



TurboPiston Pump



A revolutionary new pump "TurboPiston Pump" (TPP) has been invented by Patrick Rousset, President of the Power Engineering, Inc. This new pump combines the merits of each existing types of pumps (i.e. centrifugal pump, reciprocating piston pump, and rotary screw pump) while discarding the problems relating to each. This allows the TurboPiston Pump to achieve high flow rates and high pressures in a small package. The University of New Orleans and ECCC is currently working with Power Engineering to turn these ideas into reality.

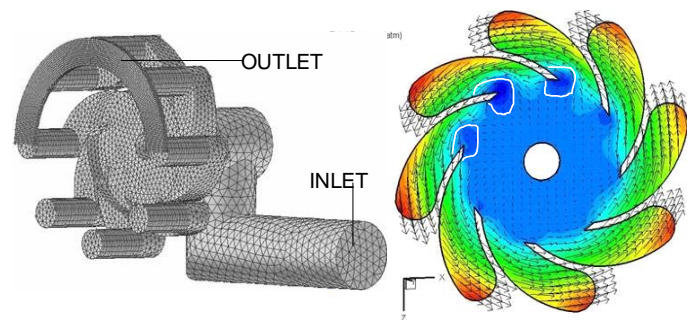
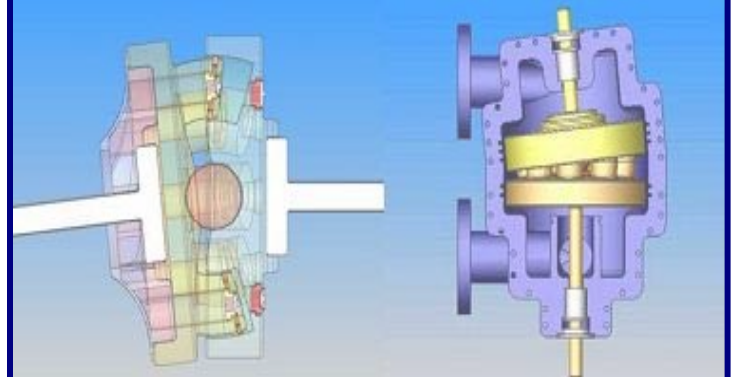
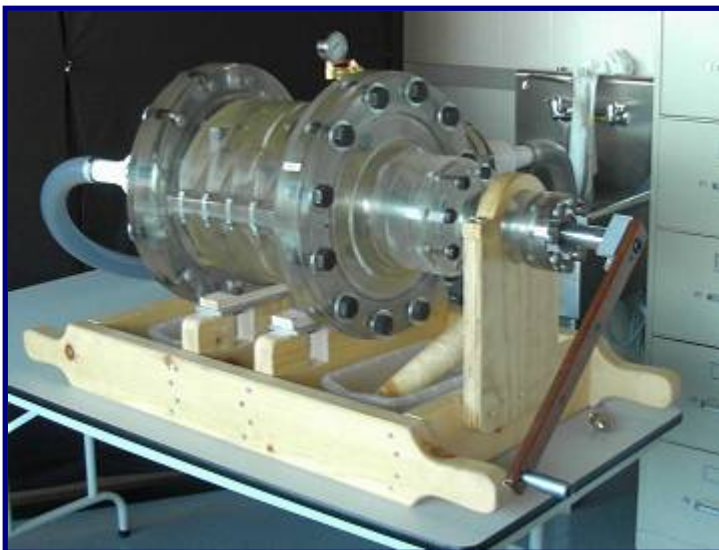
These characteristics are especially useful for applications such as irrigation, drought protection, or pumping water from the inner city of New Orleans to locations far away. Present day New Orleans pumps can move average 335,650 gallons of water per minute and discharge at 30 pounds of pressure per square inch (30 psi). With a similar 12 ft diameter cross-sectional area running at 900 rpm, the TPP can pump 722,860 gallons of water per minute and discharge at 1000 psi pressure, which can lift a water column 2,300 feet high or transport water horizontally for sixty miles.

Advantages

- High volume flow rates
- High Pressures
- Light weight and compact
- No booster pumps necessary

Research Activities

- TurboPiston Pump valve flow visualization testing and CFD analysis
- Test Laboratory for 12" TurboPiston Pump certifications



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