

# Artec Studio: Smarter. Faster. Every Year.



Annual software updates bring advanced features to Artec Studio, essentially allowing users to upgrade to a new 3D scanner every year.

## What's new in Artec Studio 20?

### Workflows

Automate data processing with custom workflows that boost efficiency, reduce errors, and consistently deliver top-quality, industry-ready results.

### Next-level AI Photogrammetry

Generate cleaner, more complete 3D models at pace thanks to refined masking, sharp image prioritization, and multi-camera support.

### Micro II HD Mode & 3-axis support

Activate HD Mode to capture more detailed 3D models with 4x more data points and use 3-axis scanning to achieve full scan coverage.

### Improved Artec Point visualization

Pick up more detailed data with every scan, for more intuitive Artec Point capture, and at least 2x faster results.

### Spider II Live Decimation & Autopilot

Spider II users can now streamline their workflows with Autopilot and reduce file size on the fly using Live Scan Decimation for export-ready models.

### Real-time Fusion for Artec handhelds

Artec Studio 20 brings Real-time Fusion to all our target-free handheld 3D scanners for highly detailed, dynamic scan previews.

### Broader file type support

USD and RCP file compatibility has been improved for users in CGI, construction, and more. ZEISS INSPECT is also better integrated for scan analysis.

### Enhanced, easier to use UI

Artec Studio's interface has been given a facelift to make scanning and tool panels easier to locate, navigate, and utilize for the same great results with much less effort.

## Update history (in-brief)

### 2025 | AS20 ✓

Custom workflows, Micro II HD Mode, Spider II Autopilot, next-gen AI Photogrammetry, RCP file type integration & a revamped UI.

### 2024 | AS19 ✓

2x faster workflow, Artec Point & Spider II integrated, AI Photogrammetry added for turning scan, photo, or video data into 3D models.

### 2023 | AS18 ✓

Smart Fusion for multi-scanner projects, compare map, PtB certification gained, chamfer, fillet & draft angle reverse engineering introduced.

### 2022 | AS17 ✓

Scan-to-CAD operations: booleans, auto-surfacing & datum alignment. Target support also enhanced, alongside phototexturing and Artec Cloud integration.

### 2021 | AS16 ✓

New CAD tools, 4x faster HD Mode, 10x faster project loading, model phototexturing added.

## Discover what Artec Studio could do for you

Contact your nearest reseller or find out more at [www.artec3d.com/3d-software/artec-studio](https://www.artec3d.com/3d-software/artec-studio).

# Artec Studio: Smarter. Faster. Every Year.



## Artec Studio specifications: comparison

|                                     | AS 20                                       | AS 19                                | AS 18                                    | AS 17                                    | AS 16 |
|-------------------------------------|---|--------------------------------------|--|--|-------|
| <b>Fast, powerful 3D processing</b> |   |                                      |  |  |       |
| Multi-scanner pipeline              | ✓   | ✓                                    | ✓  |  |       |
| Workflows                           | ✓   |                                      |  |  |       |
| Multi-scanner Smart Fusion          | Improved UI                                 | Fine-tuning of scanner-specific data |  |  |       |
| Multi-scanner Global registration   | ✓   | ✓                                    |  |  |       |
| Fusion: speed                       | ✓   | ✓                                    | 10% faster and with 30% less RAM vs AS16 | 10% faster and with 30% less RAM vs AS16 |       |
| Fusion: exclude faulty frames       | ✓   | ✓                                    | ✓  | ✓  |       |
| Global registration                 | ✓   | New option: thin objects             | 2X faster                                | ✓  | ✓     |
| Single-step mesh optimization       | ✓   | 10X faster                           | ✓  |  |       |
| Scan decimation                     | ✓   | ✓                                    | ✓  |  |       |
| Autopilot                           | Eva, Space Spider, Leo, Micro II, Spider II | Eva, Space Spider, Leo, Micro II     | Eva, Space Spider, Leo                   | ✓  | ✓     |
| New Real-time Fusion support        | Leo, Eva, Space Spider, Spider II           | Leo exclusive                        | Leo exclusive                            |  |       |
| Micro II three-axis support         | ✓   |                                      |  |  |       |
| Ray II 'Street View' mode           | ✓   | ✓                                    |  |  |       |
| Artec Point compatibility           | 2x faster data capture                      | ✓                                    |  |  |       |
| X-Ray Mode                          | ✓   | ✓                                    | ✓  | ✓  | ✓     |
| HDR & 16-bit Texturing              | ✓   | ✓                                    |  |  |       |
| <b>AI powered HD Mode</b>           |   |                                      |  |  |       |
| HD Mode for Leo and Eva             | ✓   | ✓                                    | 4X faster                                | ✓  | ✓     |
| HD Mode for Micro II                | ✓   |                                      |  |  |       |
| Simple HD presets                   | ✓   | ✓                                    | ✓  |  |       |

AS 20

AS 19

AS 18

AS 17

AS 16

## AI powered HD Mode

| Point density and frame frequency selection         | Automatic or manual | Automatic or manual | Automatic or manual | Manual | Manual |
|---|---------------------|---------------------|---------------------|--------|--------|
| Multiple HD reconstructions with different settings | ✓                   | ✓                   | ✓                   | ✓      | ✓      |
| Setting optimizer based on your GPU                 | ✓                   | ✓                   | ✓                   | ✓      |        |

## AI Photogrammetry

| Create 3D models directly from photos and videos with AI | ✓ | ✓ |  |  |  |
|--|---|---|--|--|--|
|--|---|---|--|--|--|

## Advanced CGI tools for the perfect color 3D model

| AI color contrast enhancer for Leo     | ✓                           | ✓                              | ✓                           |                             |   |
|--|-----------------------------|--------------------------------|-----------------------------|-----------------------------|---|
| Boosted 3D scan texture quality        | ✓                           | ✓                              | ✓                           |                             |   |
| Improved photogrammetry texture        | ✓                           |                                |                             |                             |   |
| Optimized color capturing mode for Leo | ✓                           | ✓                              | ✓                           |                             |   |
| Scene lighting optimization            | ✓                           | ✓                              | ✓                           |                             |   |
| Auto glare removal                     | ✓                           | ✓                              | ✓                           | ✓                           | ✓ |
| Model-to-model texture transfer        | ✓                           | ✓                              | ✓                           | ✓                           | ✓ |
| Photo-texture                          | Workflow automation support | Ray II photo-texture available | Includes photo-viewing mode | Includes photo-viewing mode | ✓ |
| Texture healing brush                  | ✓                           | ✓                              | ✓                           | ✓                           | ✓ |
| Defeature brush                        | ✓                           | ✓                              | Improved                    | ✓                           | ✓ |

## Smart automation

| Autopilot           | Including Spider II | Including Micro II | ✓ | ✓ | ✓ |
|---------------------|---------------------|--------------------|---|---|---|
| Workflows           | ✓                   |                    |   |   |   |
| Auto-align          | ✓                   | ✓                  | ✓ | ✓ | ✓ |
| Scan size optimizer | ✓                   | ✓                  | ✓ | ✓ | ✓ |
| Smart base removal  | ✓                   | ✓                  | ✓ | ✓ | ✓ |

## Easy 3D scanning

| Auto-brightness | ✓ | ✓ | ✓ | ✓ | ✓ |
|-----------------|---|---|---|---|---|
|-----------------|---|---|---|---|---|

## Easy 3D scanning

|  |                             |                             |   |   |   |
|--|-----------------------------|-----------------------------|---|---|---|
| Automated sensitivity for scanning black, shiny and fine objects | ✓                           | ✓                           | ✓ | ✓ | ✓ |
| Create a 3D model from a combination of Artec 3D scanners        | ✓                           | ✓                           | ✓ | ✓ | ✓ |
| Geometry scanning  | ✓                           | ✓                           | ✓ | ✓ | ✓ |
| Texture scanning   | All scanners (except Point) | All scanners (except Point) | ✓ | ✓ | ✓ |

## Quality inspection

|   |                                   |                                   |                                   |                                   |                                   |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| PtB certification of Artec Studio   | ✓                                 | ✓                                 | ✓                                 |                                   |                                   |
| Mesh-to-CAD comparison  | Import SAT, STEP, IGES, X_T files | Import SAT, STEP, IGES, X_T files | Import SAT, STEP, IGES, X_T files | Import SAT, STEP, IGES, X_T files | Import SAT, STEP, IGES, X_T files |
| Mesh-to-CAD alignment   | Automatic                         | Automatic                         | Automatic                         | Manual                            | Manual                            |
| Datum alignment   | ✓                                 | ✓                                 | ✓                                 | ✓                                 |                                   |
| 2D section analysis   | ✓                                 | ✓                                 | ✓                                 |                                   |                                   |
| Automatic defect detection  | ✓                                 | ✓                                 | ✓                                 |                                   |                                   |
| Deviation mapping   | Advanced distance calculation     | Advanced distance calculation     | Advanced distance calculation     | Basic distance calculation        | Basic distance calculation        |
| Thickness mapping   | ✓                                 | ✓                                 | ✓                                 |                                   |                                   |
| Tolerance Check mode  | ✓                                 | ✓                                 | ✓                                 |                                   |                                   |
| Enhanced target support   | ✓                                 | ✓                                 | ✓                                 | ✓                                 |                                   |
| Target thickness compensation   | ✓                                 | ✓                                 | ✓                                 |                                   |                                   |
| Surface distance maps: one-click annotations  | ✓                                 | ✓                                 | ✓                                 | ✓                                 | ✓                                 |
| Direct export to Control X  | ✓                                 | ✓                                 | ✓                                 | ✓                                 | ✓                                 |
| Surface distance maps: point-by-point deviation   | ✓                                 | ✓                                 | ✓                                 | ✓                                 | ✓                                 |
| Measurements: linear, geodesic, sections, distance maps, volume, annotations. Export to CSV, DXF, XML | ✓                                 | ✓                                 | ✓                                 | ✓                                 | ✓                                 |

## Quality inspection

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| Run Control X Inspection from Artec Studio        | ✓ | ✓ | ✓ | ✓ | ✓ |
| Run ZEISS Optical 3D Inspection from Artec Studio | ✓ |   |   |   |   |

## Scan-to-CAD for reverse engineering

|   |   |   |   |   |                                      |
|---|---|---|---|---|--------------------------------------|
| Fit CAD primitives to 3D model                              | Cylinder, sphere, cone, plane, torus      | Cylinder, sphere, cone, plane, torus      | Cylinder, sphere, cone, plane, torus      | Cylinder, sphere, cone, plane, torus      | Cylinder, sphere, cone, plane, torus |
| Create free primitives                                      | Cylinder, sphere, cone, plane, torus, box | Cylinder, sphere, cone, plane, torus, box | Cylinder, sphere, cone, plane, torus, box | Cylinder, sphere, cone, plane, torus, box |                                      |
| Autosurfacing   | ✓   | ✓   | Improved                                  | ✓   |                                      |
| Freeform fitting  | ✓   | ✓   | ✓   | ✓   | ✓                                    |
| Boolean operations  | ✓   | ✓   | ✓   | ✓   |                                      |
| Geometrical constraints                                     | ✓   | ✓   | ✓   | ✓   | Basic                                |
| Precise positioning   | ✓   | ✓   | ✓   | ✓   | ✓                                    |
| Export multiple open and closed contours directly to CAD    | ✓   | ✓   | ✓   | ✓   | ✓                                    |
| Create draft angles   | ✓   | ✓   | ✓   |   |                                      |
| Chamfer and fillet tools                                    | ✓   | ✓   | ✓   |   |                                      |
| Instant deviation analysis                                  | ✓   | ✓   | ✓   |   |                                      |
| Move and offset faces                                       | ✓   | ✓   | ✓   |   |                                      |
| Surface thickening tools                                    | ✓   | ✓   | ✓   |   |                                      |
| Direct export to Design X                                   | ✓   | ✓   | ✓   | ✓   |                                      |
| Direct export of fitted primitives and meshes to SOLIDWORKS | ✓   | ✓   | ✓   | fitted primitives only                    | fitted primitives only               |
| Disassembly of assemblies                                   | ✓   | ✓   |   |   |                                      |
| Delete faces  | ✓   | ✓   |   |   |                                      |

## UI and ergonomics

|                             |          |          |          |       |       |
|-----------------------------|----------|----------|----------|-------|-------|
| Home screen project manager | ✓        | ✓        | ✓        |       |       |
| Quick panel                 | ✓        | ✓        | ✓        |       |       |
| In-depth properties tab     | Advanced | Advanced | Advanced | Basic | Basic |
| Manual frame picking        | ✓        | ✓        | ✓        |       |       |
| Multiple object export      | ✓        | ✓        | ✓        | ✓     | ✓     |

Cloud collaboration

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| Artec Studio to Artec Cloud Project Synchronization | ✓ | ✓ | ✓ |   |   |
| Artec Cloud integration                             | ✓ | ✓ | ✓ | ✓ | ✓ |
| One-click 3D model share                            | ✓ | ✓ | ✓ | ✓ |   |

Interested in getting the latest industry-leading software?

Contact your nearest reseller or find out more at [www.artec3d.com/3d-software/artec-studio](http://www.artec3d.com/3d-software/artec-studio).