



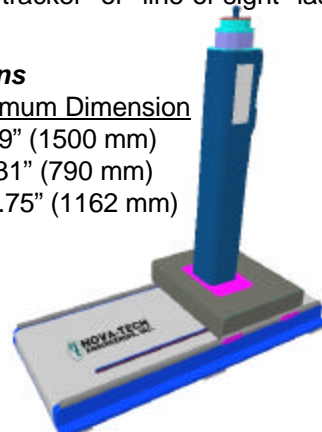
# Align & Positioning Systems

Nova-Tech Engineering's legacy of aircraft assembly positioner design, fabrication and controls expertise has been demonstrated on some of the finest aircraft flying today.

Our next generation 3-axis positioner design provides a solid foundation for automated aircraft alignment and positioning. The standard model is sized for assembly of fuselage sections of small corporate jets and military fighters. The modular design approach is scalable to accommodate the alignment and positioning of most aircraft. An easy to use Windows operator interface is networked to a single PLC that orchestrates the motion of multiple positioners based on measurement data from a laser tracker or line-of-sight laser alignment system.

### Standard Model Specifications

Axis	Capacity	Total Travel	Minimum Dimension
X	500 lbs (227 kg)	30" (762 mm)	59" (1500 mm)
Y	500 lbs (227 kg)	6" (152 mm)	31" (790 mm)
Z	2000 lbs (907 kg)	6" (152 mm)	45.75" (1162 mm)



**We can design larger or smaller positioners to suit your needs!**



### Positioner Features

- Modular Design:** Drives and controls are pre-assembled as modules, simplifying assembly and maintenance.
- Low Profile:** With its low profile, our positioner can fit where others cannot. Additional height can be accommodated.
- Scalable:** Our positioner can be scaled to meet most any need.
- Affordable:** The positioner design utilizes standard sized components, rather than custom ones. This keeps unit cost down, and order lead time low.
- Precise:** Accuracy better than +/-0.005".
- Load Cells:** All three axes have load cells to protect the airplane parts being assembled. Load cell data can be logged for Statistical Process Control analysis.

### System Features

- Adaptable:** The control system allows movement of parts using 3, 4 or more positioners.
- PLC Controlled:** Our control system uses a Programmable Logic Controller (PLC) to handle multiple inputs in parallel. Unlike systems based on a serial run PC controller architecture, our system provides the highest level of industrial reliability.
- Compatibility with laser trackers:** By using a laser tracker for positional measuring, the absolute accuracy of the assembly can be assured. Measurement data can be logged for Quality Analysis and Statistical Process Control.



**NOVA-TECH ENGINEERING, INC.**

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