

Artec Twins: The world is your dataset



Advanced 3D software for processing,
visualizing & analyzing digital twins
on an unprecedented scale

Capture reality with any technology



Satellite

Map the surrounding area for
context



Drone

Capture large sites or
structures aerially



3D scanning

Pick up fine details with sub-
millimeter accuracy



Camera

Use any photos/video for
photogrammetry models

Combine datasets for complete digital twins, down to the last detail



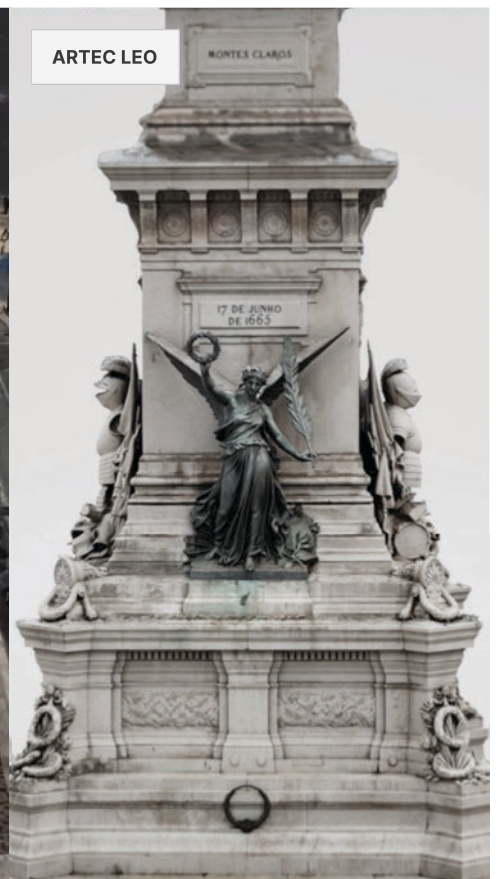
City-scale mapping

Capture entire cities down to streets, buildings,
and infrastructure by satellite or drone – then fill in
details with other 3D data where required.



Digital architecture

Digitize large assets like landmarks, bridges, and
buildings with LiDAR, aerially or at ground level.



Object 3D models

3D scan objects within a scene, picking up fine
surfaces with engineering-grade accuracy.

Render and navigate massive datasets in real time

Explore interactive digital twins on a previously unimaginable scale without lag, decimation, or any details left behind.



200 FPS

rendering

Seamlessly render and navigate interactive scenes.

100 km²

in scale

Turn massive environments into accurate digital twins.

Billions

of data points

Work with huge datasets using dedicated tools.

Zero

latency

Explore and analyze without latency or decimation.

Visualize with stunning speed & clarity

Instantly take a closer look at your project data with clear, ultra-realistic 3D visualizations.



Trajectory display

View your full trajectory to verify coverage, navigate to certain areas, and optimize your path over time.

Intuitive data overlays

Toggle between height, color, normals, and intensity to uncover vital details about your project data.

First-person view

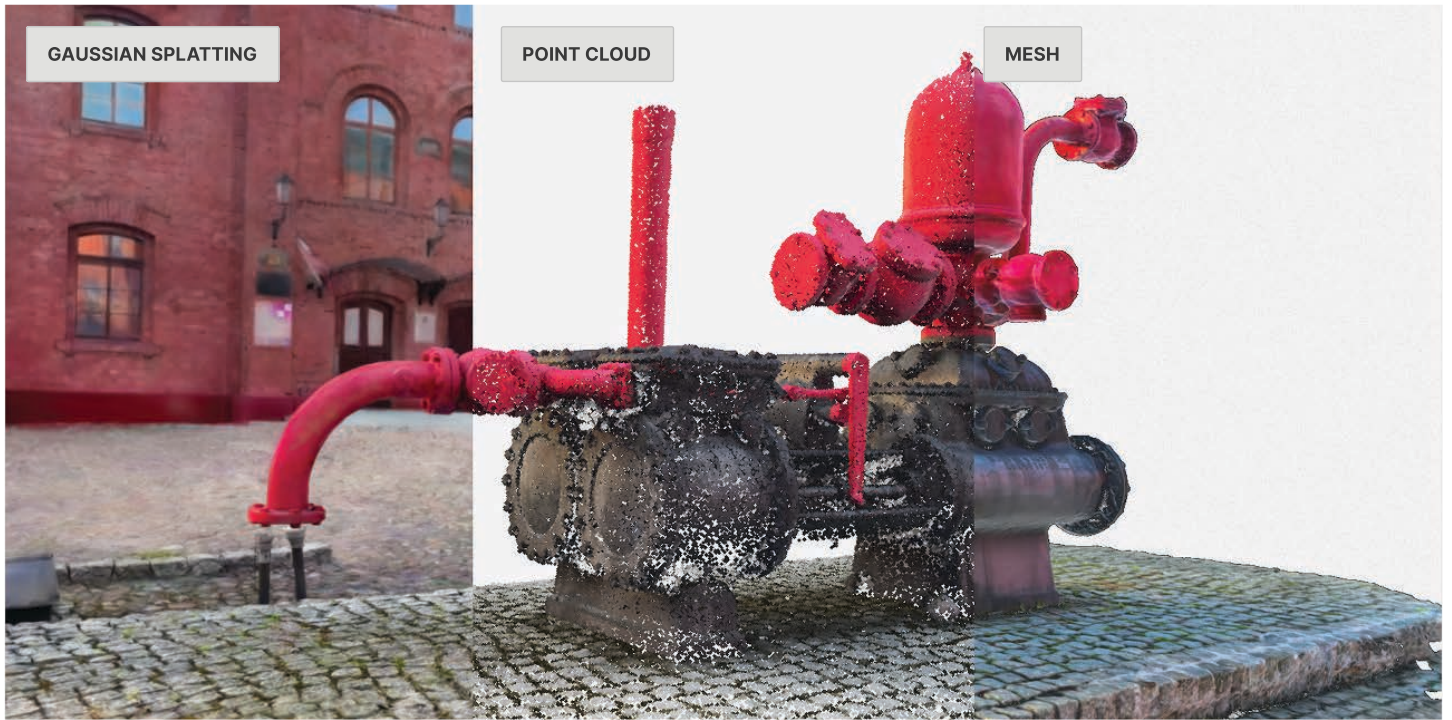
Explore your data from the inside – either at fixed viewpoints, or by moving freely in first-person.

360° panoramic texturing

Apply 360° panoramic texturing to Artec Jet and Ray II scans, adding rich color and vital visual context.

Point clouds, meshes & splats - in one workspace

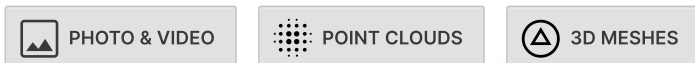
Switch between visualization and engineering — choose the modality that best meets your application needs.



Discover game-changing Gaussian Splatting

Achieve next-level realism with an all-new algorithm for reconstructing lifelike scenes.

Generate lifelike Gaussian Splats using:



Works with your dataset

Import, export, and render existing splats, or generate high-quality visualizations from scratch using Artec Jet, photo, or mesh data.

Reconstructs tricky surfaces

Digitize environments in full, even the darkest, shiniest surfaces, and ensure no detail is left behind.

Geometric accuracy

Create Gaussian Splats from LiDAR data to pair realism with geometric accuracy for truly authentic results.

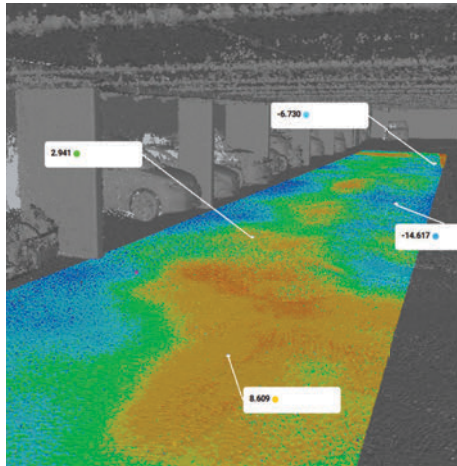
Built-in analysis tools for actionable insights

Artec Twins turned captured data into quantifiable results. Measure inside your point cloud, validate, compare, and export in industry-standard formats.



CAD primitive fitting

Fit CAD primitives like spheres, cylinders, and planes to quickly assess structural flatness, check geometry, and extract dimensions.



Distance mapping

Compare point clouds, Gaussian Splats, CAD models, or meshes to identify deviations, validate tolerances, and monitor change.



Georeferenced accuracy

Ensure every measurement sits where it belongs in the real world with ground control point support and built-in georeferencing.



Profiles & cross-sections

Make cross-sections anywhere in your dataset to evaluate gradients, verify clearances, and isolate structures for analysis.



Compare scan-to-CAD

Bring scan data straight into your workflow – overlay point clouds and meshes on CAD models to see where reality differs from design.



Volume calculation

Calculate volumes from mesh data to quantify material, track change over time, and plan with confidence.

Ready for industry

ARCHITECTURE, ENGINEERING & CONSTRUCTION (AEC)

SURVEYING & GEOSPATIAL

MINING

DEFENSE

INFRASTRUCTURE

PUBLIC SAFETY

HERITAGE PRESERVATION

OIL & GAS

Working at scale? Try Artec Twins today

Visualize & analyze the largest datasets with an interactive digital twin.
Find out more at www.artec3d.com, or contact us at sales@artec3d.com.

