Example of evaluation of mechanical properties of gravel soil using a large triaxial testing machine

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In recent years, the Technical Research Institute has redeveloped the triaxial testing machine and is actively conducting tests on materials such as gravel materials (filling materials) and new materials (solidified crushed materials such as ash cleats). As an initiative to utilize coal ash (raw powder), an example of understanding the mechanical properties and stability (creep characteristics / crushing characteristics) using a large triaxial tester and examining the applicability as an artificial ground material (crushing material) has been reported. In addition to the conventional control of dry density and water content, a compaction management method that emphasizes saturation has been proposed as a technique for efficiently constructing higher quality embankments using gravel materials. We also report on a large triaxial compression test for grasping the strength characteristics of embankment materials with different saturation properties.