

Air Bearing Geometry Gages



**Jet Engine
Assembly Station**

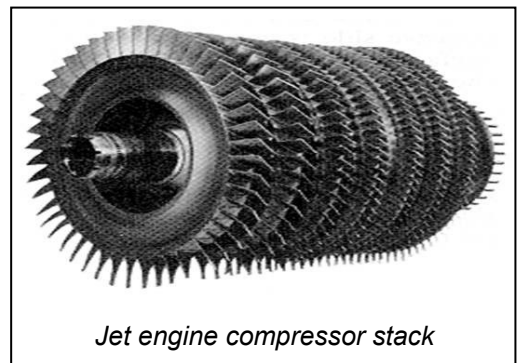
ABTech has a thorough understanding of geometric measurement principles and an extensive background in developing ultra-precision motion systems. A leading metrology company tapped this resource to have a series of jet engine test and assembly stations designed and manufactured.

Friction-free and extremely accurate rotational motion is achieved using a large capacity air bearing, direct drive motor and high resolution encoder. A fine pitch tilt and center worktable locks in the X-Y and tip/tilt adjustments for securely staging the parts.

Coupled with heavy-duty gage towers and custom designed granite bases these stations rotate individual compressor blades and other components to measure concentricity. The controller and software provided by the customer maps the best alignment of each part in the assembly to minimize rotational vibration. Final measurements are taken of the entire compressor stack to ensure a precise match with the cowling.

Features:

- High capacity rotary air bearing table
- Direct drive DC servo motor
- Locking fine adjustment tilt and center worktable
- Various sized (6' to 9') vertical towers
- Dual horizontal arms to hold electronic gage heads
- Granite base with steel frame and passive isolation feet
- Customer supplied electronics and software package



Jet engine compressor stack