

# System requirements and data formats



## PolyWorks 2018® – system requirements

### Operating systems for PolyWorks node-locked license or floating client

#### 32-/64-bit

**Microsoft® Windows 10 Pro**

**Microsoft® Windows 8.1 Pro**

**Microsoft® Windows 7 Pro**

### Operating systems for FLEXnet license server (requirements for floating license)

#### 32-/64-bit

**Microsoft® Windows 10 Pro**

**Microsoft® Windows 8.1 Pro**

**Microsoft® Windows 7 Pro**

Microsoft Windows Server 2012 R2

Microsoft Windows Server 2016

#### 64-bit

Red Hat® Enterprise Linux 6 and 7

SUSE® Linux Enterprise Server 11 and 12

We recommend installing the latest service pack.

### Peripherals

3-button mouse or 2-button mouse with a wheel configured as a middle mouse button

One free USB port for the PolyWorks software dongle

3DConnexion SpaceMouse is supported

### 3D Workstation (sample configuration)

Processor: Intel® Quad Core Processor

Main Memory: 32 GB RAM

Graphics board: NVIDIA Quadro® Series with 2 – 4 GB Memory

Hard Drive: SSD (OS and programs), HDD (Data)

Operating System: Windows® 10 Professional 64-Bit

### Graphic board

#### NVIDIA Quadro® graphic board

As PolyWorks uses Open GL for 3D graphic representation, a fast graphics card with Open GL acceleration is highly recommended. The graphics cards of the Quadro series of NVIDIA are best suited for Open GL applications. We recommend that you have installed the latest reference driver.

[http://www.nvidia.de/object/quadro-certified-drivers.html#partner\\_id=44&page=appSelected](http://www.nvidia.de/object/quadro-certified-drivers.html#partner_id=44&page=appSelected)

#### Graphic board settings for PolyWorks

Manage and configure PolyWorks profiles in the 3d settings of your NVIDIA Quadro graphic boards.

# System requirements and data formats



## PolyWorks® – data formats 3D digitizing systems

### PolyWorks data formats

- POL-Format:** Polygon meshes
- PF-Format:** Point clouds from planar grid scanners
- PSL-Format:** Point clouds from line scanners

### Supported 3D- data import formats

#### Planar grid scan formats

3D-Digital, 3D Scanners, Breuckmann, CNRC, Cognitens, Cyberware, Genex, GOM, HoloVision, HyMarc, IMetric, Kreon, Konica Minolta, Nikon Metrology, Nub3D, Optech, Opton/EOIS, ShapeGrabber, Solutionix, Steinbichler, Voxelan

#### Line scan formats

3D Scanners, Carl Zeiss, KREON, Hexagon Leica, Metron, Nikon Metrology, Perceptron, Steinbichler, Wolf&Beck

#### Spherical scan formats

3rd Tech, FARO LS, iQVolution, Leica, Mensi, Optech, Riegl, Surphaser, Topcon, Z+F

#### Unorganized point clouds (import & export)

ASCII, Laser Design, IGES, Perceptron, LAS

### Direct CNC-CMM interfaces

- |         |          |       |
|---------|----------|-------|
| Hexagon | Mitutoyo | Nikon |
| Pantec  | Wenzel   | I++   |
| CMM-OS  |          |       |

### Direct interfaces for single point digitizers

#### Measuring arms

- |                 |       |               |
|-----------------|-------|---------------|
| Nikon Metrology | FARO  | Hexagon       |
| CimCore         | KREON | RPS Metrology |

#### CMMs (protocols)

- |     |          |         |      |
|-----|----------|---------|------|
| I++ | Samssoft | MZ-1060 | Deva |
|-----|----------|---------|------|

#### Laser/optical tracker

- |                 |          |                   |
|-----------------|----------|-------------------|
| AICON           | API      | Creaform          |
| FARO            | Metronor | Leica             |
| Nikon Metrology | NDI      | Zeiss Optotechnik |
| GSI (V-Stars)   | Metronor |                   |

### Direct interfaces for laser scanners

- |             |                   |                 |
|-------------|-------------------|-----------------|
| Creaform    | FARO              | Nikon Metrology |
| Leica       | Konica Minolta    | NDI             |
| Perceptron  | Zeiss Optotechnik | Hexagon         |
| LaserDesign | KREON             |                 |

### Direct third party interfaces

- Tomelleri-SpaceArms

Please observe that additionally used third software for the measurement system is also applicable to the operating system.

# System requirements and data formats



## PolyWorks® – data formats

### Formats for polygon meshes (import & export)

CNRC	PLY	DXF
POL + POK (PolyWorks Binary format)		NAS
OBJ	VRML 2.0	JT
STL (ASCII and Binary)		

### Other export formats (export)

- Cross sections in ASCII, DXF, IGES and Inventor
- Bezier curves in ASCII- and IGES-Format
- NURBS-Surfaces in IGES- and STEP-Format
- 2D-Sketches in IGES, STEP, CATIA, Siemens NX (UG), Creo, SolidWorks, Inventor und DXF.
- Measurements and tables to DMIS or Q-DAS

### PolyWorks/Inspector™ supports the following CAD import formats

#### Standard

ACIS SAT	IGES	STEP
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#### Optional

CATIA V4 + V5	Inventor	Pro/ENGINEER
SolidWorks	Siemens NX (UG)	VDA-FS
JT	Parasolid	

### Report formats

#### Report layout generator

With the report layout generator formatted reports can be created. Thereby it is possible to define layouts and use them for creating reports.

### Report formats

ASCII - Text	HTML	PDF
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### Standard export formats

Report objects can be exported in the following formats:

ASCII - Text	AVI - Video	DXF
HPGL	HTML	Microsoft Excel
Microsoft Word	PDF	SVG

### PolyWorks|Viewer™

Free 3D viewer to view PolyWorks projects and with simple basic measurement and report functionality.

### PolyWorks|Talisman™

- Apple Bonjour Service, iOS Device (minimum iOS 5.0)
- Android (minimum 4.1 Jelly Bean)