

# Application Study

able to handle 3.5", 2.5",  
1.8", and 1" drives

## PLACEMENT OF BREATHER & RECIRCULATION FILTERS INTO DISK DRIVE



### TASK

Place breather & recirculation filters into a hard disk drive.

### CHALLENGES

- Carbon-filled filter have unique masked adhesive areas that cannot be excessively compressed to ensure quality.
- Placement repeatability is critical for functionality and production.
- The equipment must function in Class  $\leq 100$  clean room environment.

### SOLUTION

- Model 1515 - clean room capable
- Customized chuck
- Customized nest
- Rewind Reel
- Bench top configuration for semi-automatic operation

### FEATURES & BENEFITS

- AccuPlace patented peeling technology allows consistent peeling.
- Unique precision vacuum chucks correspond exactly to the adhesive areas and minimize carbon compression.
- The system achieves a placement repeatability of  $\pm 0.002$ " in most cases, depending on component and filter design.
- The clean room version incorporates air valve exhaust ports connected together for porting to an outside vacuum system. Pneumatic cylinders have vacuum collars around the shafts, and bearings are constructed of stainless steel.
- The bench top platform consisting of a base with feet, built-in power supply, and 2-hand control provides a simple cost-effective solution that captures the quality benefits of automation.

