



Models & Tools

KinAiry® saves time, fulfills NADCAP requirement

Interim field test for laser trackers



When seeking a NADCAP certification for Boeing, Models & Tools needed to demonstrate a periodic inspection procedure for their laser trackers. They turned to Brunson for a solution that included a NIST interim field test procedure and Maximum Permissible Error (MPE) report. Implementing Brunson's KinAiry system enabled Models & Tools to meet the challenge. They feel it improves their best practices and helps to minimize the frequency of non-conformances – and therefore future audits.

Company Profile

Models & Tools provides high quality tooling solutions to the aerospace and communications industries. Their primary focus is aerospace tooling, specializing in designing and manufacturing metallic and composite bond jigs, trim tools, and assembly fixtures. The company is an approved supplier to Lockheed-Martin Aeronautics, as well as a designated source for Boeing and others. Models & Tools has an established reputation for first class quality, on-time delivery, and outstanding customer support. They strive to find and use the latest technology and apply innovative solutions to exceed the demands of today's precision aerospace tooling customers.

The Challenge

As an approved supplier and designated source for Boeing Co., Models & Tools was asked to gain NADCAP certification. NADCAP (National Aerospace & Defense Contractors Accreditation Program) was initially conceived by the Department of Defense as a means to control cost and ensure consistent aerospace product and process quality.



The Challenge (cont.)

As part of their NADCAP audit, Models & Tools was asked to produce quarterly reports demonstrating that their six laser trackers were performing within the trackers' stated MPEs. Models & Tools had no way of satisfying that requirement.

The Solution

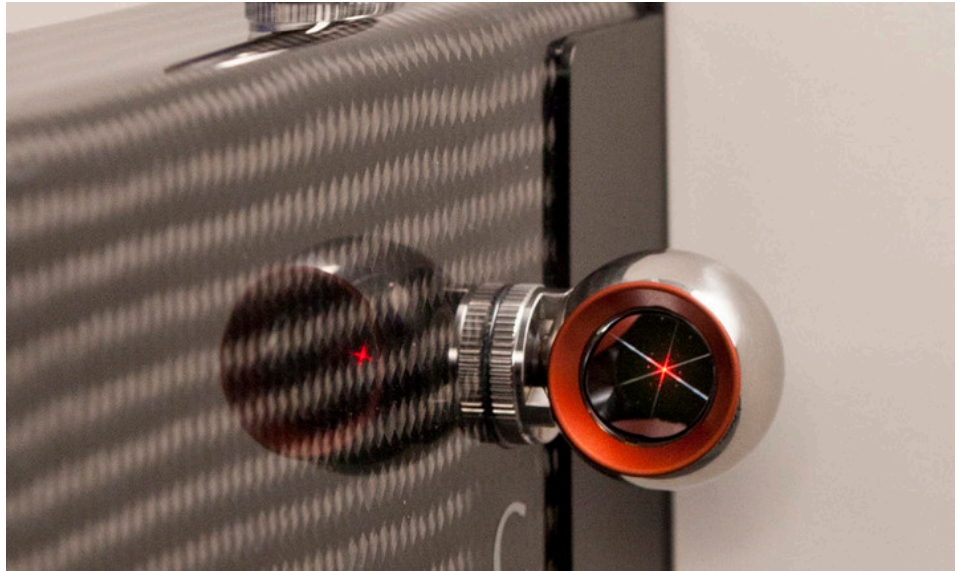
Models & Tools reached out to Brunson for KinAiry, a solution based on NIST's IR-8016 Interim Field Test Procedure for laser trackers. KinAiry provides a set of traceable measurements designed to verify volumetric performance in the field, and includes a report indicating how a tracker is performing compared with its own MPEs. KinAiry's graphical analysis quickly shows the overall health of a tracker, regardless of make or model. It was precisely what the NADCAP auditor was looking for. Implementing KinAiry was an important step in enabling Models & Tools to complete their certification for Boeing.

The Results

Models & Tools was happy to find a quick and easy test to monitor the health of their trackers, especially considering that NADCAP required quarterly checks – meaning 24 tests annually. The new KinAiry system, with its easy learning curve, has been well received by their operators. The speed of the NIST IR-8016 procedure allows them not only to run the quarterly tests, but provides another tool to check their trackers both before and after big jobs. By virtue of running many tests during the course of the year, they have discovered the benefits of KinAiry as a troubleshooting tool, increasing the level of quality for their customers.

Do You Have Similar Quality/Audit Requirements?

Are you conducting audits under NADCAP? Or just want more peace of mind about your tracker performance following transportation between facilities, or before/after an important measurement job? If so, we'll be glad to talk to you about how the NIST IR-8016 Interim Field Test Procedure and KinAiry may be able to help.



KinAiry's Benefits

- Usable in the field, wherever you are doing tracker measurements.
- Test can be performed in under 30 minutes.
- Provides a volumetric check which is more robust than shooting a scale bar or doing a two-face test.
- Gives you a quick, easy-to-read report indicating how your laser tracker is performing compared to the manufacturer's specification.
- Enables you to follow the historical performance of your trackers as a troubleshooting tool for your quality program.
- Gives you more confidence after transport, or during normal operating cycles.
- Provides peace of mind –you can monitor the condition of your trackers at any time.
- Improves your quality program and reduces total cost of ownership.

