SUMMARY

This submitted bachelor thesis deals with the influence of different factors that may influence the results of mechanical tests of rock. This is a search thesis, which draws primarily from academic articles and conference papers. In the introduction this thesis describes the laboratory testing methods, which we can test a rocks and obtain a strength characteristics and additionally the thesis describes the strain and deformational properties of rocks. In the second part of this thesis there are defined a factors that influence the results of mechanical tests, namely those given by their composition and structure of the tested rocks and on its physical properties. Additionally there are also included factors that can be influenced, such as test conditions and preparation of test specimens. For each selected factor there is a description of how it affects the results of mechanical tests of the different lithological types of rocks. This thesis brings clear knowledge, that the described factors can have strong effects on mechanical properties and is beneficial to these factors account for the mechanical tests.