Project Title: Rotary Actuator Damper

Team Members: Derek Steffen Sean Ashman Iliyan Enev

Faculty Advisor: Bongsu Kang, Ph.D.

Area: Mechanical Engineering

Sponsored by: PHD, Inc.

PHD is a manufacturer of industrial automation actuators in Fort Wayne, Indiana. Some of their highest selling products are in the family of pneumatic rotary actuators. Currently, one of the restrictions that limits the customer's application is the kinetic energy constraint. Often, the rotary actuators exceed the kinetic energy limits due to the excessive inertia from various applications. PHD has asked IPFW to design an external attachment to increase the kinetic energy constraint on the family of rotary actuator products. The goal of this project is to design a scalable, cost-effective, accessory system that will increase the kinetic energy limits of the rotary actuator family.