

Abstract

Presented master thesis deals with the issues of deep compaction of soils and its application in the Czech Republic. In the introduction part are briefly resumed current methods of improving foundation soils and their application in our conditions. In following chapters the thesis address only to improving foundation soils, both the very vibroflotation, and application of gravel columns. First, the methods are technically described according standards and many years of experience with the implementation worldwide. The aim of this work was to assess the factors which may affect the application in our conditions. These factors include the geological structure of the Czech Republic, applicability tests, methods to verify the quality of the deep improvement construction and the application in the urban areas. The work contains also reports from various construction areas. The maps of applicability? according to individual input conditions are presented in the conclusion part.