, precision and an easy interface with the PLC. The RMC75's adaptability allowed the press to run in both open and closed loop modes, affording Multipress cost and energy savings.

The beauty of the Delta RMC controller is that it's very adaptable. It allows speed, precision and has a very customer-friendly interface that satisfies the requirements of most PLCs.

Motion Control . . . and More. deltamotion.com

—Barney Raye, President of Multipress