

Training **CATALOG**

polyworks
europa

About PolyWorks Europa

PolyWorks Europa empowers manufacturers of every size to digitally transform their 3D measurement processes and maximize the value of 3D measurement data for their product engineering and manufacturing processes. With offices in France, Italy, Spain, and Czech Republic, PolyWorks Europa provides PolyWorks® smart 3D metrology software solutions and technical services—including technical support, training, metrology process consulting, and software customization—to European industrial manufacturers.

PolyWorks Europa is an InnovMetric group company, a multinational software development organization headquartered in Canada with over 650 employees dedicated to bringing 3D measurement data at the heart of enterprise manufacturing processes.



Our Solutions

PolyWorks® is the first single-vendor solution that supports all 3D measurement processes and tasks performed by industrial manufacturing organizations, from model-based definition for measurement planning in CAD software, to dimensional analysis, quality control, and reverse engineering, up to the enterprisewide sharing of 3D measurement data and results.

3D DIMENSIONAL ANALYSIS AND QUALITY CONTROL

When manufacturing organizations integrated coordinate measuring machines within their processes in the 1960s, their main objective was to inspect manufactured products to ensure that key dimensions were within their specifications. Thirty years later, point-cloud scanning technologies emerged and made it possible to quickly digitize and analyze tooling, prototype pieces, and pilot assemblies to reduce time to market while engineering a new product. Today, as we have successfully integrated dimensional analysis and quality control workflows within a single solution, you can now deploy a common 3D measurement platform for your entire product engineering and manufacturing lifecycle.



REVERSE-ENGINEERING ANALYSIS AND 3D MODELING

PolyWorks | Modeler™ is a comprehensive reverse-engineering software solution that allows extracting optimal CAD entities—curves, surfaces, parametric sketches, and prismatic features—from polygonal models of digitized parts to serve as the starting point in your professional CAD modeling solution.



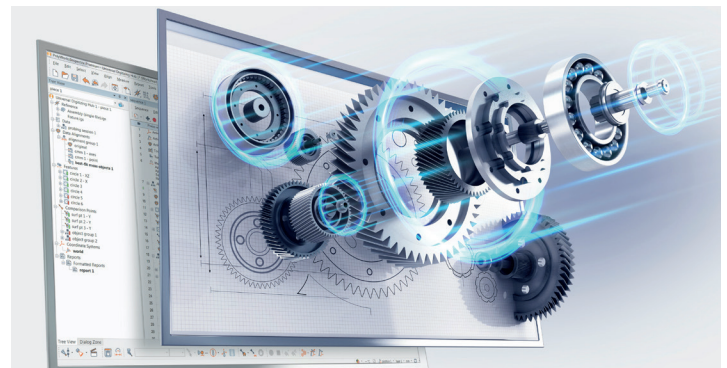
DATA MANAGEMENT AND DIGITAL CONNECTIVITY

The giant leap forward in the capabilities of 3D measurement technologies that has occurred since 2000 has fueled a major growth in the use of 3D measurement by manufacturing organizations. As a result, new data management complexities have emerged, as the amount of 3D measurement data has grown exponentially. A data management system solves these issues by storing your valuable 3D measurement data on a central server, opening multi-platform access to data enterprisewide, and offering modern digital communication tools, thereby effectively interconnecting the producers and consumers of 3D measurement data.



MODEL-BASED DEFINITION FOR MEASUREMENT PLANNING

PolyWorks | PMI+Loop™ is an innovative model-based definition (MBD) solution that allows you to define complete 3D measurement plans associative with CAD geometry within your native CAD platform. It provides the digital traceability needed to automate the consumption of its measurement plans plus digital connectivity to open up access to 3D measurement results to all CAD users.



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PolyWorks Europa offers you a ready-to-learn setting where you will gain practical skills that can be applied as soon as you return to work. Taught by certified PolyWorks® instructors, a classroom training session is an excellent way to receive hands-on instruction, interact with your peers, and gain the skills that matter. We offer basic training courses that can be enhanced by additional training.

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PolyWorks
Inspector™

Basic training

Basic probing applications for portable metrology



OBJECTIVE:

The objective of this 2-day training is to enable metrology operators, technicians, and engineers, who have little or no knowledge of the PolyWorks® Metrology Suite, to perform 3D inspections using tools found in PolyWorks | Inspector. More specifically, it covers the key concepts of a typical inspection workflow for portable metrology devices such as articulated arms with probing capabilities.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage files and navigate through the PolyWorks interface
- Define a measurement plan
- Measure surface deviations and control part dimensions by probing
- Align the measured part to the CAD model
- Review, report, and share inspection results
- Inspect multiple pieces

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have a basic knowledge of metrology, be able to read engineering drawings, and have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector using portable metrology with probing capabilities.



DURATION:

2 days (14 hours)



LOCATION:

Onsite, at a PolyWorks Europa training center, or online.



DATES, PRICING, AND CONTACT INFO:

For more details, including accommodations for people with disabilities, please contact us: training@polyworkseuropa.com
+420 228 885 459



Basic training

Basic probing and scanning applications for portable metrology



OBJECTIVE:

The objective of this 3-day training is to enable metrology operators, technicians, and engineers, who have little or no knowledge of the PolyWorks® Metrology Suite, to perform 3D inspections using tools found in PolyWorks | Inspector. More specifically, it covers the key concepts of a typical inspection workflow for portable metrology devices such as articulated arms with probing and scanning capabilities.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage files and navigate through the PolyWorks interface
- Define a measurement plan
- Measure surface deviations and control part dimensions by probing
- Measure surface deviations and control part dimensions by scanning
- Align the measured part to the CAD model
- Review, report, and share inspection results
- Inspect multiple pieces

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have a basic knowledge of metrology, be able to read engineering drawings, and have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector using portable metrology with probing and non-contact scanning capabilities.



DURATION:

3 days (21 hours)



LOCATION:

Onsite, at a PolyWorks Europa training center, or online.



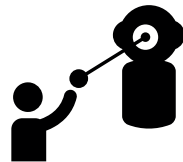
DATES, PRICE, CONTACTS:

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Basic training

Basic probing applications for laser trackers



OBJECTIVE:

The objective of this 2-day training is to enable metrology operators, technicians, and engineers, who have little or no knowledge of the PolyWorks® Metrology Suite, to improve their skills by performing 3D inspections with PolyWorks | Inspector using a laser tracker device. Specifically, it covers the key concepts of a laser-specific inspection workflow for laser trackers.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage files and navigate through the PolyWorks interface
- Define a measurement plan
- Measure surface deviations and control part dimensions by probing
- Align the measured part to the CAD model
- Review, report, and share inspection results
- Use specific laser tracker tools such as field checks, leveling, and drift checks

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have a basic knowledge of metrology, be able to read engineering drawings, and have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector using a laser tracker device.



DURATION:

2 days (14 hours)



LOCATION:

Onsite, at a PolyWorks Europa training center, or online.



DATES, PRICE, CONTACTS:

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Basic training

Basic probing applications for CNC CMMs



OBJECTIVE:

The objective of this 3-day training is to enable metrology operators, technicians, and engineers, who have little or no knowledge of the PolyWorks® Metrology Suite, to perform 3D inspections using tools found in PolyWorks | Inspector. More specifically, it covers the key concepts of a typical inspection workflow for CNC CMMs with probing capabilities.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage files and navigate through the PolyWorks interface
- Create and edit a machine configuration
- Define a measurement plan and create a measurement sequence to perform the automated measurement of a part, online and offline
- Measure surface deviations and control part dimensions by CNC probing
- Align the measured part to the CAD model
- Review, report, and share inspection results
- Inspect multiple pieces

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must be familiar with their CNC CMM and its related equipment, including their functionality, maintenance, and care, and be able to perform calibrations, use components, and set operational parameters (best practices).

Trainees must have a basic knowledge of metrology, be able to read engineering drawings, and have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector using a CNC CMM with probing capabilities.



DURATION:

3 days (21 hours)



LOCATION:

Onsite.



DATES, PRICE, CONTACTS:

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PolyWorks | Modeler™ Training



Basic training

Basic polygonal editing, parametric sketching, and NURBS surfacing



OBJECTIVE:

The objective of this 3-day training is to enable metrology operators, technicians, engineers, and designers, who have little or no knowledge of the PolyWorks® Metrology Suite, to reverse engineer parts using tools found in PolyWorks | Modeler. More specifically, it covers the key concepts of basic polygonal model editing, parametric sketching, and NURBS surfacing.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage files and navigate through the PolyWorks interface
- Obtain part data and position the polygonal model
- Edit the polygonal model
- Model prismatic shapes using sketching tools
- Model freeform shapes using NURBS surfacing tools

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have a basic knowledge of metrology and have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, engineers, and designers involved in performing reverse-engineering tasks with PolyWorks | Modeler.



DURATION:

3 days (21 hours)



LOCATION:

Onsite, at a PolyWorks Europa training center, or online.



DATES, PRICE, CONTACTS:

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PolyWorks
Inspector™

Complementary training Probing and scanning applications for PolyWorks | Inspector users



OBJECTIVE:

The objective of this 2-day training is to enable metrology operators, technicians, and engineers, who have a basic knowledge of the PolyWorks® Metrology Suite, to improve their skills by performing 3D inspections with PolyWorks | Inspector. Specifically, it covers the key concepts of an optimized inspection workflow, including advanced tools.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Perform data-to-reference alignments with or without CAD models
- Use advanced measurement tools
- Set geometric and dimensional tolerancing (GD&T) controls
- Inspect multiple pieces
- Review inspection results and reports

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have completed the basic training course “Basic probing and scanning applications for portable metrology”. They must also have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector using portable metrology with probing and non-contact scanning capabilities.



DURATION:

2 days (14 hours)



LOCATION:

Onsite or online.



DATES, PRICE, CONTACTS:

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Complementary training

Basic probing applications for CNC CMMs for PolyWorks | Inspector users



OBJECTIVE:

The objective of this 2-day training is to enable metrology operators, technicians, and engineers, who have a basic knowledge of the PolyWorks® Metrology Suite, to perform 3D inspections using tools found in PolyWorks | Inspector. More specifically, it covers the key concepts of a typical inspection workflow for CNC CMMs with probing capabilities.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Create and edit a machine configuration
- Measure by CNC probing
- Define a measurement plan and create a measurement sequence to perform the automated measurement of a part, online and offline
- Align the measured part to the CAD model
- Review, report, and share inspection results
- Inspect multiple pieces

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must be familiar with their CNC CMM and its related equipment, including their functionality, maintenance, and care, and be able to perform calibrations, use components, and set operational parameters (best practices).

Trainees must also have a basic knowledge of metrology, be able to read engineering drawings, and have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector using portable metrology and CNC CMMs with probing capabilities.



DURATION:

2 days (14 hours)



LOCATION:

Onsite or online.



DATES, PRICE, CONTACTS:

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PolyWorks | Modeler™ Training



Complementary training

Basic polygonal editing, parametric sketching, and NURBS surfacing for PolyWorks | Inspector™ users



OBJECTIVE:

The objective of this 2-day training is to enable metrology operators, technicians, engineers, and designers, who have a basic knowledge of the PolyWorks® Metrology Suite, to reverse engineer parts using tools found in PolyWorks | Modeler. More specifically, it covers the key concepts of basic polygonal model editing, parametric sketching, and NURBS surfacing.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage files and navigate through the PolyWorks interface
- Obtain part data and position the polygonal model
- Edit the polygonal model
- Model prismatic shapes using sketching tools
- Model freeform shapes using NURBS surfacing tools

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have completed the basic training course “Basic probing applications for portable metrology”. They must also have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, engineers, and designers involved in performing reverse-engineering tasks using PolyWorks | Modeler.



DURATION:

2 days (14 hours)



LOCATION:

Onsite or online.



DATES, PRICE, CONTACTS:

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Advanced training

Probing and scanning advanced applications for PolyWorks|Inspector users



OBJECTIVE:

The objective of this 3-day training is to enable metrology operators, technicians, and engineers, who have a basic knowledge of the PolyWorks® Metrology Suite, to improve their skills by performing 3D inspections with PolyWorks|Inspector. Specifically, it covers the key concepts of an optimized inspection workflow, including advanced tools.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage data with PolyWorks|DataLoop™
- Perform data-to-reference alignments with or without CAD models
- Use advanced measurement tools
- Add geometric and dimensional tolerancing (GD&T) controls
- Inspect multiple pieces
- Review inspection results and reports
- Learn the basics of macro scripting

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have completed the basic training course "Basic probing and scanning applications for portable metrology". They must also have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks|Inspector using portable metrology with probing and non-contact scanning capabilities.



DURATION:

3 days (21 hours)



LOCATION:

At a PolyWorks Europa training center.



DATES, PRICE, CONTACTS:

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Advanced training GD&T in PolyWorks | Inspector



OBJECTIVE:

The objective of this 3-day training is to enable metrology operators, technicians, and engineers to perform 3D inspections using GD&T visualization and analysis tools in PolyWorks | Inspector and enhance their understanding of GD&T. This training also covers the datum reference frame (DRF) system.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Manage data with PolyWorks | DataLoop™
- Perform data-to-reference alignments with or without CAD models
- Use advanced measurement tools
- Add geometric and dimensional tolerancing (GD&T) controls
- Inspect multiple parts
- Review inspection results and reports
- Learn the basics of macro scripting

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have completed the basic training course "Basic probing and scanning applications for portable metrology". They must also have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector using portable metrology with probing and scanning capabilities.



DURATION:

3 days (21 hours)



LOCATION:

Onsite or at a PolyWorks Europa training center.



DATES, PRICE, CONTACTS:

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+420 228 885 459



Macro Training

Introduction to macro scripting in PolyWorks



OBJECTIVE:

The objective of this 2-day training is to enable metrology operators, technicians, and engineers, who have a good knowledge of the PolyWorks® Metrology Suite, to develop macro scripts using the tools available in PolyWorks. Specifically, it covers the key concepts of typical macro scripting that allow users to automate tasks in the PolyWorks Metrology Suite.

ACQUIRED SKILLS:

At the end of the training, you will be able to:

- Use the Macro Script Editor
- Develop scripts using the macro scripting control language (MSCL)
- Manage files using the macro scripting control language (MSCL)
- Create and edit dialog boxes for user interaction
- Insert macro scripts into PolyWorks projects

PREREQUISITES:

This training is only available to customers whose licenses are under a valid support/maintenance contract.

Trainees must have completed the PolyWorks Metrology Suite software training and have basic computer skills (Windows operating systems).

INFORMATION



AUDIENCE:

Operators, technicians, and engineers involved in performing 3D inspections with PolyWorks | Inspector.



DURATION:

2 days (14 hours)



LOCATION:

Onsite, at a PolyWorks Europa training center, or online.



DATES, PRICE, CONTACTS:

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