

This document contains small parts of a paper which are translated from dutch.

Preface

This document was written under commission of the assigned project teachers for the first project of the first year of the Mechanical engineering course at the The Hague university of applied sciences in Delft.

This document was assembled over a period of seven weeks, for this the school scheduled a three and a half hour long period every Monday in which student had the ability to work on their paper in the presence of a teacher who they could ask questions if necessary.

This paper is intended to inform the reader about the design process of a wireless electric drill and screwdriver.

Lastly I would like to thank my teachers J. H. Kluiver and L. M. Hollegien for their well coherent and well prepared lessons.

Introduction

This paper describes the disassembly and analysis of an cordless electric drill

The primary target of the paper is to analyze the design and production steps which were taken to get to a finished product.

Besides that, is this paper also intended to teach new students how they are supposed to write a technical paper about their future projects.

The performed analysis consists for the following subjects:

- Deconstruction
- Function analysis of the separate components
- Retracing the orientation process
- Simulating the analysis process
- Statement of Requirements
- Further analysis of the device
- Retracing of the design process
- Conclusion