Low-profile Precision Stage

- Highly rigid, low deflection design
- Exceptional straightness/flatness
- High lead accuracy
- Two sizes, X-Y configurable without use of additional adapter plate

APPLICATION:
This application required extremely tight deflection specifications to accurately position a spindle in a milling operation. The challenge was that the stack up of three linear stages in an X-Y-Z configuration required the deflection to be less than 0.007 inches (0.178 mm) at the spindle bit during all milling operations. This rigid requirement was not achievable with any commercially available actuators.

CUSTOMER BENEFITS:
Achieving performance objectives within budget were key for this customer. These precision stages outperformed the existing solution with increased accuracy and rigidity. This allowed the machine to run at faster rates with improved product quality.

- Lowered overall cost of the final system
- Decreased contaminant ingress during machining process
- Increased production throughput

OTHER APPLICATIONS:
These low-profile stages can be deployed in multiple configurations such as stand-alone, X-Y, X-Z and X-Y-Z in applications requiring accuracy and rigidity. Designed in two sizes to accommodate axis stacking, they can be used in machine tool, medical, inspection and electronics applications plus many more.