

# Professional 3D scanning solutions



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





# 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

 SOLIDWORKS

 Geomagic

 blender





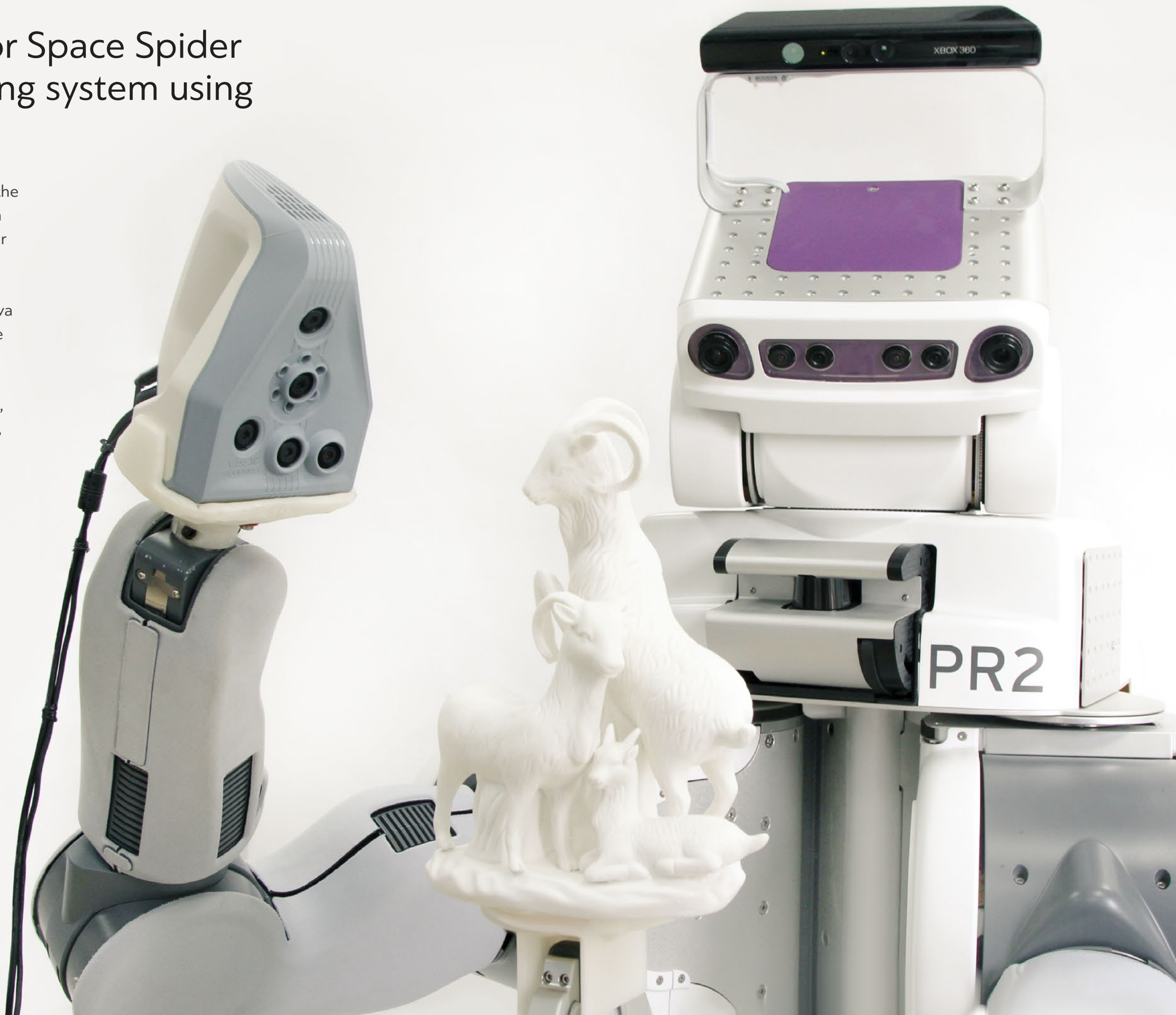
Easy integration:

## 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 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

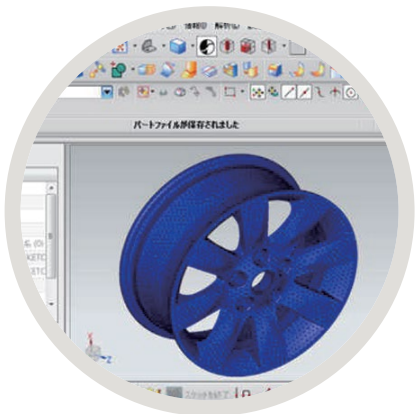
Test and redesign a part without manufacturing defects using 3D scan data.



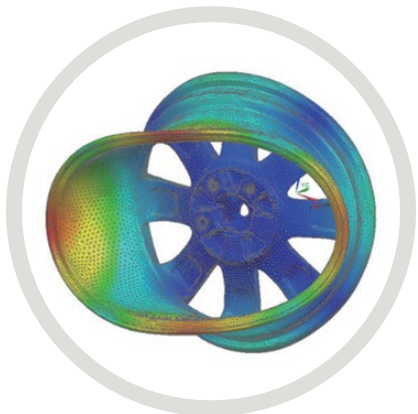
Scan your object fast and  
with high accuracy



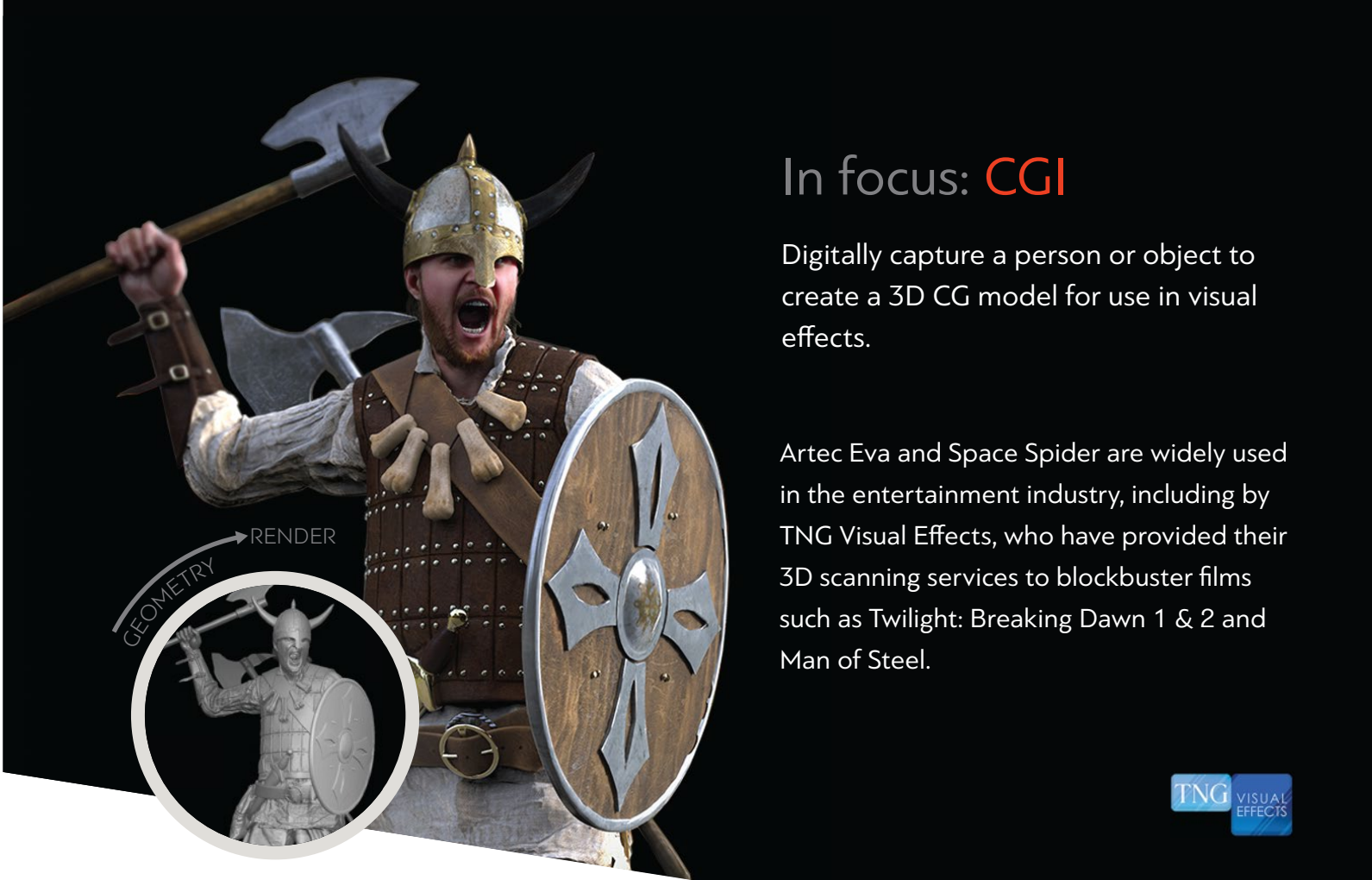
Create your 3D model using  
Artec Studio algorithms



Export to simulation  
software



Analyze how the object reacts  
under specific conditions



## In focus: CGI

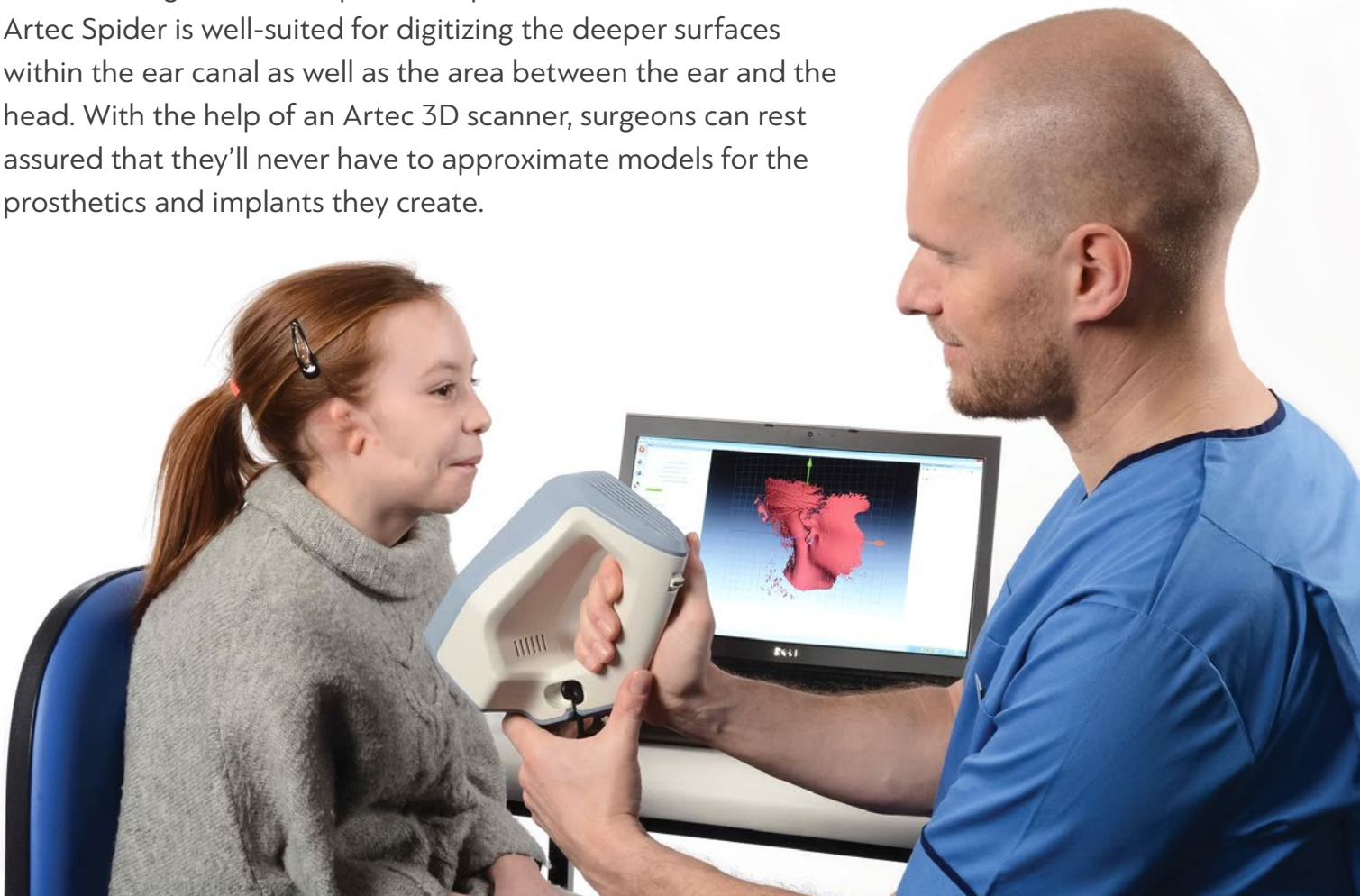
Digitally capture a person or object to  
create a 3D CG model for use in visual  
effects.

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.



## 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.





## In focus: Heritage preservation

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.*



See 3D models of prehistoric fossils scanned by Artec Eva and Space Spider on [africanfossils.org](http://africanfossils.org) free online lab.



3D model of prehistoric giant crocodile with measurements

## 3D scanning has never been so portable

Artec handheld 3D scanners are compatible 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



### 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*)



## 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



## 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



## 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



### 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

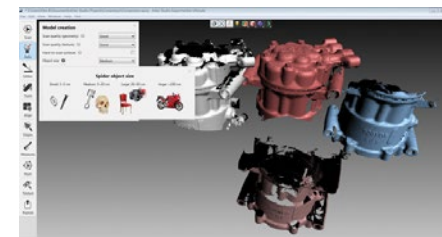
What was once tricky and time consuming for new and inexperienced users is now a thing of the past.

### Making accurate 3D models has never been so straightforward

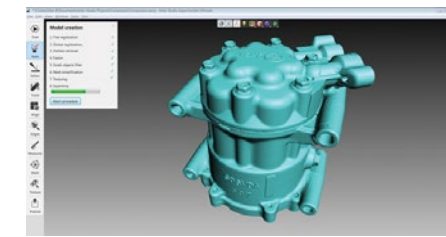


Introducing AUTOPILOT – the smartest and most advanced post-processing mode ever. Create professional 3D objects in just a few clicks

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



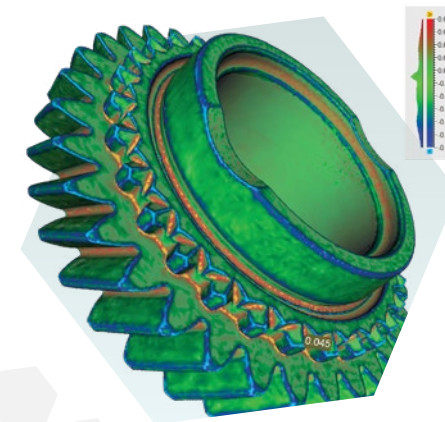
Answer a few easy questions about the object you have scanned, including its size, geometry and texture. All the questions are illustrated with clear examples.



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







## Eva

Artec's fastest structured-light 3D handheld scanner



## Space Spider

Metrological device for superior precision  
Long-term repeatability in data capture  
Automatic temperature stabilization



## Artec Studio 14 Professional

For use with all Artec 3D scanners

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

## Where to buy Artec Scanners

Find Artec Eva and Space Spider in stock at over 110 distribution centers worldwide.

[www.artec3d.com/where\\_to\\_buy](http://www.artec3d.com/where_to_buy)



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

## Optional extras:



Battery pack



Shoulder bag



Hard carry case



Artec Scanning SDK free to download  
[www.artec3d.com/3d-software/sdk](http://www.artec3d.com/3d-software/sdk)

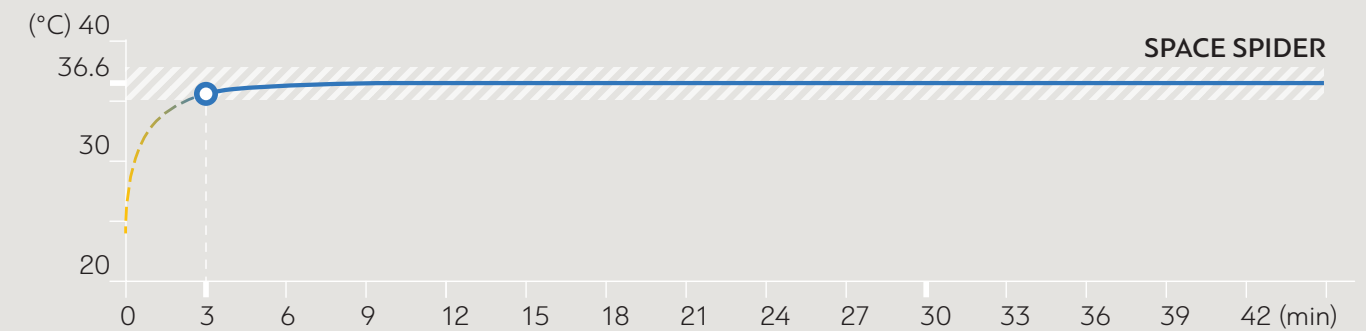


	EVA	SPACE SPIDER
Ability to capture texture	Yes	
3D resolution, up to	0.5 mm	0.1 mm
3D point accuracy, up to	0.1 mm	0.05 mm
3D accuracy over distance, up to	0.03% over 100 cm	
Texture resolution	1.3 mp	
Colors	24 bpp	
Light source	flash bulb	blue LED
Working distance	0.4 – 1 m	0.2 – 0.3 m
Linear field 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](http://www.artec3d.com) for detailed hardware requirements.

## Space Spider

### Warm up period for achieving maximum accuracy



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

