عنوان مقاله:
the effect of cement content on shear behavior of a cemented gravely sand

محل انتشار:
هفتمین کنگره بین المللی مهندسی عمران (سال: 1385)

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خلاصه مقاله:
The shear behavior of a cemented gravely sand that can be considered as the representative of Tehran alluvium has been investigated using triaxial equipment . Artifically cemented samples are prepared using gypsum plaster as the cementing agent. The plaster was mixed with the base soil at the weight percentages of 1.5 , 3 , 4.5 and 6. the applied confining pressure varied between 25 to 500 kPa in triaxial tests. According to the results, therate of increase in shear strength, Young's modulus, maximum dilation in drained condition and the maximum suction in undrained state increase with cement content to a maximum value, however it decrease with more increase in cement content. In fact a threshold cement content value exists that controls the mechanical behavior of cemented soil. This is confirmed using microscopic photo.

کلمات کلیدی:
Cemented soil, Gravely sand , Gypsum , Mechanical behavior , Triaxial test