## **SMD** Handler

Industry: RF Microwave Components

This machine is used to pick and place electronic components on printed circuit boards at rates of up to 20000 parts per hour. A tape and reel are used to hold and dispense the components before placement. A servo motor is used to pull on the reel, taking up any slack to avoid binding the tape.

The customer wanted to replace their existing system with one that was less costly and easier to work with. Unlike AMC, the original servo drive manufacturer could not provide local support. This was an important issue to the customer.





Above: Standard 12A8 drive/amplifier. May differ in appearance from the actual custom product used.

The reel needed to have a constant tension to take up the tape slack. Simply running the drive in torque mode presented a major problem. The reel would take off and run at full speed when the tape was either cut or finished.

AMC provided the solution by setting a 12A8 amplifier in velocity mode, and allowing the tension to be adjusted via an external current limit potentiometer. This way the customer could control both the speed and tension, solving the "run-away" problem.

The solution was much cheaper than the existing system with similar or better performance. Once again, AMC provided the end result that the customer desired.

