**MODAL ANALYSIS OF COMPRESSOR VALVE PLATES AND COMPARES THE RESULTS BETWEEN THE TWO VALVE PLATES.**

ABSTRACT

A compressor is fitted with mounting plates and is welded to the compressor bottom and through the holes of this plate; the compressor gets mounted on to the A/C housing. The vibrations from the compressor get transferred to the A/C housing there by producing noise, which is undesirable. These vibrations will be greater enough to produce noise when the natural frequencies of the compressor, the mounting plate and the A/C housing coincide resulting in resonance. In this work the static analysis of the plate with three different PCDs are modeled and analyzed. The natural frequencies of the mounting plate and the corresponding mode shapes are plotted. Three different models have been considered for analysis and the investigations are carried out. The analysis results of the existing model are compared with two different models and the results are compared. Upon analysis of the three models, the better one out of them is suggested.