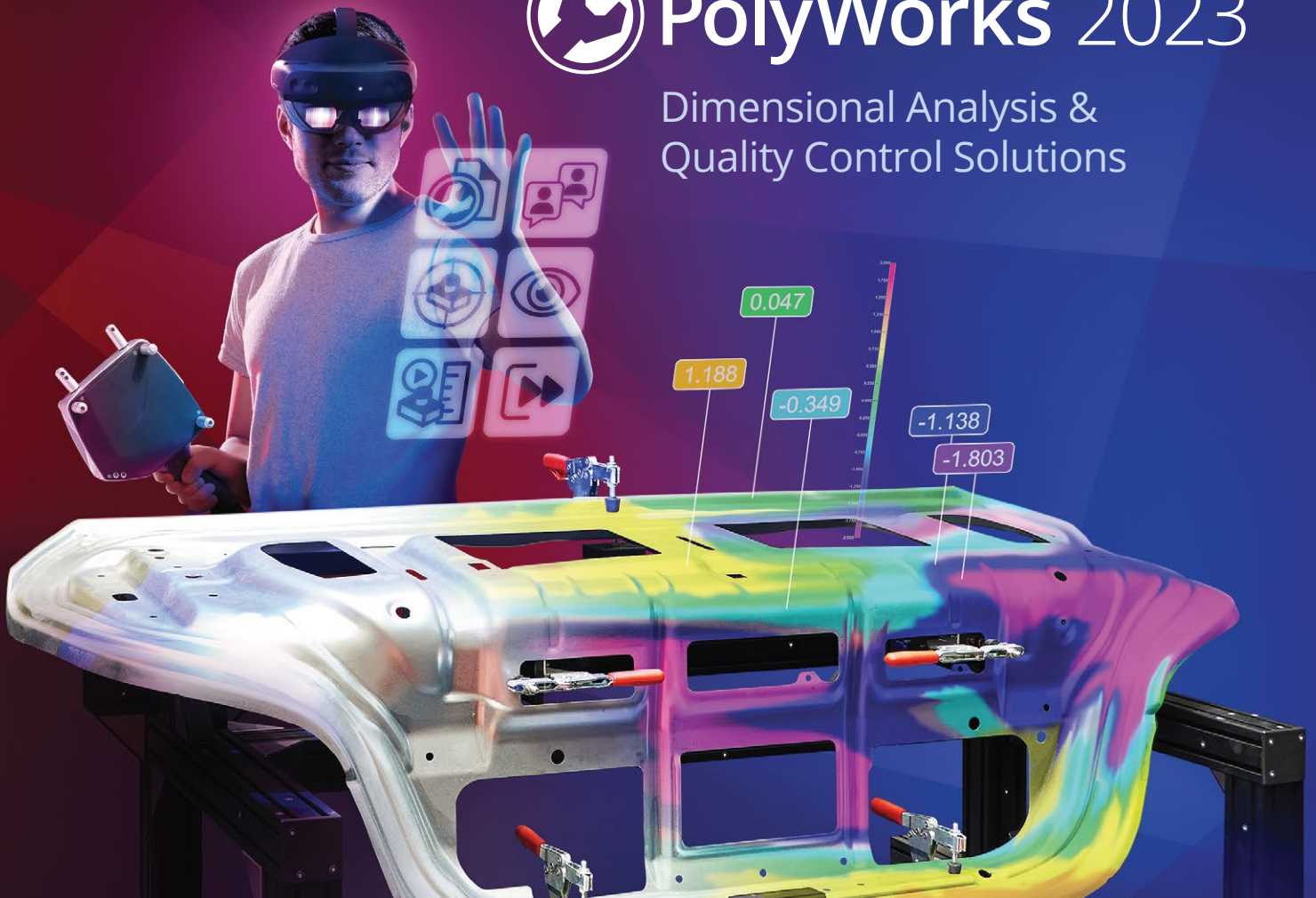


What's new in



PolyWorks® 2023

Dimensional Analysis &
Quality Control Solutions



Boost your large-scale 3D measurement performance with mixed reality display technology

Mixed reality display technologies are transforming large-scale metrology tasks by providing localized visual guidance, measurement feedback, and access to inspection functionalities, without encumbering the hands of operators. The PolyWorks® 2023 mixed reality app offers new powerful tools to guide laser scanning, review inspection results, and collaborate with colleagues:

- **Position the hologram of the PolyWorks | Inspector™ 3D Scene window within your field of view to:**
 - See your scanning progression as a polygonal surface
 - Perform additional scanning in areas of poor data quality
 - Know exactly where to scan features and when enough data has been acquired for good feature extraction
- **Review feature deviations and color maps directly over the measured piece following each measurement task**
- **Collaborate with colleagues anywhere:**
 - Call them through Microsoft Teams
 - Review inspection results collaboratively by projecting holograms on the measured piece
 - Discuss manufacturing issues efficiently by showing them defective areas

innovmetric



Sequence Editor

Sequence Edit Insert Tools

(All Steps) Search

(All Steps)

(From Selected Step T...

(All Statuses)

(All Issues)

Step Status

Information

Warning

Error

Path

ers se results

- 11 Activate: cmm 1 - axis
- 12 Tool: 1020.01 10x2.5mm
- 13 Tool orientation: AO 0 B0 0
- 14 Go to: X=1358.590 Y=17.872 Z=1021.281
- 15 Measure: cmm 1 - point
- 16 Alignment
- 17 Go to: X=1076.334 Y=494.481 Z=749.295
- 18 CNC Probe: sphere 1
- 19 Go to: X=1082.319 Y=-9.083 Z=482.900
- 20 CNC Probe: sphere 2
- 21 Go to: X=1546.537 Y=1053.010 Z=756.000
- 22 Go to: X=2194.549 Y=-805.000 Z=756.000
- 23 Go to: X=184.618 Y=-612.400 Z=756.000
- 24 CNC Probe: sphere 3
- 25 CNC Probe: sphere 4
- 26 Activate: best fit meas objects 1
- 27 Holes
- 28 Go to: X=2076.460 Y=491.893 Z=762.900
- 29 Go to: X=2023.529 Y=423.216 Z=476.300
- 30 Go to: X=1841.612 Y=-699.900 Z=443.300
- 31 CNC Probe: circle 3
- 32 CNC Probe: circle 2
- 33 CNC Probe: circle 1
- 34 Go to: X=1741.227 Y=479.449 Z=494.778
- 35 CNC Probe: circle 5
- 36 Go to: X=1770.839 Y=439.173 Z=426.300
- 37 CNC Probe: circle 4
- 38 Go to: X=1655.785 Y=441.958 Z=457.787
- 39 CNC Probe: circle 7
- 40 CNC Probe: circle 6
- 41 Go to: X=1172.782 Y=127.941 Z=800.547
- 42 CNC Probe: plane 1

Simplify the project preparation and 3D measurement processes

Set up measurement templates and perform 3D measurement tasks more efficiently.

Analyze and edit large measurement sequences more quickly by finding steps using keyword searches or navigating through step types, such as errors and warnings.

Add flexibility to your GD&T toolbox

Increase datum mobility by individually activating considered degrees of freedom (ASME) or situation features (ISO).

datum cone A

datum plane B

cylinder 1				
\varnothing 0.200	A [x, y, u, v] B [z]	Nom	Meas	Dev Test
			4.061	4.061 ✗

Measure imported or user-defined PMI with digital gauges.

A datum plane A				
Char No.	Nom	Meas	Dev	Test
0.100		0.042	0.042	✔

Replace the source objects of a dependent feature and preserve all related objects, data alignments, and reports created from the feature.

115.052"

circle 5

line 3

circle 2

Properties

Name: line 3

Type: Line Feature

Layer: layer 1

Type: Line from Average of N Points

Center points: C4, circle 5

Orientation: circle 1, circle 2, circle 3, circle 4, circle 5, Center Point

Properties

Name: line 3

Type: Line Feature

Layer: layer 1

Type: Line from Average of N Points

Center points: C4, circle 2

Orientation: circle 1, circle 2, circle 3, circle 4, circle 5, Center Point

115.058"

circle 5

line 3

circle 2

Get the most out of CNC CMM measurements obtained by tactile scanning

Reduce the noise resulting from the manufacturing or measurement process by filtering tactile-scanned feature curves.

Parameters

Reject outliers

Outside of standard deviation factor: 2.500

Percentage of points: 5.000

Tactile scanning:

Reject first points: Traveled Distance

Distance: 1.000

Reject last points: Traveled Distance

Distance: 1.000

Gaussian filter

Wavelength: 10.000

Apply Close



circle 1				
Dia	Nom	Meas	Dev	Test
X	14.773	159.472		
Y		864.126		
Z		272.451		

Create curve-based features in a single click over a polygonal model of a measured piece to more rapidly inspect a piece without CAD data.

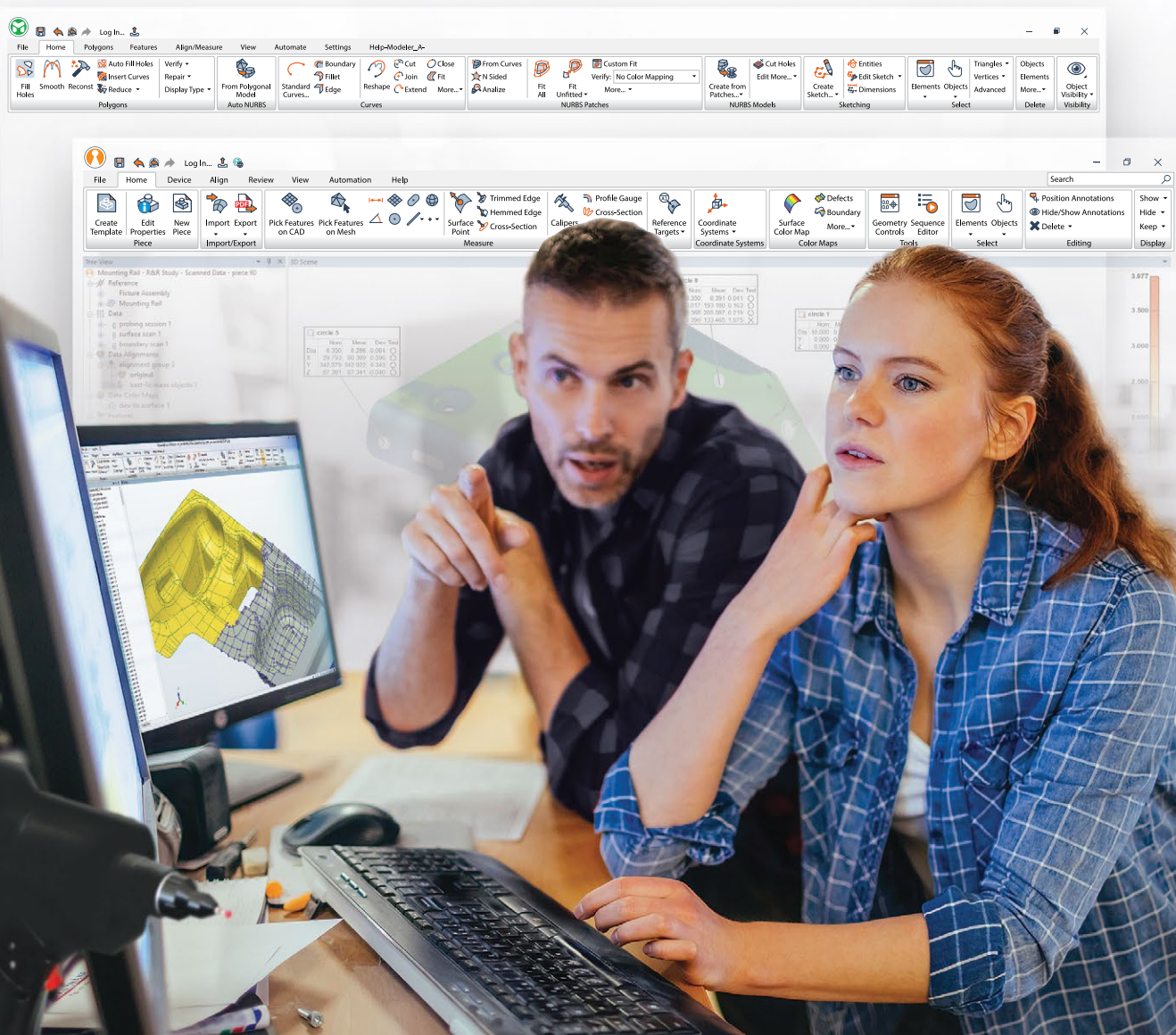
Become a beta tester of our new intuitive ribbon menu!

Help us enhance the efficiency of your workflows

In addition to celebrating the 30th anniversary of InnovMetric, 2024 will also be the debut year of the new PolyWorks ribbon menu. We are transforming your user experience so you can:

- Learn PolyWorks more quickly
- Remember your workflow and retrieve your favorite tools easily
- Discover our powerful functionalities intuitively

With your help, we can make PolyWorks better. Stay tuned for our beta testing program announcement!



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PTB SmartGD&T

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