

Recrowning the queen of Egypt

Potsdam based Objektscan GmbH, centre of 3D surveying purchased a FARO Laser Scanner LS 800 in 2004. Dr. Ralf König, Managing Director of ObjektScan GmbH, explained: „Our core competence is 3D surveying. We purchased the laser scanner for its technical performance and the many application possibilities this allows us to achieve. We were drawn to FARO by not only the hardware but also the software and the service before and following our purchase. Currently we are using the scanner a minimum of 2-3 days per week for applications in industries as diverse as Facility Management, Architecture and preservation of ancient monuments.

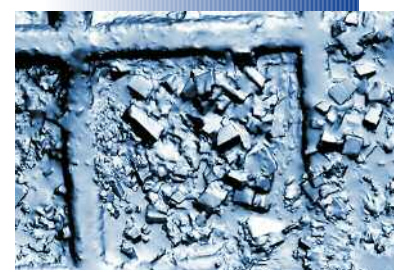
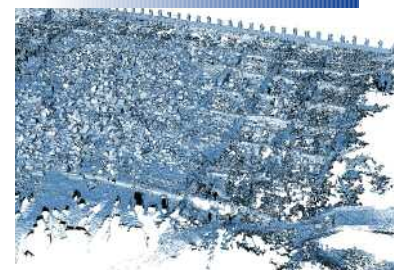
Throughout excavations in Tell Basta, in Egypt, the Laser Scanner has been used to capture and survey the significant finds. One of the more significant tasks was to capture the excavation of the statue of a Queen. A grid made up of 100 10x10m squares was created and captured with 70 scans. In order to optimise the scan of the entire area the scanner had to be positioned 3m from the object being scanned. The measurements, including setup, coordination and planning were all completed inside of 2 days.

Afterwards in the office the scans were filtered and through a triangulation a model true to the original was generated. The provisional data allowed a photo-realistic 3D model from circa 900,000 polygons to be produced which could be overworked in CAD. The dimensionally accurate images with supporting point cloud data (X,Y,Z coordinates) were retrofitted using the terrain and edges of the object. The result being detailed, navigable 3D model also with colour photo information.

Using this information a comprehensive reconstruction, not only of the excavation area, but also of the statue was possible. The various pieces of the statue were placed together in the virtual environment, this allowed archeologists to assess which sections of the statue still lay undiscovered and what to look for when excavating further. Statistical calculation of the mass allowed the statue to be reconstructed in greater safety, as seen in the image the queen stands once again.

From the numerous archological findings in Tell Basta the surface of an ancient graveyard have also been scanned, as well as many fragments from further statues,.

Dr. König concluded “The Laser Scanner fulfilled our performance and reliability expectations. The main advantages of the scanner being the scan performance, long range and the portability of the device. Our satisfaction in the purchase of the Laser Scanner led to the purchase of a FARO Laser Tracker and the planned purchase of a FaroArm with Laser Line Probe.”



Objekt Scan GmbH in Potsdam was formed in 2000 by Dr. König and consists of 7 employees. Working in 3D surveying, contract Laser scanning, consultancy and sales Objektscan are offering the technology and solutions of the future. Specialising in the capture of 3D data and the interpretation and overworking ObjektScan GmbH are providing a result orientiered solution. Further information can be found at www.objektscan.de.

With more than 7,500 installations and approximately 3,800 customers globally, FARO Technologies, Inc. (NASDAQ: FARO) and its international subsidiaries design, develop, and market software and portable, computerized measurement devices. The Company's products allow manufacturers to perform 3-D inspections of parts and assemblies on the shop floor. This helps eliminate manufacturing errors, and thereby increases productivity and profitability for a variety of industries in FARO's worldwide customer base. Principal products include the FARO Laser ScanArm; FARO Laser Scanner LS; FARO Gage and Gage-PLUS; Platinum, Digital Template, Titanium, Advantage FaroArms; the FARO Laser Tracker X and Xi; and the CAM2 family of advanced CAD based measurement and reporting software. FARO Technologies is ISO 9001 certified and ISO-17025 laboratory registered. Learn more at www.faro.com.