# PolyWorks Inspector Probing<sup>™</sup>

The rising star in the world of portable probing metrology software, from the market leader in industrial point cloud metrology

## Most powerful management of multiple device positions

- Automatic matching of probed targets to align a repositioned device (no need to follow a specific order during measurement)
- Complete target analysis toolbox, including target measurement statistics, measured target deletion, and target reprobing
- Temperature compensation by specifying material and temperature, or by best-fitting targets
- Best-in-class real-time bundle adjustment for large volume metrology

## Most advanced toolset to define nominal geometry and controls

- Support for all commonly used CAD formats
- $\circ$  Import of features, controls, tolerances, and GD&T for CATIA v5, UG, Pro/E, and JT
- Definition of nominal features with one click on a CAD model
- Automatic matching of measured features to nominal features from a new CAD model revision

# Total metrology solution for industrial manufacturing

- Self-learning, parametric, traceable, and updatable inspection projects
- Feature, surface point, boundary point, cross-section, profile, flush & gap, and airfoil gauge probing
- Embedded SmartGD&T<sup>™</sup> technology
- · Build/Inspect mode for measurement-driven assembly
- Integrated statistical process control (SPC)
- Fully customizable reports
- Integrated DirectReplay<sup>™</sup> re-measurement technology to automatically measure a new piece without teaching or scripting

Bundled with plug-ins for all major probing brands and technologies All plug-ins included at no additional cost

Position

-2.406 -2.406

149.2<mark>9</mark>4

32.438

Distance

9.594

7.038

12.139

PolyWorks

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Supported

languages

English

Japanese

German

Spanish

Italian

Czech

IGES

UG Pro/E

JT

SAT

Parasolid

Inventor

VDA-FS

SolidWorks

Russian

Portuguese

CAD formats

STEP CATIA V4 and V5

supported

Chinese (simplified & traditional)

French

### Key features

- Self-learning, parametric, traceable, and updatable solution that automatically records the operator's intent and adapts to new measurement contexts
- Universal platform that supports arm-based and hand-held probing devices, photogrammetry-based devices, laser trackers, and manual CMMs
- Total compatibility with the PolyWorks/Inspector point cloud metrology platform
- Best-in-class management of multiple device positions with automatic probed target matching, target analysis toolbox, bundle adjustment, and temperature compensation
- Powerful set of data-to-CAD alignment techniques that include techniques based on probed features, probed reference points, probed surface points, surface and cross-sectional best-fit, and more
- Multiple coordinate systems and a complete alignment history
- Widest range of comparison and measurement tools on the market for a complete analysis of surface, boundary, and cross-sectional deviations, feature dimensions and GD&T controls, in addition to flush and gap, profile radius, airfoil dimensions, clearance, thickness, and more
- **Build/Inspect mode** for measurement-driven assembly that offers 3D or X, Y, Z tolerancing on individual objects, visual and audio guidance, auto-detect and specific object-building modes, and more
- Integrated Statistical Process Control (SPC) methodology
- Embedded SmartGD&T<sup>™</sup> technology from Multi Metrics
- Extended report capabilities including customizable report layouts, automatic report generation, and export to Adobe PDF
- Integrated DirectReplay<sup>™</sup> remeasurement technology to automatically measure a new piece without teaching or scripting
- User-friendly macro-programming language for advanced process
  customization
- Xtreme graphical user interface that offers fully customizable menus and toolbars, ideal for corporate-wide deployment
- Free PolyWorks/IMView<sup>™</sup> viewer that maximizes corporate-wide information sharing among users, managers, and suppliers

#### Included with each license

- One year of technical support from highly skilled Application Specialists with optional annual renewals
- · Access to InnovMetric's on-line technical support zone
- Access to a comprehensive network of partners that provide PolyWorks service work, like macro development and interface customization

### Probing devices supported

#### Arms

Faro Hexagon (Romer, Cimcore) Nikon Metrology

Laser trackers API Faro Hexagon (Leica)

Optical trackers/ Photogrammetry

Aicon Creaform Metronor NDI

Nikon Metrology Theodolites

TDRA6000

Manual CMMs Deva I++ MZ1060 (Zeiss) Renishaw

#### System requirements

Windows 64-bit or 32-bit Edition (7/Vista/XP) Dual-core processor or two processors 2 GB of RAM or more 2 GB of free disk space and 2 GB of swap space OpenGL graphics board (NVIDIA is recommended) 3-button mouse or 2-button with wheel



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