



The standard software platform for coordinate metrology and analysis of 3D measurement data

Software packages	Probing	Standard	Premium
Direct plug-in interface to taktile measurement devices (arms, laser trackers, photogrammetry systems and manual coordinate measuring machines (CMM))	✓	✓	✓
Import of CAD files. Included are IGES, STEP, SAT, Parasolid, STL (additional translators are optional)	✓	✓	✓
Various alignment possibilities of nominal and measured data (best fit, 3-2-1, RPS, alignment based on primitives)	✓	✓	✓
Management of multiple coordinate systems, multiple positions of a digitizing system (Bundle adjustment and temperature compensation)	✓	✓	✓
Guided probing of features, sections, surface and boundary points	✓	✓	✓
Build-inspect mode to adjust fixtures	✓	✓	✓
Statistical analysis of serial measurements with integrated data base (Statistical Process Control)	✓	✓	✓
Complete implementation of GD&T according to DIN ISO 1101 and ASME Y14.5M standards	✓	✓	✓
Reporting tool and license free 3D PolyWorks Viewer	✓	✓	✓
Remote Control and Voice Recognition to connect to PolyWorks (PolyWorks Talisman)	✓	✓	✓
Support of optical measurement devices (Laser scanner, fringe projection systems), Point cloud processing		✓	✓
Surface comparison with color map of the deviations		✓	✓
Extract feature primitives, calipers, cross sections, profile gauges, flush and gaps from optical data		✓	✓
Real-time Quality Meshing: Scan and mesh in real-time, quality control of scan data, polygonal meshing			✓

Additional module Airfoil Gauge

Analysis and measurement of wing, propeller and turbine blade profiles

Additional module Optional CAD translators

CATIA V4/V5 and V6, Inventor, Creo (Pro/E), Solidworks, NX (UG), VDA-FS, JT (In Standard: IGES, STEP, SAT, Parasolid)

Additional modul D3D++

Import and export of company specific inspection plans



Processing of point clouds, optimization of polygonal meshes and reverse engineering

Software packages	Standard	Premium
Plug-in interface to laser scanners or other optical digitizing systems	✓	✓
Real-time Quality Meshing: Scan and mesh in real-time, quality control of scan data, polygonal meshing	✓	✓
Best fit alignment of scanned data and overlap reduction of point clouds	✓	✓
Filtering and curvature based reduction of polygonal meshes	✓	✓
Mesh optimization for visualization and simulation	✓	✓
Extraction of curves and feature lines, editing and smoothing	✓	✓
Matching and merging of polygonal meshes	✓	✓
Functions for touch probe measurement and alignment of polygonal models	✓	✓
Parametric 2D Sketching for Solid Modeling Workflows	✓	✓
Morphing of meshes and tessellated CAD models	✓	✓
Creation of quadrilateral meshes from existing triangular meshes, for instance for finite element simulation purposes (NASTRAN format)	✓	✓
Reverse Engineering: Fitting of NURBS surfaces using a curve network		✓
Export of created CAD surfaces in IGES and STEP format		✓
Import of CAD data(IGES,STEP) and watertight tessellation for hybrid modeling		✓

