

Department of Mechanical Engineering

Engr 466 Design Report 2

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| Filename: |  |
| Date: |  |
| Total Pages: | 32 |

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# Introduction

* 1. Current State of the Project
  2. Objectives of this Report

KEEP THINGS CONCISE. GO THROUGH THE DESIGN IN DETAIL BUT ONLY SAY WHAT YOU HAVE TO. SAY IT DIRECTLY AND SIMPLY.

# Final Design Description

This section should be pretty short. Give a detailed description of how each design component will operate and the parts that make it up. keep it brief and general. Tell them what the component is, what it does, the parts that make it up to achieve its purpose

-Film transport

-2 sprockets, R=23.8mm. cnc milled from aluminum

-driven by a stepper motor.. 50 steps per frame. Stepper motor circuit…independent control diagram…(or should this be in the later sections…)…

-Up/outtake

-film gate

-tensioner

-LED illumination

-photo mount

-frame layout (this can mostly go in design mechanical interfacing)

…. maybe

# Detailed Mechanical Overview

Drawings for each mechanical component

Describe how things attach, bolt sizes ect.

Assembly drawing of the system

# Design Component Interfacing

…the mechanical interfacing.. spacing between film gate and sprockets.. how things are layed out on the frame ex, so the tensioner will fit and operate. (basically a detailed discussion of the frame)

Identify all the interface circuits

Identify the software relationships between

# Electrical Design

-individual circuits and the power requirements, operating parameters for our actuators/sensors

-giant system circuit

# Preliminary Software Design

-system flow chart

-flow chart for the components (like in that 230 assignment)

# Conclusions

-current challenges we are facing and how we are attacking it.

-our next steps

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