


MME 4499 – Mechanical Engineering Capstone Project Proposal Document

Name of Sponsor	Wolfe Heavy Equipment
Title of Project	
PL plow arm main cylinder position	
Brief Project Description	
<p>The Wolfe Heavy Equipment produces mainly Parallel Link Plows as shown in the figure below. Customers would like to decrease the reaction time of the vertical motion of the plow to and to increase the stiffness and strenght of our arms.</p> 	
Desired Project Deliverables	
<p>Required.</p> <ol style="list-style-type: none">1. Determination of the optimal position of the cylinder.2. Redesigned upper arm. <p>Possible:</p> <ol style="list-style-type: none">1. A electro-hydraulic simulation of the GPS to mole control system which would show the improvement in reaction time based on the change in cylinder position using Altair Activate.2. A 3D model linked to the activate model showing the motion of the arms driven by a GPS program.	