

# Why upgrade to Geomagic Control X 2020?

New Features Comparison by Major Releases



NEW FEATURES	V20.0	V18.1	V18.0	V17.0
New Flexible Geometry Creation Methods in LiveGeometry	•			
New P.C.D. (Bolt Hole Circle) Method to LiveGeometry	•			
Define Probing Method for Pre-Planned Inspection	•			
Define Local Plane creation for Pre-Planned Inspection	•			
Automatic Geometric Tolerance Calculations in DRO during Live Capture	•			
Enhanced Progress indicator in DRO during LiveInspect	•			
Move Device Enhancement: Remove Outlier Points and Refit	•			
Move Device Enhancement: Export Transform Matrix	•			
New Probe Data Management to Remove Outlier Points and Recalculate	•			
X, Y, and Z components can be toleranced for Reference Geometry and Comparison Points	•			
X, Y, and Z components can be viewed for Linear Dimensions, Angular Dimensions, and Position	•			
ASCII Geometry Importer can import X, Y, and Z tolerances	•			
Simulated CMM Points are now compatible with Point Cloud data	•			
Deviation Location can now automatically measure Major Length and Minor Width	•			
Control X has a new Inspection Viewer mode when unlicensed	•			
Annotations Presets can be applied to each inspection object	•			
3D Sprint Files are supported for Import	•			
Automation Server supports trigger options for multi-scan automation	•			
Transform Measured Data has a new Datum Match option	•			
Coordinate Alignment provides discrete control of geometry priority	•			
Coordinate Alignment allows target position by definition	•			
Coordinate Alignment now clearly provides Degrees of Freedom information	•			
2D Section tools have been enhanced for performance	•			
Probe Two Intersecting Vectors	•	•		
Improved Mesh Topology During Scanning	•	•		
Improved 2D Construction Geometry from Cross-Section	•	•		
Redefine Construction Geometry as Reference or Measured	•	•		
Added Clipping Plane in LiveCapture	•	•		
Pair Probe Points with CAD in Pairing Manager	•	•		
Improved Pairing Map and Pairing Manager	•	•		
Enhanced ASCII Importing Workflow	•	•		
Scan Grouping in Model Manager	•	•		
Added Single Point Circle Option	•	•		
Acquire Probe Data from One Project to Another	•	•		
Probe Compatibility with Data from Other Software	•	•		
Align Probe Data with Transform Measured Data	•	•		
Free Probe in LiveScan	•	•		
Added Save Current Profile to Manage User Profiles	•	•		

Optimized Tabular View	●	●		
Updated Hardware Device Compatibility for AICON, Creaform, FARO, Kreon, Nikon, and RPS	●	●		
Added Progress Indicator during Auto-Update	●	●		
Enhanced Anonymous Usage Statistics	●	●		
Ref. Geometry Automatically Grouped for Reporting	●	●		
Added User Profiles	●	●	●	
New Deviation Location Feature	●	●	●	
New Airfoil Analysis	●	●	●	
New 2D Twist Analysis	●	●	●	
New Scan Process Automation Tools	●	●	●	
New Probe Location Tool	●	●	●	
Customize Metrology Standards	●	●	●	
Toggle On and Off Global Coordinate System	●	●	●	
Updated CAD File Import	●	●	●	
Support for WRP and GEODOC Files	●	●	●	
New ASCII Geometry Import	●	●	●	
Edit Geometry in Tabular View	●	●	●	
Pair and Unpair Geometry from Model Manager	●	●	●	
Construction Geometries in Model Manager	●	●	●	
Enhanced Result Navigator	●	●	●	
Improved LiveInspect	●	●	●	
Added Re-Align To Existing Measure Data Option in Replace Measured Data	●	●	●	
Enhanced Report Tools with 3D PDF	●	●	●	
Alignment Matrix Exported as CSV	●	●	●	
Automatic Regenerated Measured Geometries	●	●	●	
Tessellate CAD Option in Import Tool	●	●	●	
Performance Enhancements in Scan Pair Searching, Best Fit Aligning, 3D Compare, and Point Cloud Handling	●	●	●	
Automatic Error Reporting	●	●	●	
Added Reprobe Tool	●	●	●	●
Added GPD File Support	●	●	●	●
Improved Scanning and Scan Processing Performance	●	●	●	●
Improved Probing UX and Performance	●	●	●	●
Improved CAD Platform	●	●	●	●
Twelve Languages Added	●	●	●	●
Added Status Indicator for LiveScan and Replace Measured Data	●	●	●	●
Optimized Mesh Buildup Wizard	●	●	●	●
Edit Radius Size of Probe Data	●	●	●	●
Licensing Upgrade	●	●	●	●
Synchronous Inspection	●	●	●	●
Multiple Results System	●	●	●	●
Walk-up Probing	●	●	●	●
Repetable Probing Processes	●	●	●	●
Automatic Report Generation	●	●	●	●
CAD Aware Dimensioning and Tolerancing	●	●	●	●