

Worksheet IT 37: Object scanning

After completing all the preliminary actions to the scan it's then possible to go on acquiring the digital 3D model of the chosen object. The more ideal are the environmental conditions you take the scan in, the more accurate the 3D model will be. After the elaboration of the scanned data the work on the 3D model shifts from hardware to software, starting with the point cloud image of the object.

What will you learn?

- Step 1: How to scan an object
- Step 2: Which objects are more suitable for laser 3D scanning
- Step 3: What's the output of a 3D scan

How to scan an object

3D scanning an object is a more complex operation than taking a picture, that's why it's sometimes needed to follow some unusual measures. Which ones of these measures are correct in order to get a good 3D scan? (More than one answer):

- Make sure that the object is stable on a flat surface;
- Make sure that the object is evenly lit;
- Make sure that the object is at at least 50 metres from the scanning device;
- Make sure that the object is not green colored.



Which objects are more suitable for laser 3D scanning

Many 3D scanning technologies are available, but some are more suitable for certain uses rather than others. What's the 3D laser scanning more suitable for? State the correct answer:



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- Simple and even objects;
- Complex objects with round and uneven surfaces;
- Moving objects.

What's the output of a 3D scan

Laser 3D scans produce files that computers can read and modify through specialized programs. Which of the following is the output of a laser 3D scan?

- A tridimensional point cloud;
- A picture;
- A black and white slow-mo video of the scanned object.

