

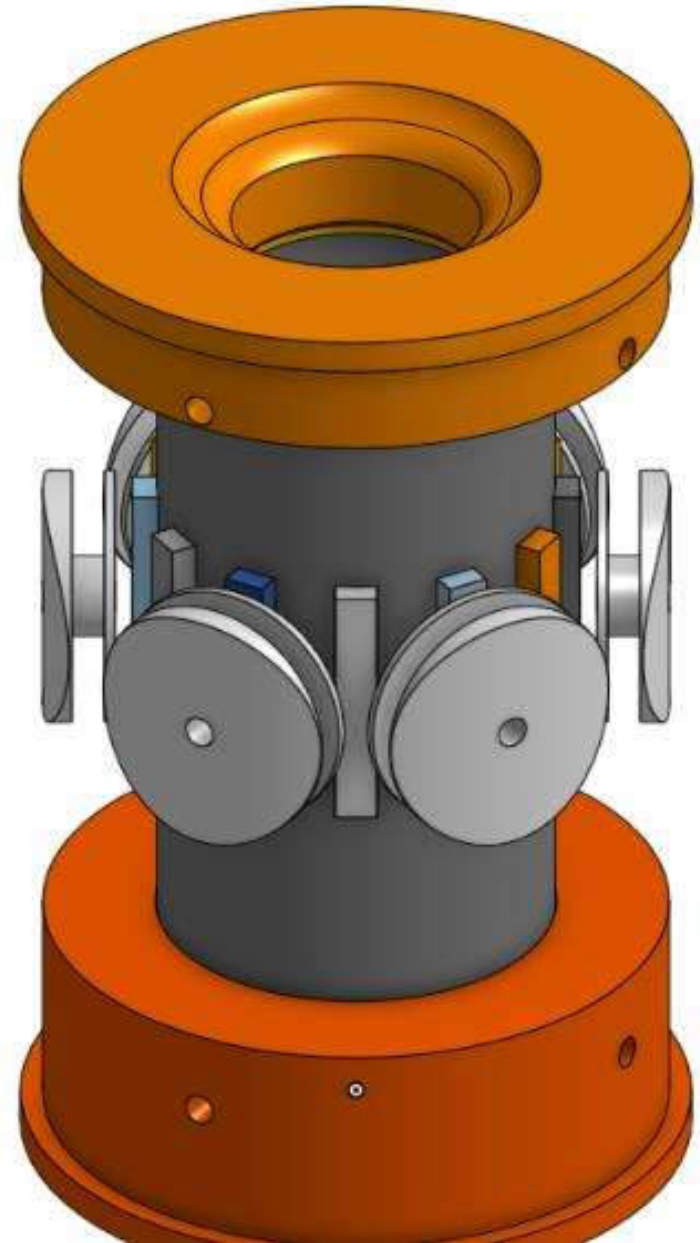
Water Turbine

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Design Overview

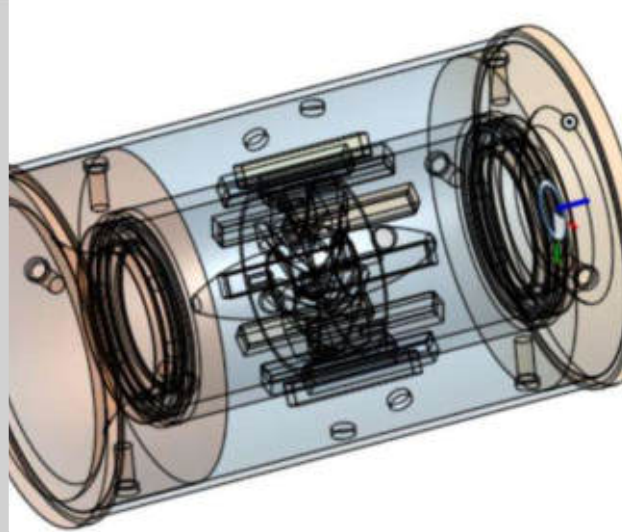
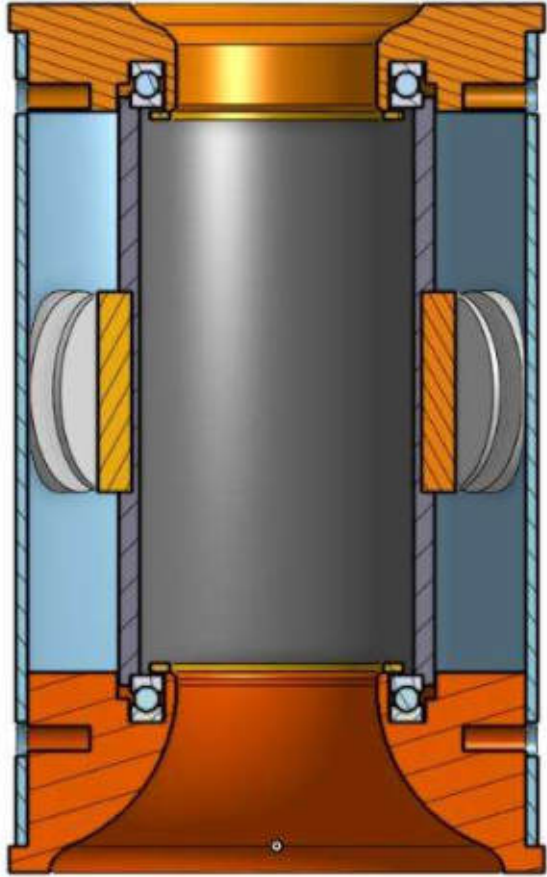
- ◇ Caps
- ◇ Funnel cloth
- ◇ Magnets
- ◇ Copper coils
- ◇ Bearings
- ◇ Turbines





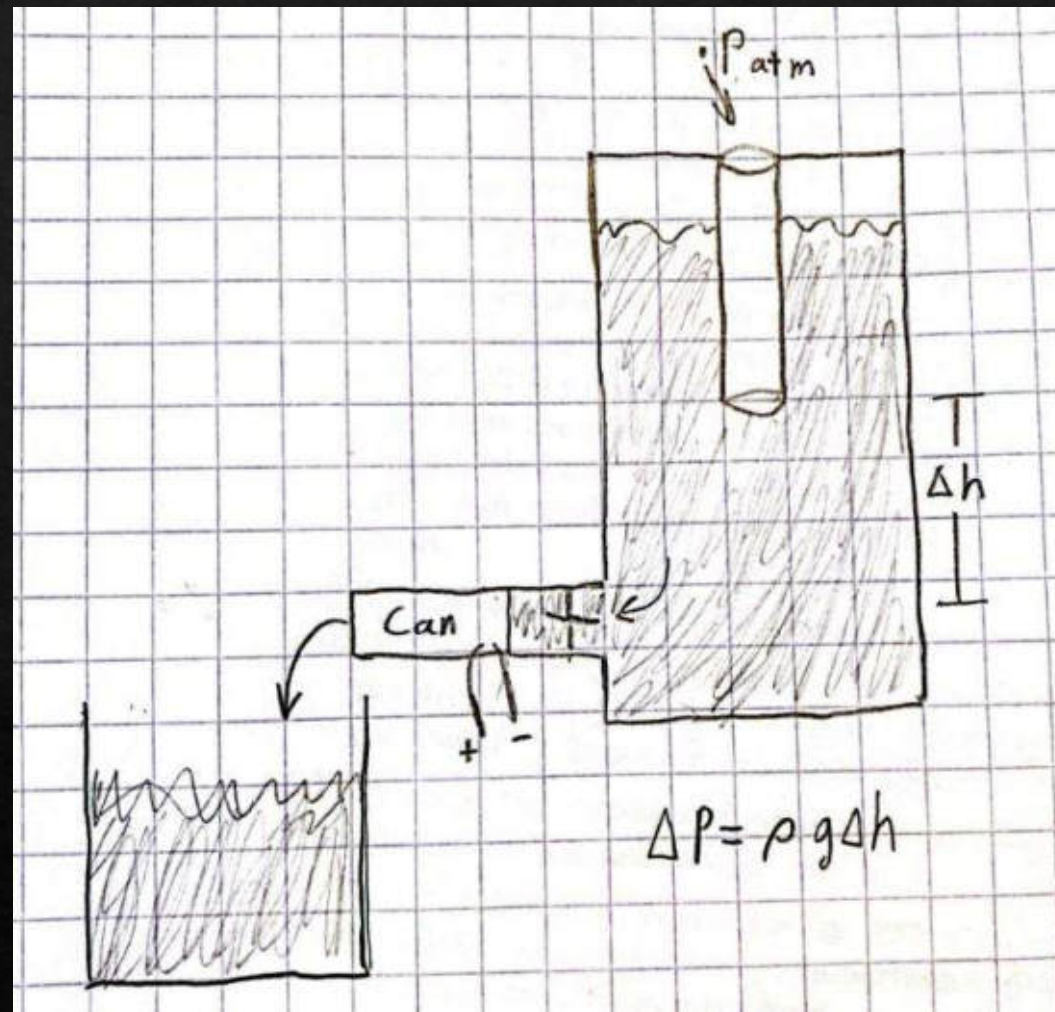
Manufacturing timeline

- Approval of CAD sketches and concepts from workshop technicians
- Turbine design research to maximize axial flow and desired torsion
- 3D printing of said turbines
- Manufacturing of casing and bearings, ordering of materials.
- Assembly and pitch to class for design optimization
- Testing for AC output using oscilloscope, consulted with EE's
- Success! A peak of 10V with manual rotations



Inner workings and
Principles

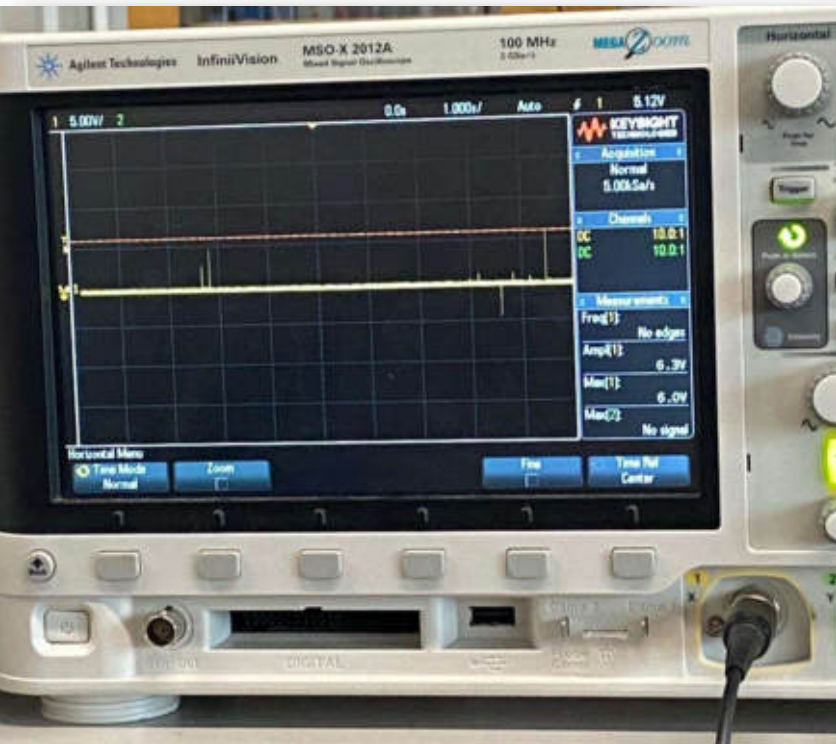
Testing Procedure



Actual Procedure

-First testing consisted of wiring up one set of coils to see if any alternate voltage was being generated by the hand -induced rotation





Second series
of tests