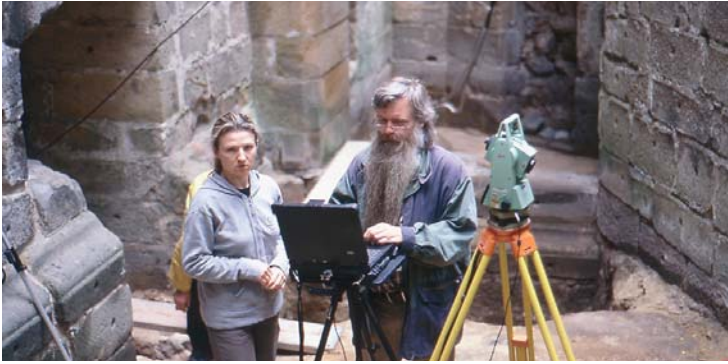


Archaeological survey with LEICA TCR410C



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Archaeological field studies on Oybin, Kreis Löbau-Zittau

Date

Installation December 2003

Project Facts

Instruments

- 5 TCR410C Total Stations

Application:

- Measurement of archaeological finds

Benefits

- Time saving and increased productivity due to high measurement speed
- Reflectorless measurement of inaccessible objects
- Easy to use
- Online connection with notebook

The Archaeological Heritage Service (Landesamt für Archäologie) in Saxony use Leica TCR410C and TCR307 Total Stations together with an online software "Tachy-CAD" for their survey at the archaeological excavations. The high measurement speed and the reflectorless measuring option of the Leica total stations combined with the online data recording in the notebook PC, save them a lot of time and money.

The Archaeologists use the Leica TCR410C total station in conjunction with the "Tachy-CAD" online software (based on Autocad).

The TCR410C is set up directly at the excavation field, aside a tripod with the notebook PC mounted. A cable via the RS232 interface connects the TCR410C and the notebook. All archaeological finds are measured. Mostly the Archaeologists use a GMP111 mini reflector with appropriate reflector pole at the target. If required, the measurement is made without reflector, especially when the find is hard to access or inaccessible.

The documentation and identification of the found objects is made online via the "Tachy-CAD" software on the notebook. The Archaeological Heritage Service applies this technol-

"The modern archaeological field work requires equipment that works reliably and precisely even under extreme weather conditions.

The reflectorless technology from Leica Geosystems allows us to do our research in the field with maximum accuracy and time saving."

Dr. Christoph Heiermann, press officer

Task

Use of LEICA TCR410C total stations for archeological surveys

Customer

Archaeological Heritage Service
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ogy since one and a half years now and it has proved very efficient. Up to now they were using 3 TCR307 total stations for the surveys. Because of the huge time saving that can be achieved with this technology, the Director of the Archaeological Heritage Service of Saxony Dr. Judith Oexle decided to purchase additional 5 total stations from the new Leica TCR410C series. In the past, the measurement at excavations was performed with tape measure and prism optical square. This turned out to be very complicated and time consuming. Sometimes they had to employ a surveyor. From the records made by hand, hand mappings or designs in Autocad were created. All these steps are now carried out in the field.

Application Report: Archaeological Survey

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