



# SpatialAnalyzer<sup>®</sup> (SA)

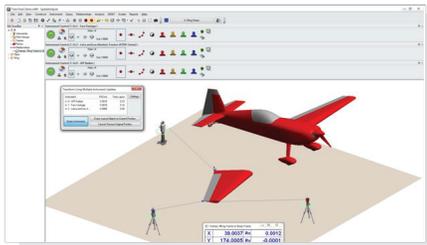
by New River Kinematics (NRK)

SpatialAnalyzer is the premier portable metrology software solution for large-scale applications. SA is an instrument-independent, traceable 3D graphical software platform that makes it easy for users to integrate data from multiple instruments and perform complex tasks simply.

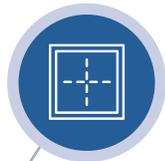
With SA, you can improve accuracy, save time, and ultimately improve productivity.



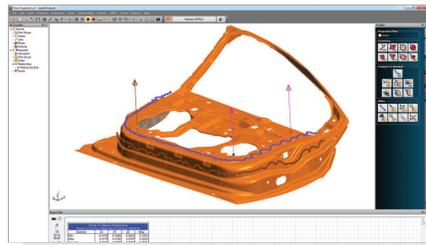
## FULL SUPPORT FOR MULTIPLE PORTABLE METROLOGY INSTRUMENTS



SA can simultaneously communicate with virtually any number and type of portable metrology instruments. This includes laser trackers, arms, laser radars, scanners, projectors, theodolites, total stations, and photogrammetric devices—all featuring a common interface for each instrument class.



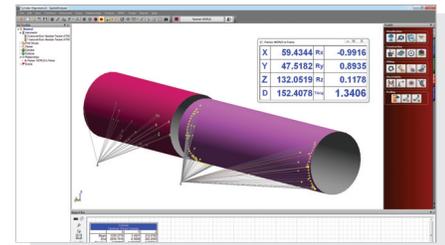
## ALIGNMENT



Align to a known coordinate system using a variety of techniques, from 3-2-1 and best fits to interactive fitting such as Quick-Align and classic surface fits. Relationship Fitting allows for simultaneous feature-based fitting to organic surfaces in addition to traditional iterative fitting.



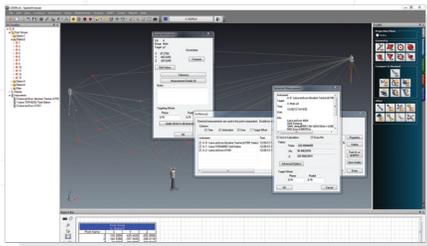
## REAL-TIME BUILD & VIRTUAL ASSEMBLY



Digitally assemble components with relationships and constraints to see how parts will fit in final assembly. An entire suite of tools are available for real-time building.



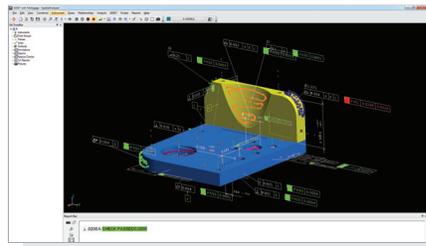
## TRACEABILITY



Maintain a clear history of all data from start to finish with 100% traceability from measurement to reporting.



## GD&T INSPECTION



Address ASME standard GD&T requirements with support for native CAD annotations.



## SA CAD VALIDATION



### CAD Validation

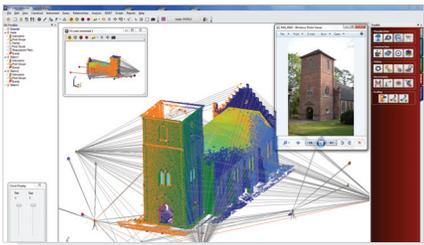
The SA CAD Validation application is a separate utility that allows you to define standalone test reference files that contain lists of CAD files and reference points for verification.

## SA HELPS CUSTOMERS ACHIEVE THE FOLLOWING:

- address a broad spectrum of problems ranging from simple to complex
- save time, money, effort, and ultimately improve productivity
- establish ROI and accomplish goals that were previously impossible.



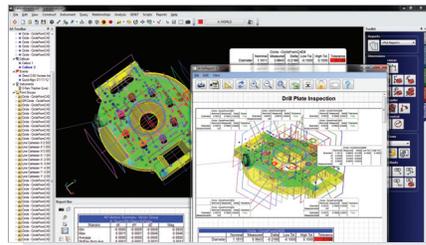
### POINT CLOUDS



Combine laser scanner interfaces with advanced tools for feature fitting and automatic sphere extraction. Automatically extract features from scan data for easy comparison to CAD or analysis with GD&T.



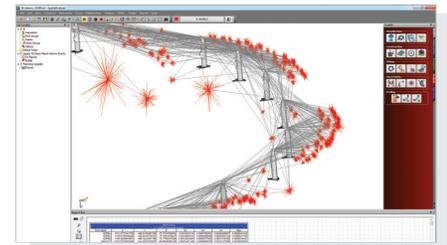
### REPORTING TOOLS



Quickly and easily generate custom reports with output to a wide variety of formats.



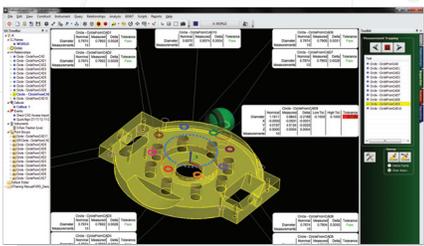
### UNCERTAINTY CALCULATION & USMN



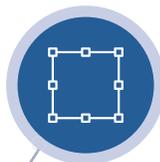
Calculate measurement uncertainty and use USMN to achieve the ideal instrument network.



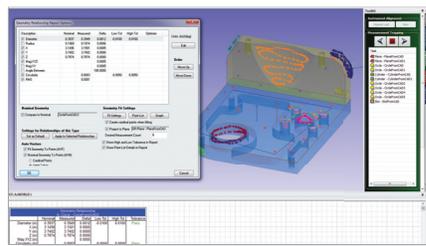
### GEOMETRY INSPECTION



Define design-based inspection routines from a CAD model or primitive geometry.



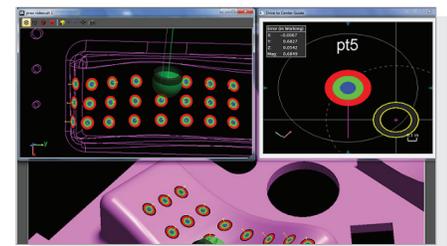
### MODEL-BASED DEFINITION



Take advantage of CAD models to capture deviations over time or watch them in real-time.



### AUTOMATION



Use Measurement Plans and an SDK to enable powerful scripting and automation capabilities.