## Cavitation Erosion Test Facility



Photograph of Cavitation-Erosion Test Facility


A Cavitation Erosion Test Facility has been developed and qualified as per ASTM G32. The test facility is being utilized for evaluating cavitation-erosion resistance of various stainless steels and coatings.

## Linear Reciprocating Tribometer

The Linear Reciprocating Tribometer is used to determine Frictional Force and Coefficient Of Friction to estimate wear characteristics of the required material. The top specimen is pressed against bottom specimen under dry, Lubricant (oil \& water) \& heated condition. The upper specimen moves in linear reciprocating motion under different conditions set with load, frequency and temperature while the stroke length is fixed at $0.5,1,1.5,2 \mathrm{~mm}$. After test the dimensional changes /mass losses for both top and Bottom specimens are used to calculate Wear Volume and Wear rate of the material under test.


## Pin On Disc test setup

The Pin on Disc sliding wear and friction Machine is used for conducting test on various Metals, Ceramics and Polymer pairs under sliding contact at various loads and sliding speeds, under dry, lubricated, vacuum, corrosion or in heated conditions. The ball or pin specimen is pressed against rotating disc under controlled applied load and sliding speed.


## Stereo Microscope

The Carl Zeiss Discovery V12 stereo Microscope is used for carrying out failure analysis, metallurgical studies and wear analysis of various tribological samples. It is also used to take images and to do measurements of various wear scars generated on samples during tribological tests.


