

# DEVELOPMENT OF A FRICTION AND WEAR TESTING MACHINE; DESIGN

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### **ABSTRACT**

This report is about development of a pin on disc, friction and wear testing machine. For this project purposes, a flat mating surface between the disc and the specimen is focused. The scope of the project are to design a machine where it can hold a brake pad material having a rectangular shape of size 10mm x 10mm with operating speed of 95 rpm with up to 200N load and commissioning a friction and wear test in dry condition. In this report, some literature survey about this machine, its advantages and disadvantages over other types has been given. Some calculations such as calculation to find the motor horse power and shaft, technical drawings in forms of CATIA and AutoCAD, procedures in commissioning friction and wear test in dry condition and also the data analysis also has been shown. In completion of this report, related information has been gathered from many sources such as books, websites, catalogs and lecturers (through discussion).

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