

COMPRESSIVE STRENGTH OF SELECTED FINE GRAINED SOILS TREATED WITH CEMENT KILN DUST AND CALCAREOUS FLY ASH

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Received: 6.02.2019; Revised: 6.06.2019; Accepted: 8.01.2020

Abstract

This paper presents the results of unconfined compressive strength tests carried out on samples of two different fine grained soils mixed with anthropogenic materials produced in Poland, showing binding properties – cement kiln dust and fly ash obtained from combustion of brown coal in a pulverized boiler. The tests were performed on cylindrical samples in a testing machine for compression tests after various curing time ranging from 1 to 8 weeks. The conducted work constitutes the first stage of research devoted to the recognition of the effects of calcareous fly ash and cement kiln dust addition into the fine grained soils.

Keywords: Cement kiln dust; Fly ash; Fine grained soil; Soil improvement; Compressive strength.