Capstone Design Project
Piston Pump Centering Mechanism for an Industrial Sweeper
University of Minnesota
Sponsored by Tennant

Objectives:
1. Develop a mechanism to automatically center the swash plate on a hydrostatic pump to avoid vehicle creep.
2. Create computer-based design tool to optimize the mechanism
3. Create and test a prototype mechanism.

Results:
1. Fully operational, prototype mechanism
2. Matlab computer simulation model for optimizing the design.
3. Comprehensive report