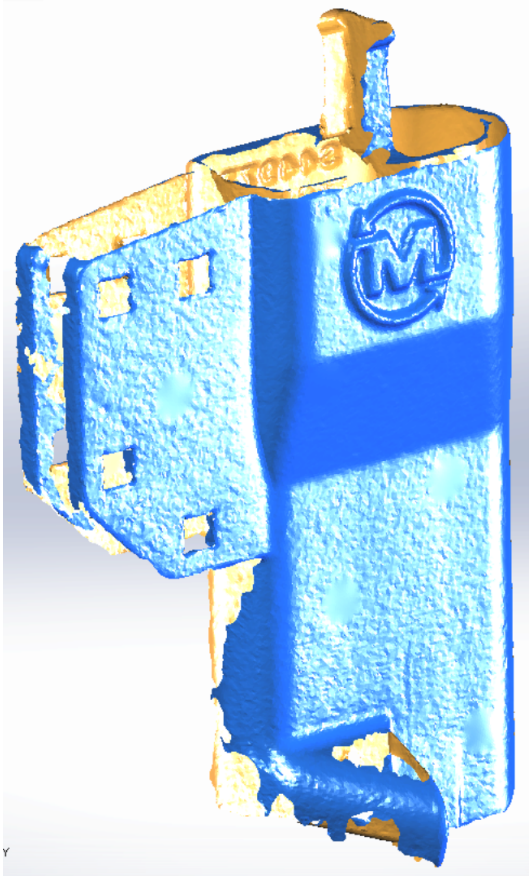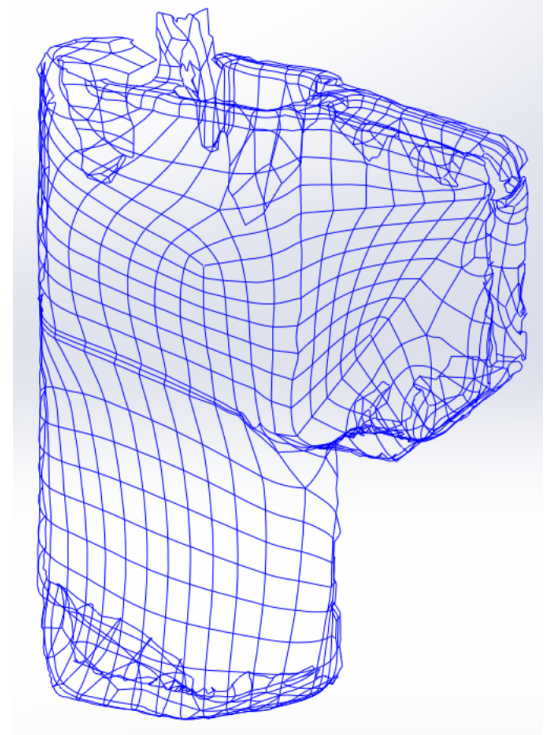# Scanner notes

May 2015

Creaform Handyscan700

Most expensive of all scanners presented here.

Seems to be targeted at close accurate features of smaller objects.

Requires targets.

Result in SolidWorks

Modified by Geomatic software

Creaform goscan50 (Best tested)

Capable of accurate scans, includes a calibration plate and does not need targets.

Easy to use, better software feel than others.

Object range 300mm to 3m. Creates point cloud and meshes, solid models possible with additional software.

Requires no alignment or post-processing steps.

Feels more solid than the Artec.

Result in SolidWorks

Artec Eva (Second choice)

Longest (slowest) processing times of all units tested.

Creates mesh as well as point clouds.

Seems to have issues with holes.

Wide distance range from under 1/2m to 1m.

Fan unit a problem for field work and sensitive to lighting conditions.

3D Scanners - Artec EVA - Review $ | € | £

KEY FACTS

Artec EVA

BUY

Brand	Artec
Product	EVA
Website	artec3d.com
Type of device	Portative
Price	$ 18,000

ANIWAA'S OPINION

Artec Eva™ 3D Scanner is similar to a video camera which captures in 3D. The scanner captures up to 16 frames per second. These frames are aligned automatically in real-time, which make scanning easy and fast. Eva™ allows texture capture at 1.3 mp resolution with 24 bpp color depth. The indicated price depends on options, taxes, changing rates and country of delivery.

PROS & CONS

+ Texture capture // Acquisition time // Light weight

— 3D capture of small details

QUALITY

Resolution: Up to 0.5 mm
Precision: Up to ± 0.1 mm

SYSTEM

Supported OS: Windows
Connectivity: USB 2.0
Power Input: 12V 48W

Result in SolidWorks

Untrained result in SolidWorks
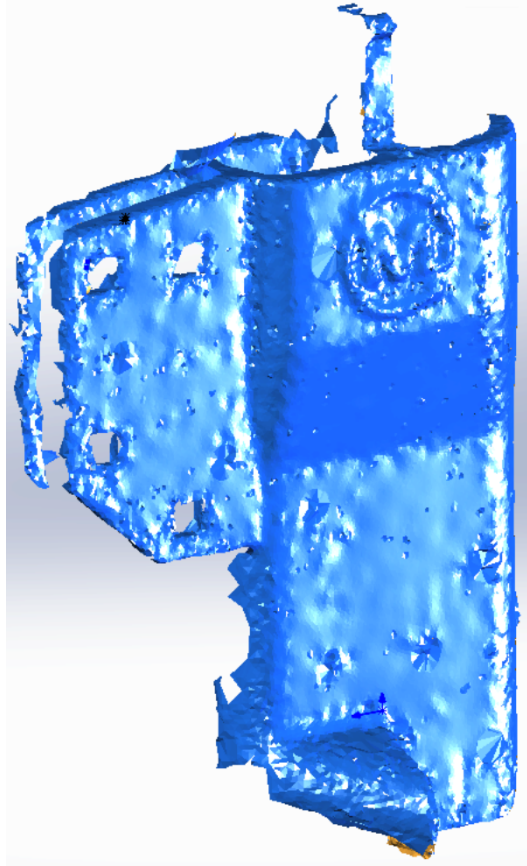
Mantis Vision F5

Output during scanning is just 2D and only point cloud.

NDI Vicrascan

Single laser scanner, not as accurate as other models tested.

Scanning times are longer than other models tested.

Needs to scan in three axes (two at 90 degrees and one at 45 degrees) for crosshatch pattern.

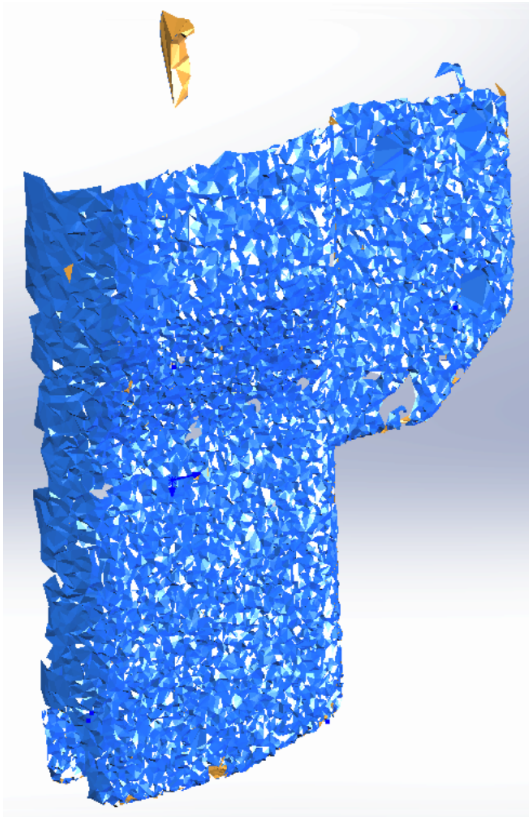Result in SolidWorks, small round pyramids are the markers.

Faro Freestyle

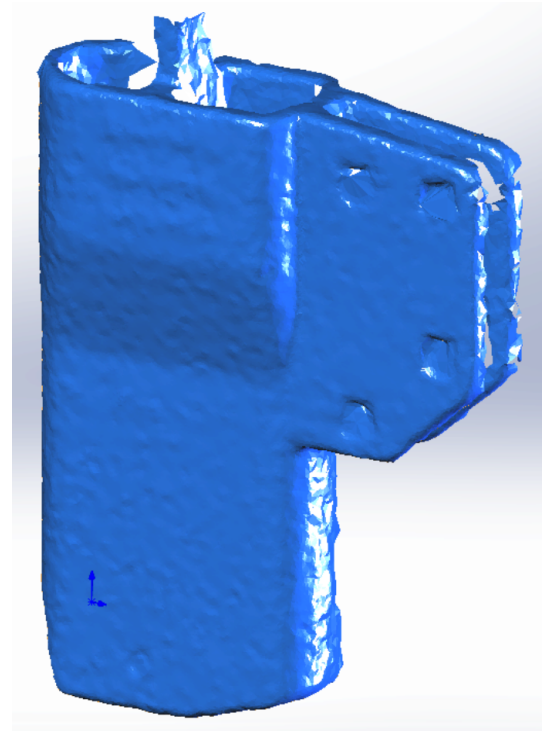Relatively recent player in the market.

Seems more suited to body and building scans.

Accuracy at the 1 to 2mm range, rather than 1/10 of other models tested.

Fast scanning but poor software.

Result in SolidWorks

Modified in GeoMagic