

HIGHER TECHNICAL INSTITUTE

MECHANICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF WATER PUMP TESTING STATION
TO CEN STANDARDS

M/664

BY: ANDREAS CHRISTOU

JUNE 1994

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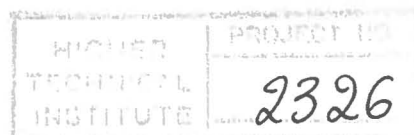
TESTING STATION TO

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**DESIGN OF WATER PUMP TESTING
STATION TO CEN STANDARDS**

by

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Project Report

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ACKNOWLEDGEMENTS
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This project is dedicated to
my parents for offering
me so much

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SUMMARY

The project deals with the design of a water pump testing station to CEN standards .

Firstly , the various types of pumps and their main performance characteristics are being described .

Then , the main features for the tests based on CEN standards (class - B) for the various types of pumps are being described .

In addition , the operational features of the HTI water pump testing station and the limitations of this station in fulfilling the requirements for testing on the CEN standards are being described .

Finally , the presentation of the necessary modifications so as to extend the capability for testing water pumps to CEN standards is being described .

INTRODUCTION

Various types of water pumps are sold in the market .

But each one has its own purpose .So ,various types of water pumps and their main performance characteristics are described in chapter 1 .Then ,it would be obvious that each type of pump is manufactured to work under specific conditions in order to accomplish its purpose .

Moreover ,each type of pump is tested for its accuracy before getting into the market .The main features for the tests based on CEN standards (class-B) for centrifugal ,axial and mixed flow pumps are described in chapter 2 .

Furthermore ,the operational features of HTI water pumping station are limited in fulfilling the requirements for testing on CEN standards .So , the operational features and limitations of this station in fulfilling these requirements are described in chapter 3 .

Finally ,the modifications needed so as to extend the capability of this station for testing pumps to CEN standards are described in detail in chapter 4 .

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