

Field Grade I Certification Debuts in Tunisia

In March 2016, the Institut Supérieur des Etudes Technologiques de Sfax (ISET Sfax), in Sfax, Tunisia, participated in its first ACI Concrete Field Testing Technician - Grade I certification. Luke Snell, FACI, conducted the training. The class comprised six members of the university staff and faculty and six representatives from the concrete industry.

The classes faced equipment and language challenges. With Tunisia's mild climate, temperatures seldom are below freezing, and thus air-entrained concrete is not needed. But because the Field Grade I is an international certification and certified technicians could move to a cold weather area, they must be able to perform both the pressure (ASTM C231/C231M) and volumetric (ASTM C173/C173M) air tests. ISET Sfax did not have a volumetric air meter, nor was one available elsewhere in Tunisia. To solve this problem, Snell purchased a meter at World of Concrete and brought it with him.

The people of Tunisia speak Arabic and their second language is French. Although English is taught in school, it is not used regularly. However, the Field Grade I study books, training materials, classroom instructions, and exams that Snell planned to use are all in English. To overcome this difficulty, the study books (CP-1(16)) were sent a month before the exam and a 2-day training class was scheduled with both classroom instruction and hands-on performance testing in the laboratory. This allowed time for discussions and translations as needed, plus providing experience in completing each of the required tests.

The performance part of the exam requires that each of the ASTM tests be witnessed by the examiner or a certified Field Grade I Technician. ACI member Billie Snell, a certified Field Grade I Technician, was able to assist in the performance part of the exam.

All 12 participants passed both the written and performance exams and are now certified as Field Grade I Technicians for the next 5 years. ISET Sfax is making plans for additional certifications and starting a student chapter at the university. Equally as important, ACI now has 12 more ambassadors who know the details of good concrete testing procedures.



Luke and Billie Snell at the Amphitheatre in El Jem

Ancient Amphitheatre

One of the remarkable structures in Tunisia is the Amphitheatre in El Jem. It is the fourth largest existing Roman Amphitheatre, built between 230 and 238 AD. Because Tunisia is relatively dry (averaging less than 10 in. [240 mm] rainfall per year), the Amphitheatre is in remarkable shape. Although the Amphitheatre was never finished, it was still functional and is thought to have been able to seat 35,000 people. The areas where the lions were caged and where gladiators awaited their fate in the arena can still be seen.

The Amphitheatre was also used as a fort. In the seventh century, the Berbers, under the leadership of their legendary queen al-Kahina, unsuccessfully resisted the invading Arab forces there. In WWII, the German Luftwaffe built a major military airfield nearby. This airfield was attacked many times; however, no damage occurred at the Amphitheatre. This structure is on the United Nations Educational Scientific and Cultural Organization's World Heritage List.



Training at ISET Sfax on the density test using sand