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Laboratory Study on Behavior of Compacted Soils

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Abstract : These controlling the water content of compaction are a major concern of fundamental civil engineers. Also, the knowledge of the fundamentals of the behaviour of compacted clay soils is essential to predict and quantify the effects of a change in water content. The study of unsaturated soils is a very complex area which several studies are directed to in recent years. Our job work is to perform tests of Proctor, Oedometer and shear, on samples of unsaturated clay in order to see the influence of water content on the compressibility and the shear strength. The samples were prepared at different amounts of water from water content to optimum water contents close to saturation. This study thus allowed us to measure and monitor the parameters of compressibility and shear strength as a function of water content.

Keywords : laboratory tests, clay, unsaturated soil, atterberg limits, compaction, compressibility, shear
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