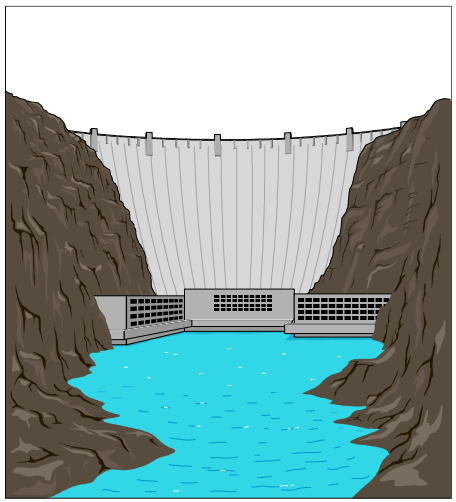
Wilcoxon Research
Vibration Product Training

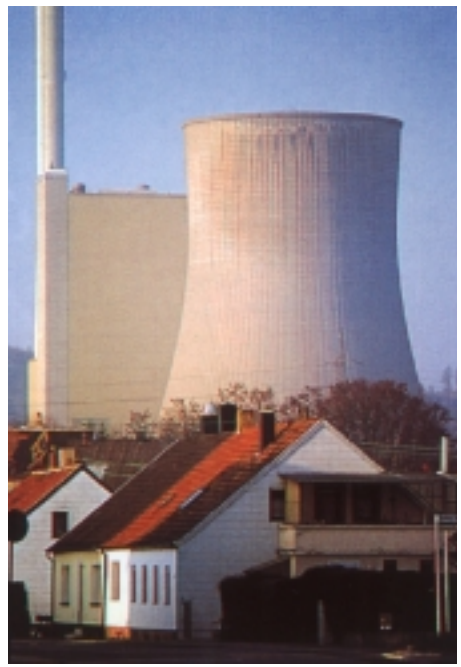
Primary Markets and Applications:

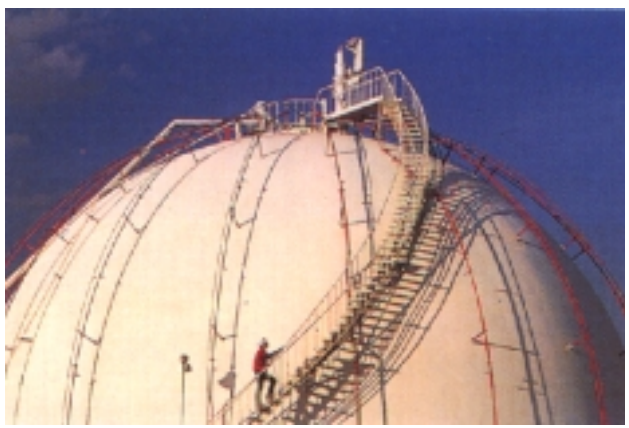
Power Generation

Power Generation

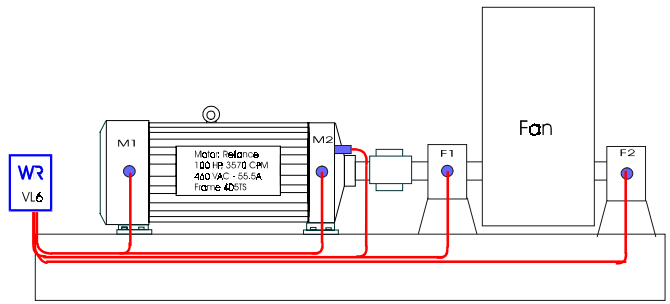


- Nuclear
- Fossil Fuels
- Hydroelectric
- Solar

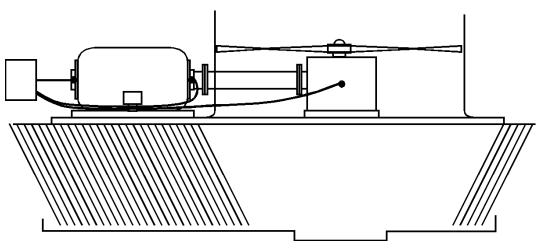




Power Generation Machinery

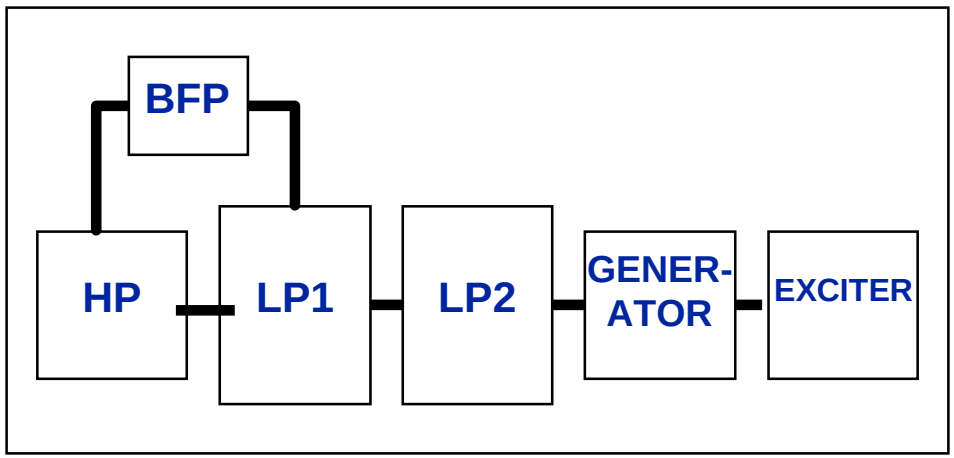


- Steam Turbines
- Gas Turbines
- Cooling Towers
- Boiler Feed Pumps
- Scrubber Fans



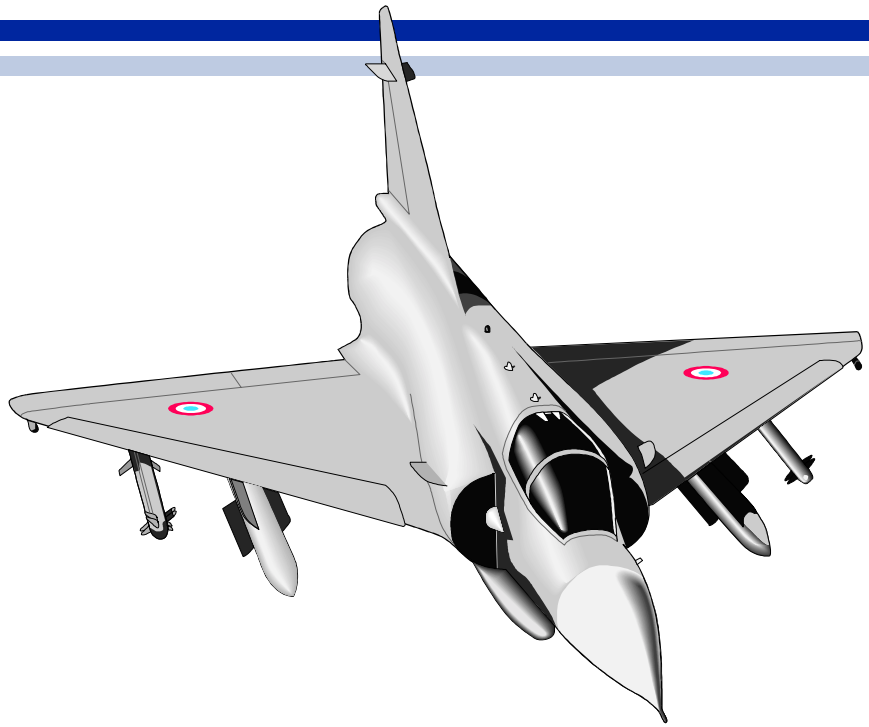
Power Generation: Steam Turbines and Boiler Feed Pumps

- Use PVT (Piezo-Velocity Transducer) with Proximity Probes for absolute shaft measurement.



- 793V and 797V will replace electrodynamic velocity sensors in IRD and Bentley Nevada Systems
- PVTs reduce cavitation overload by attenuating high frequency noise
- “R” version used for radioactive environments

Power Generation: Gas Turbines



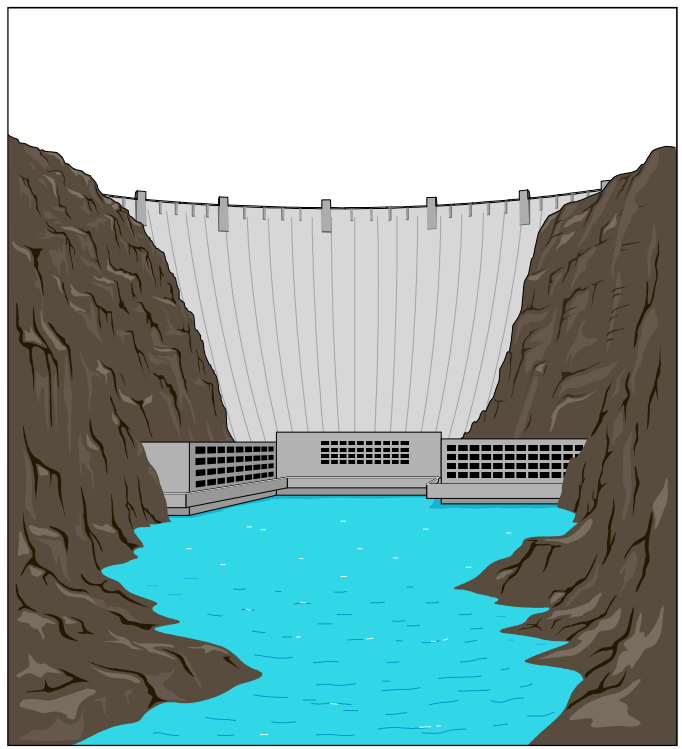
- High Temperature sensors near combustion chamber: Examples 376B, 797-6, Barium Titanate Sensors, Electrodynamic Velocity Sensors.

Use General Purpose Accelerometer on cooler locations.
Examples 793, 797, 786A

Power Generation:
Hydroelectric Generators

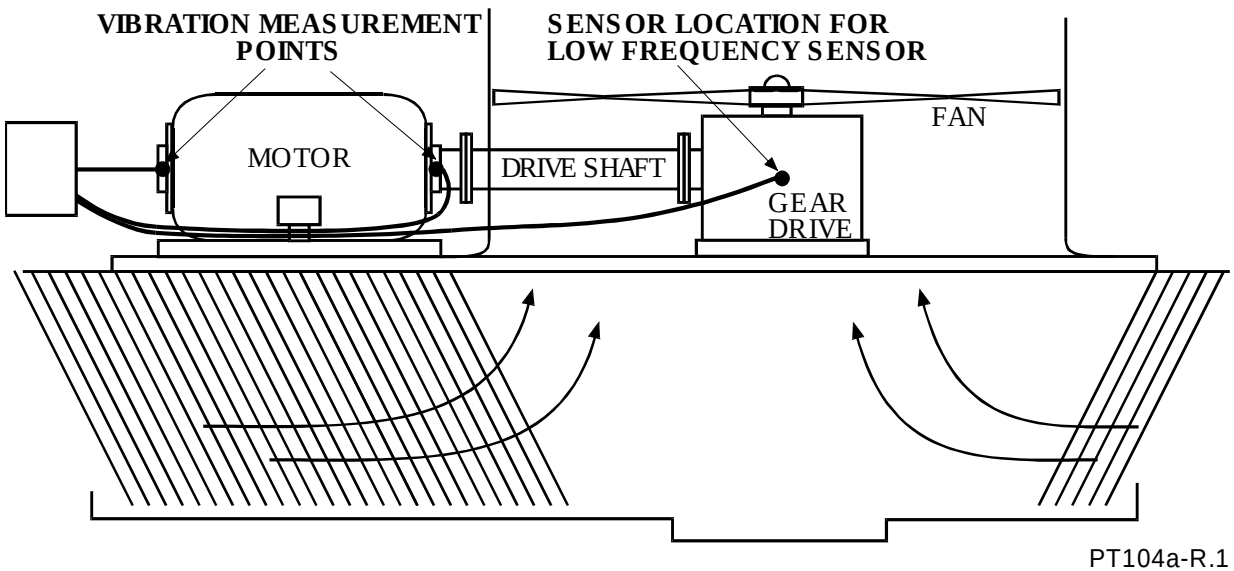
Use Low Frequency Accelerometer on Water Turbines.

Examples 793L, 797L, 799LF



Power Generation: Cooling Towers

Use General Purpose Accelerometer on Cooling Tower Motors. Examples 797, 786A

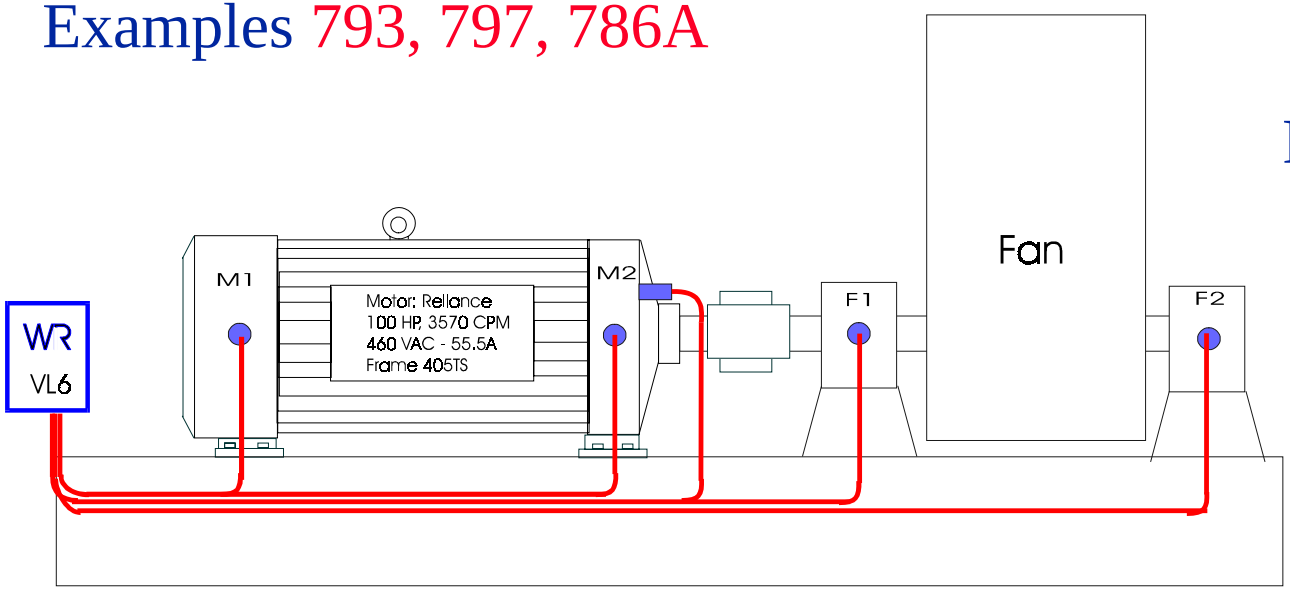


Route cables to VL Switch Box at the base of the tower

Use Low Frequency Accelerometer on Cooling Tower Fan Gearboxes. Examples 797L, 799LF

Power Generation: Scrubber Fans

Use General Purpose Accelerometer on Scrubber Fans.
Examples 793, 797, 786A



Route cables to VL Switch Box at central locations

Monitor each bearing in the horizontal plane and one measurment in the axial for each direct coupled shaft configuration. Vertical positions can be added for more complete information