Professional
3D scanning solutions

Artec3D

Industrial design and manufacturing / Healthcare
Science and education / Art and design

CERTIFIED
Solution
Partner

3S SOLIDWORKS

Artec Eva and Space Spider:
The perfect package for mass production, industrial design & more

Artec Eva and Space Spider are the ideal 3D scanners for professional use. Unrivalled in their scanning quality, they are proven to scan fast and in very high resolution, while being easy to use.

Very high resolution

Create a quick, textured and accurate scan of medium to large surface areas with Eva, and use Artec Space Spider to scan small areas, capturing intricate detail with minute precision.
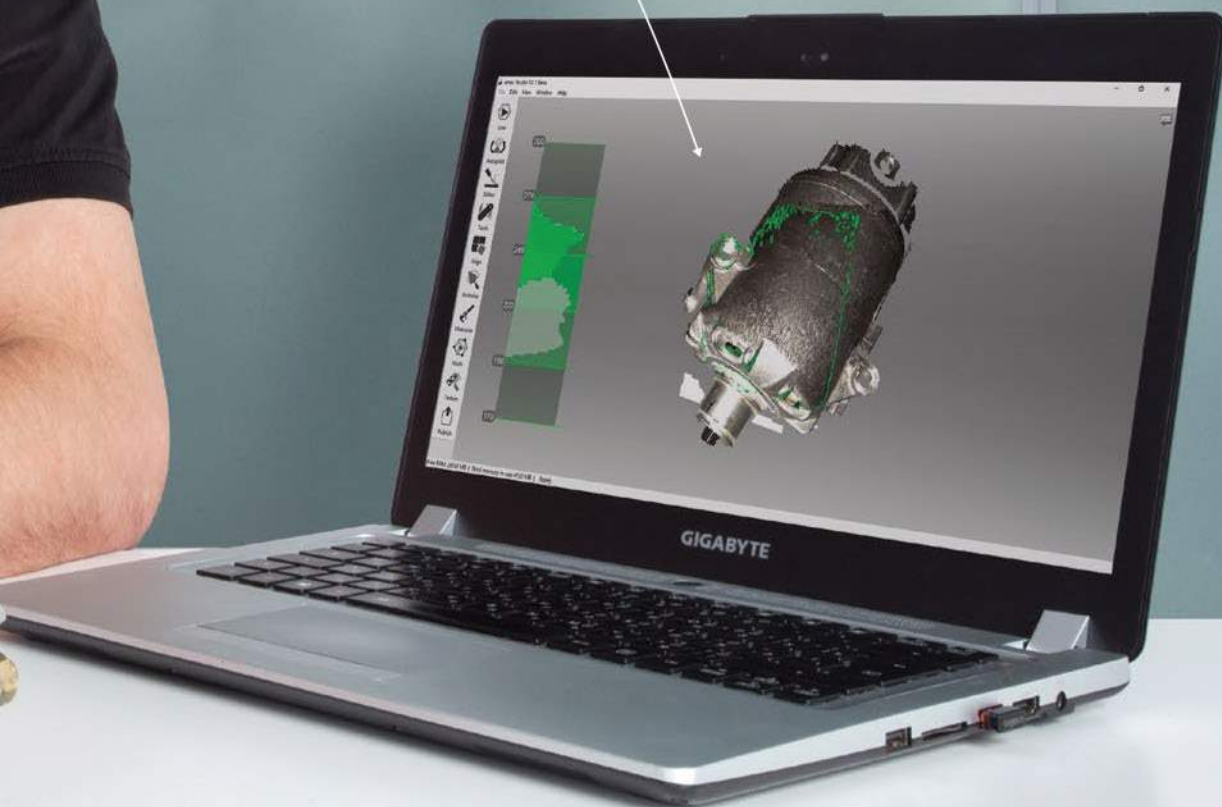
A tried and tested product used in a wide range of industries

Artec Eva and Space Spider are used in countless industries, including quality control, the automotive industry, medicine, heritage preservation, computer graphics, design, forensics, education, reverse engineering and architecture.

Artec Studio professional 3D data processing software

Scan with Artec Studio advanced 3D data processing software for editing data fast and effectively using Artec's unparalleled algorithms. Then export the results into a wide range of formats: OBJ, PLY, WRL, STL, AOP, ASCII, Disney PTX, E57, XYZRGB, CSV, DXF, XML

Use models in a wide range of software:

AUTODESK.

3DS SOLIDWORKS

Geomagic

blender

Easy integration:

Integrate Artec Eva or Space Spider into your own scanning system using Artec Scanning SDK

With Artec Scanning SDK you can now achieve the very best in scanning results also using your own software, integrating Artec Eva and Space Spider into almost any system.

Either adapt your current software to support Eva and Space Spider, or develop your own software to spec.

Whether you want to scan for medical purposes, industrial quality control, or reverse engineering, Eva and Space Spider can be easily assimilated into your specialized solution.

Artec Scanning SDK can also be used with Artec L2, a 3D scanner with a wider field of view, specifically developed for built-in scanning solutions.

Artec Eva and Space Spider:
New possibilities for forward thinking industries

From rapid prototyping to quality control, CGI to heritage preservation, the automotive industry to forensics, medicine and prosthetics to aerospace, Artec Eva and Space Spider are used to customize, innovate and streamline a wide range of different industries.

In focus: Reverse engineering

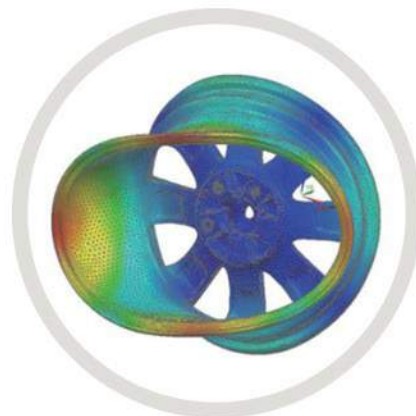Test and redesign a part without manufacturing defects using 3D scan data.

Scan your object fast and with high accuracy

Create your 3D model using Artec Studio algorithms

Export to simulation software

*Analyze how the object reacts under specific conditions*

In focus: CGI

Digitally capture a person or object to create a 3D CG model for use in visual effects.

Artec Eva and Space Spider are widely used in the entertainment industry, including by TNG Visual Effects, who have provided their 3D scanning services to blockbuster films such as Twilight: Breaking Dawn 1 & 2 and Man of Steel.

RENDER

GEOMETRY

TNG VISUAL EFFECTS

In focus: Orthotics and Prosthetics

Use Artec Spider to capture the geometry of ears with precision so as to design custom implants for patients with ear deformities. Artec Spider is well-suited for digitizing the deeper surfaces within the ear canal as well as the area between the ear and the head. With the help of an Artec 3D scanner, surgeons can rest assured that they'll never have to approximate models for the prosthetics and implants they create.
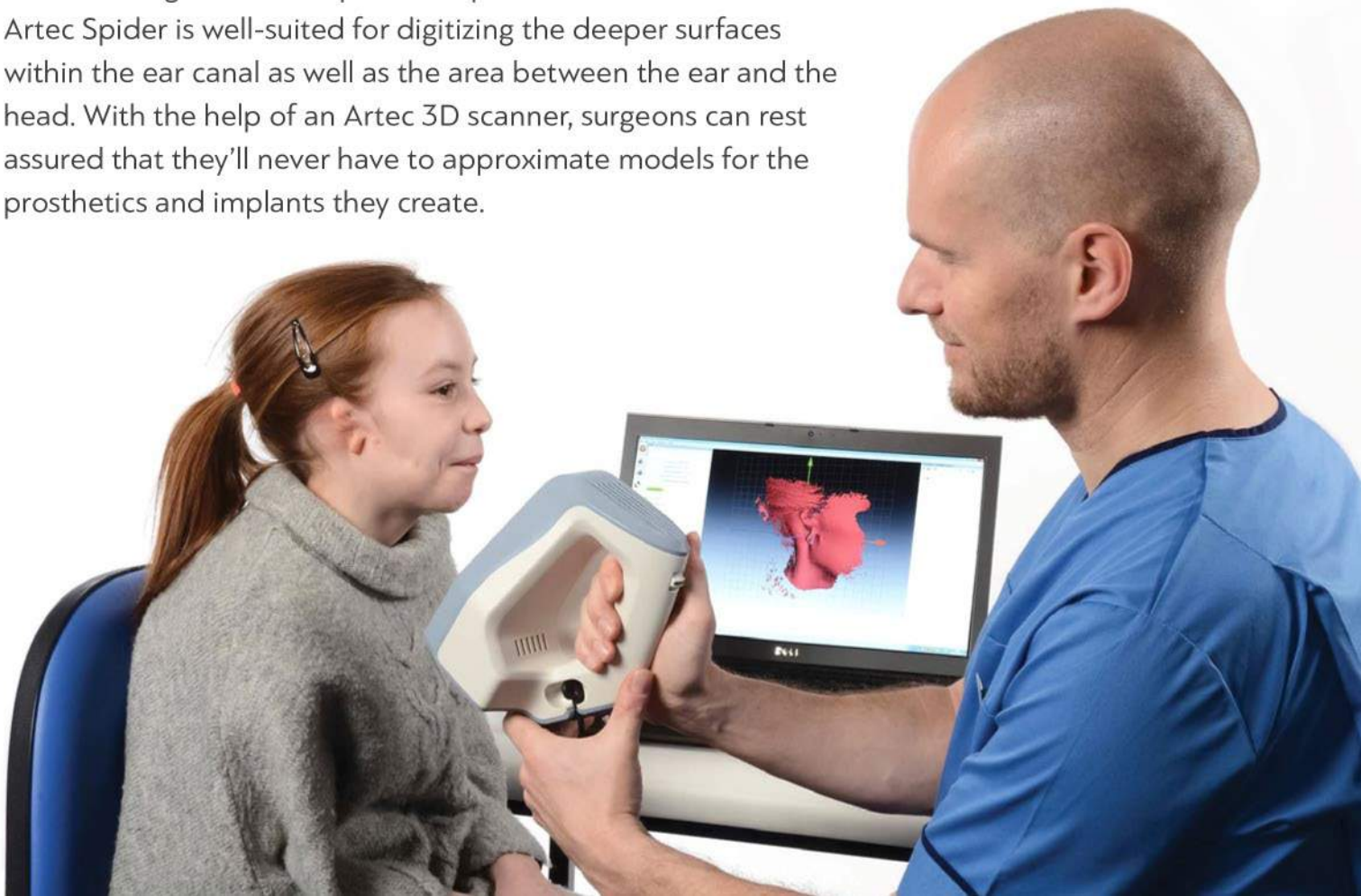
Scan and create replicas of cultural objects, preserve them for posterity, digitize collections and make them accessible to everyone all over the world.

Photo: Scanning a 1.8 million year old giant crocodile at a paleontological site in Kenya.

3D model of prehistoric giant crocodile with measurements.

836.39

409.60

See 3D models of prehistoric fossils scanned by Artec Eva and Space Spider on africanfossils.org free online lab.

3D scanning has never been so portable

Artec handheld 3D scanners are compatibile with both lightweight laptops and tablets, making for the best all round user experience. Plus with the Artec battery pack, which gives up to 6 hours scanning time, you really can take Artec scanners anywhere, capturing objects right in the field.

Artec battery pack

Powers the scanner for up to

6 hours

Compatible tablets & lightweight laptops*

Tablets: Microsoft Surface Pro 4, Surface Pro 3, Wacom Mobile Studio Pro 13" & 16" i7 512 GB, Wacom Cintiq Companion 2
Lightweight laptops: Dell XPS 15, HP Omen, HP ZBook 15 G3 Mobile Workstation, Gigabyte P34G v2

*These models have been tested and verified by Artec, however other lightweight options may also be available.

Artec Eva and Space Spider:
What you need to know

Extremely versatile

Scan a broad range of objects with Artec Eva and Space Spider. Use Eva for medium to large objects and Space Spider for small objects

Fast and accurate

Eva scans fast, capturing and simultaneously processing up to two million points per second with up to 0.1mm accuracy

Speed and precision

Artec Space Spider processes up to one million points per second and produces images of extremely high resolution *(up to 0.1 mm)* and superior accuracy *(up to 0.05 mm)*

Safe to use

Artec scanners employ structured light technology and are totally safe for scanning people

Tablet compatibility

Scan with a tablet for greater mobility

Real-time scanning

Frames are automatically aligned in real time

Target free

No object preparation needed. Start scanning from the word go

Easy integration

Integrate Artec Eva or Space Spider into your own scanning system using Artec Scanning SDK

Portability

Lightweight and battery compatible, you can take Artec scanners anywhere. The Artec battery pack provides power for up to 6 hours of scanning

High resolution

Scan in brilliant colour and high resolution (*Eva up to 0.5mm, Space Spider up to 0.1mm*)

3D video mode

Scan a moving object and record a real-time 3D video

Bundling

Several scanners can be bundled together and synced to scan larger objects automatically

Artec Studio 14

Revolutionary 3D scanning and data processing software

Enjoy the smartest, easiest and most effortless scanning ever with Artec Studio 14

ARTEC STUDIO 14
PROFESSIONAL

ARTEC STUDIO 14
PROFESSIONAL

Artec 3D

THE BEST JUST GOT BETTER

Easy 3D scanning with Artec Studio 14

Creating 3D scanning masterpieces requires smart and powerful software to capture, process, analyze and edit data.

\ User-friendly and intuitive interface for smooth, expertly guided 3D scanning

\ Quick and easy start-up process. No special positioning requirements, just point and shoot

\ Artec Studio 14 software is compatible with tablets as well as 3D sensors, and together with the battery pack for the 3D scanner, you can easily create professional scans anytime and anywhere

Now anyone can achieve professional results with the most comprehensive and straightforward 3D scanning software on the market today.

\ Get high quality scans every time with a smart tracking system that ensures correct movement of the scanner and object capture

\ Stop or pause scanning and continue exactly from where you left off, with the smart auto-continue feature

\ Achieve equally great results using both manual and Autopilot modes

## Smart, fast and automated post-processing

What was once tricky and time consuming for new and inexperienced users is now a thing of the past.

Making accurate 3D models
has never been so straightforward

Introducing AUTOPILOT – the smartest and most advanced post-processing mode ever. Create professional 3D objects in just a few clicks

Autopilot. An essential tool for beginners, a time saver for experienced users
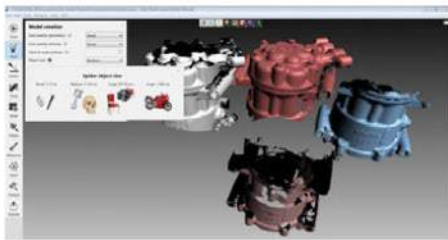

Answer a few easy questions about the object you have scanned, including its size, geometry and texture. All the questions are illustrated with clear examples.
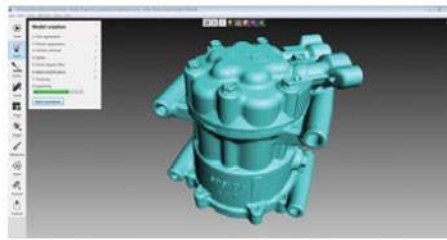
Based on the info provided, Autopilot automatically chooses the right algorithms and settings to create the best possible result.

Fast and accurate application of automatically selected settings for all the processing stages: Creates a high precision 3D model in no time.
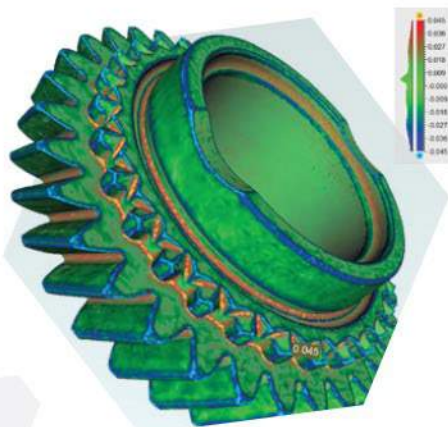
Thorough analysis in Artec Studio

\ Get all the needed measurements, including the surface size and the volume of your model

\ Compare your scans and models

\ Annotate your 3D object

Direct compatibility with CAD

\ Create a 3D model in Artec Studio and directly export it to SOLIDWORKS, AutoCAD and Design X.

EXPORT YOUR MODEL TO A WIDE RANGE OF POPULAR SOFTWARE

AUTODESK. ƏS SOLIDWORKS Geomagic® blender

Eva

Artec's fastest structured-light 3D handheld scanner

Space Spider

NEW
EQUIPMENT
DIGEST 2016
INNOVATION
AWARD
WINNER

Metrological device for superior precision

Long-term repeatability in data capture

Automatic temperature stabilization

All Artec handheld scanners come with a USB cable and power cord.

Where to buy
Artec Scanners

www.onrol.com

Optional extras:

Battery pack

Shoulder bag

Hard carry case

Artec Studio 14
Professional

For use with all Artec 3D scanners

Compatible sensors: Kinect for Windows V1 & V2, Intel RealSense F200 (IVCAM), R200 (DS4) & SR300, PrimeSense Carmine, ASUS Xtion, XYZprinting 3D scanner.

Global support, training and integration
offered by every distribution center and online by Artec's dedicated support team.

Artec Scanning SDK free to download

	EVA	SPACE SPIDER
Ability to capture texture	Yes	
3D resolution, up to	0.5 mm	0.1 mm
3D point accuracy, up to	0.1 mm	0.05 mm
3D accuracy over distance, up to	0.03% over 100 cm	
Texture resolution	1.3 mp	
Colors	24 bpp	
Light source	flash bulb	blue LED
Working distance	0.4 – 1 m	0.2 – 0.3 m
Linear field of view, H×W @ closest range	214×148 mm	90×70 mm
Linear field of view, H×W @ furthest range	536×371 mm	180×140 mm
Angular field of view, H×W	30 x 21°	
Video frame rate, up to	16 fps	7.5 fps
Exposure time	0.0002 s	
Data acquisition speed, up to	2 million points/s	1 million points/s
Multi core processing	Yes	
Dimensions, H×D×W	261.5×158.2×63.7 mm	190×140×130 mm
Weight	0.85 kg / 1.9 lb	
Power consumption	12V, 48W	12V, 24W
Interface	1 x USB 2.0, USB 3.0 compatible	
3D mesh formats	OBJ, PLY, WRL, STL, AOP, ASCII, PTX, E57, XYZRGB	
3D point cloud formats	BTX, PTX	
Formats for measurements	CSV, DXF, XML	
Processing capacity	40 million triangles / 1GB RAM	
Supported OS	Windows 7, 8 or 10 – x64	
Minimum computer requirements*	i5 or i7 recommended, 12Gb RAM	i5 or i7 recommended, 18Gb RAM
Calibration	no special equipment required	

*Please refer to www.artec3d.com for detailed hardware requirements.*

Space Spider
Warm up period for achieving maximum accuracy

(°C) 40
36.6
30
20

0 3 6 9 12 15 18 21 24 27 30 33 36 39 42 (min)
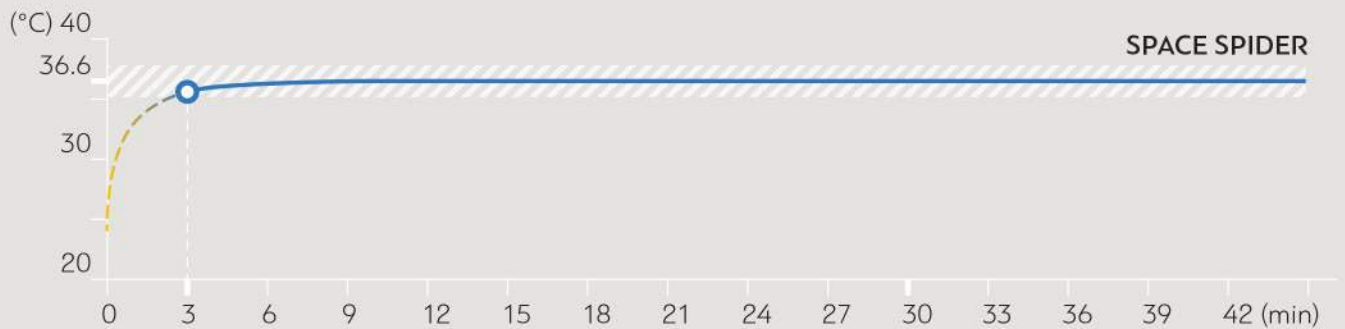
SPACE SPIDER

To achieve the very best results, every measurement tool is usually tuned to the conditions of a particular use case. Space Spider, however, keeps its precision in a wide range of temperatures and adjusts to the conditions in only 3 minutes, saving you precious time.

temperature range for achieving maximum accuracy

Field of view
of Artec Scanners

SPACE SPIDER

EVA

0 (mm) 200 300 400 1000
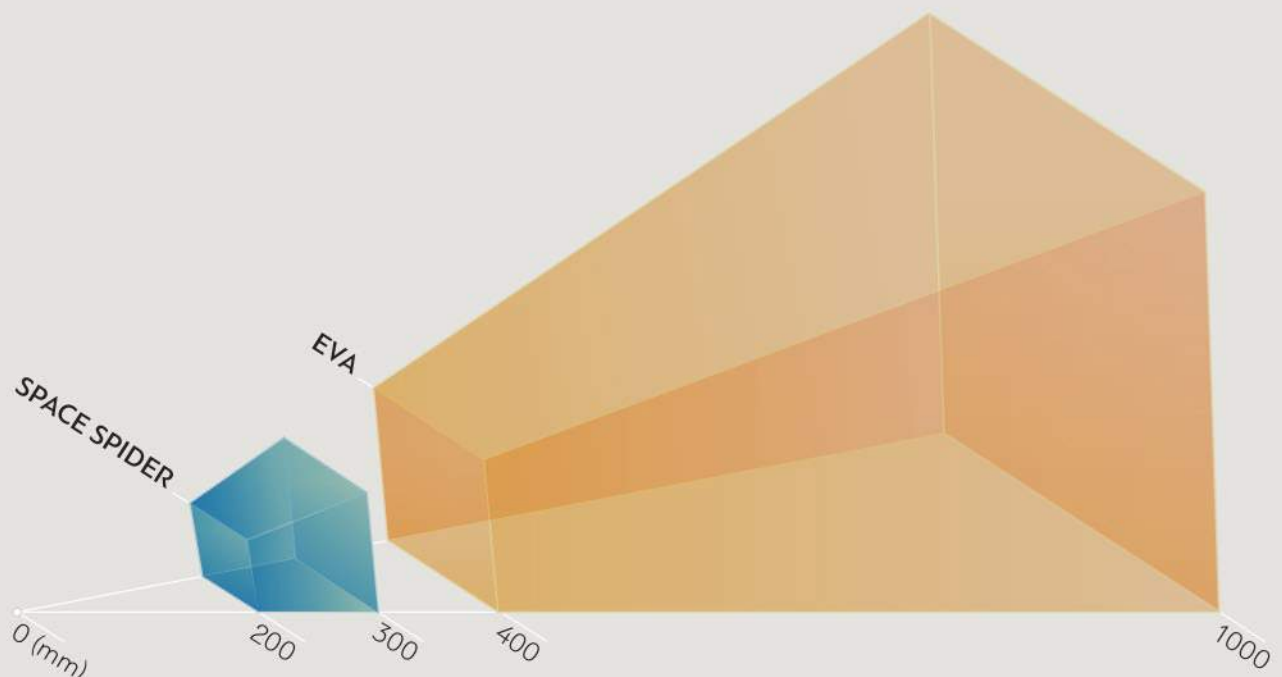
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