

Introduction

In our first semester an assignment was to analyse a mechanical product and look at all the different facets that come with making a screw gun. I chose to use a screw gun for this project. The reason behind this choice is that it is an everyday object that can be used in very different scene's, in the household but also at somebody's job as a carpenter. The subjects that will come forward in this report will range from stakeholders and their needs to the production techniques that will be used to make certain parts of the screw gun. This makes this a very wide report where we will be looking at the main objects of every different part of making a screw gun. This report is written for my fellow students at The Hague University, Delft. Its main purpose is to inform them.

Summary

In this report we will be looking at a screw gun. The screw gun will be looked at from many different views. Every part of the screw gun will be examined and looked at. The subjects range from stakeholders and their needs to the way some parts of the screw gun are made. The first subject that you will find is an exploded view to get a clear image of the parts inside a screw gun. After that will be looking at the main issue and the stakeholders with their needs. In this chapter we will be looking at the reason why the screw gun is made, and witch people benefit from its existence. The third chapter is about the functions of the screw gun as a whole and at parts of the screw gun itself. This will be done through different scheme's. After this there will be a 2D-drawing of a part of the screw gun. This is done to show how a part normally enters a factory. With the 2D-drawing it is possible to remake the part. As fifth chapter there will be three subchapters about connections, energy transfers and alternative ways of connecting parts. After that we will talk about the way certain parts are made. The last chapter is about a free body scheme of a certain part.

Conclusion

Trying to solve the main issue of the process of slow drilling is resolved by inventing the screw gun. This is done after extensive research to find the best solution. It meets all customer requirements and the PVE. After they were approved, they needed to look at the type of functions the wanted to give the screw gun. This research is done by making different kind of tables and choosing the best fit. They also looked at different kind of materials and what qualities they have. And trying to find the best match of materials and the made requirements. After choosing the materials they had to choose which type of production technique is the most efficient. All those steps together have made the final result, a screw gun.