

Recording Objects

The objects found during the excavations at Portus are important in showing how different areas of the site were used, providing evidence for activities such as trade, as well as revealing information about the people who lived and worked there.

Polynomial Texture Mapping (PTMing) is a new technique developed by HP Labs which is being pioneered on archaeological excavation at Portus. It allows the rapid capture of very high resolution images of surface details on objects such as coins and carved inscriptions.

Laser scanning is used to record objects as well as buildings. Working with the University of Warwick and the Herculaneum Conservation Project, the Portus Project has recorded the head of a statue of a female Amazon warrior which was discovered at Herculaneum. This type of laser scanner, more commonly used in Formula 1 car design, produces an instant image of the object as it is scanned.

1 Amphora with inscription.

2 PTM images. This brick is stamped with the name of the owner of the factory where it was made, and its date of manufacture. This helps date the building or place where the brick was excavated.

3 An image of a laser scan of the brick stamps.

4 Laser scanning the Amazon warrior. The results are immediately downloaded onto a laptop, seen in the background.

5 Traditional photography is used to capture the colours of this painted sculpture.

6 Computer generated image from the laser scan, showing both the wire frame and the final render using a marble texture. Laser scan data capture by Warwick Manufacturing Group; rendering by the Archaeological Computing Research Group, University of Southampton.

