

**Turn Key Re-Design Saves Plant from Over Spending on New Motors**



**PROBLEM:** A large Mid-Michigan Chemical Company was replacing old, outdated, and, inefficient fluid drives on 500 HP vertical turbine pumps. The pumps are located at a local municipality water plant and provide critical cooling and process water to the chemical plant.

The chemical company was informed by a representative of another “pump repair” facility that because they were removing the drive, the 500 HP motors would have to be replaced because the fluid drive was what carried the thrust load from the pump.

**SOLUTION:** Kennedy Industries was then contacted to get a second opinion. Upon investigation it was confirmed that the old drive carried the thrust load but the existing motors did not need to be replaced. Kennedy’s field service department determined that a thrust stand could be designed, manufactured and installed between the existing pump and motor to carry the thrust load and provide substantial savings over the cost of new motors.

The pumps were removed from service by the customer and loaded on Kennedy Industries 42’ flatbed semi and transported to Kennedy Industries state of the art repair facility in Milford, Michigan. While there the pumps underwent a complete re-build, thrust stands were engineered, manufactured and installed. Cross-sectional cad drawings were also created along with a bill of materials and an operation and maintenance manual. Kennedy then transported the pumps back to the customer’s facility and assisted with the installation. When the installation was complete Kennedy provided startup and training to the customer. Everything went as planned and the newly rebuilt pumps now equipped with thrust stands performed flawlessly.



*“... It has been a long time since I have seen a pump run as smooth as pumps three and four. Thank you for working with Kennedy to rebuild the pumps.”*

*- Plant Maintenance Manager*

- Existing pumps transported and re-built in Kennedy Repair Shop
- New thrust stands engineered, manufactured and installed in station by Kennedy
- Kennedy Field Service assisted in start-up and commissioning of newly equipped pumps