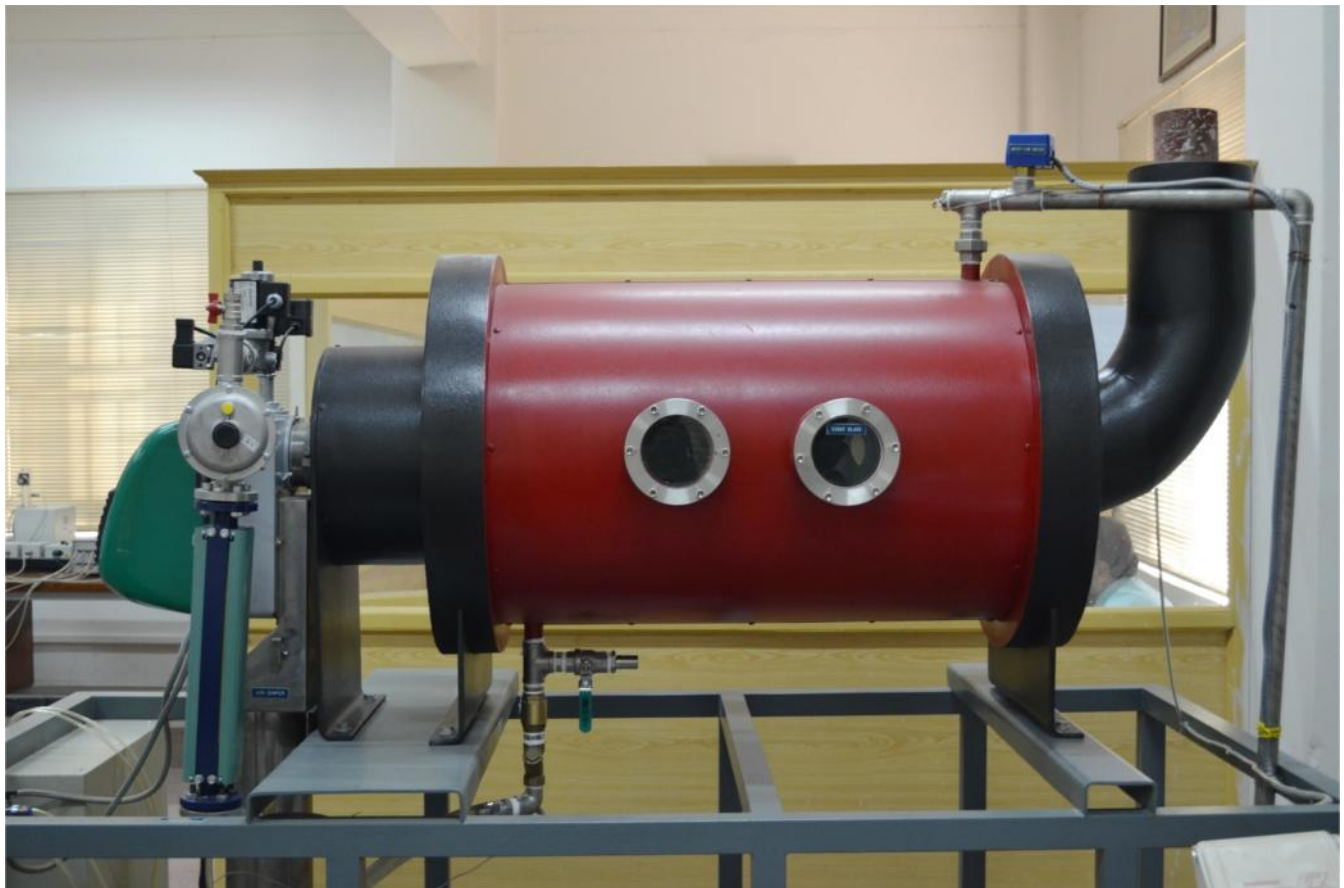


THERMODYNAMICS LABORATORY:

The principles of conversion of heat into work are demonstrated in the thermodynamics laboratory with state-of-the-art imported equipment. Here students can see internal parts of modern machines like petrol engine, diesel engine, turbo-jet engine and Wankel engine, operation and performance of complete thermal power plant, steam turbine, boiler and generator. The principle of conversion of chemical energy of fossil fuel (oil and gas) into heat is demonstrated and evaluated with the help of combustion process laboratory equipment. Internal combustion engine performance is evaluated on an engine test bed where petrol and diesel engine are tested. Boiler set up is used to demonstrate boiling process at different pressures and temperatures. Compressor performance is evaluated and characteristic curves are drawn on a centrifugal compressor unit. One of the most important practical and experimental aspects is how to calibrate pressure and temperature measuring instruments. It is performed with the help of pressure and temperature calibration unit.

1) Combustion Laboratory Unit



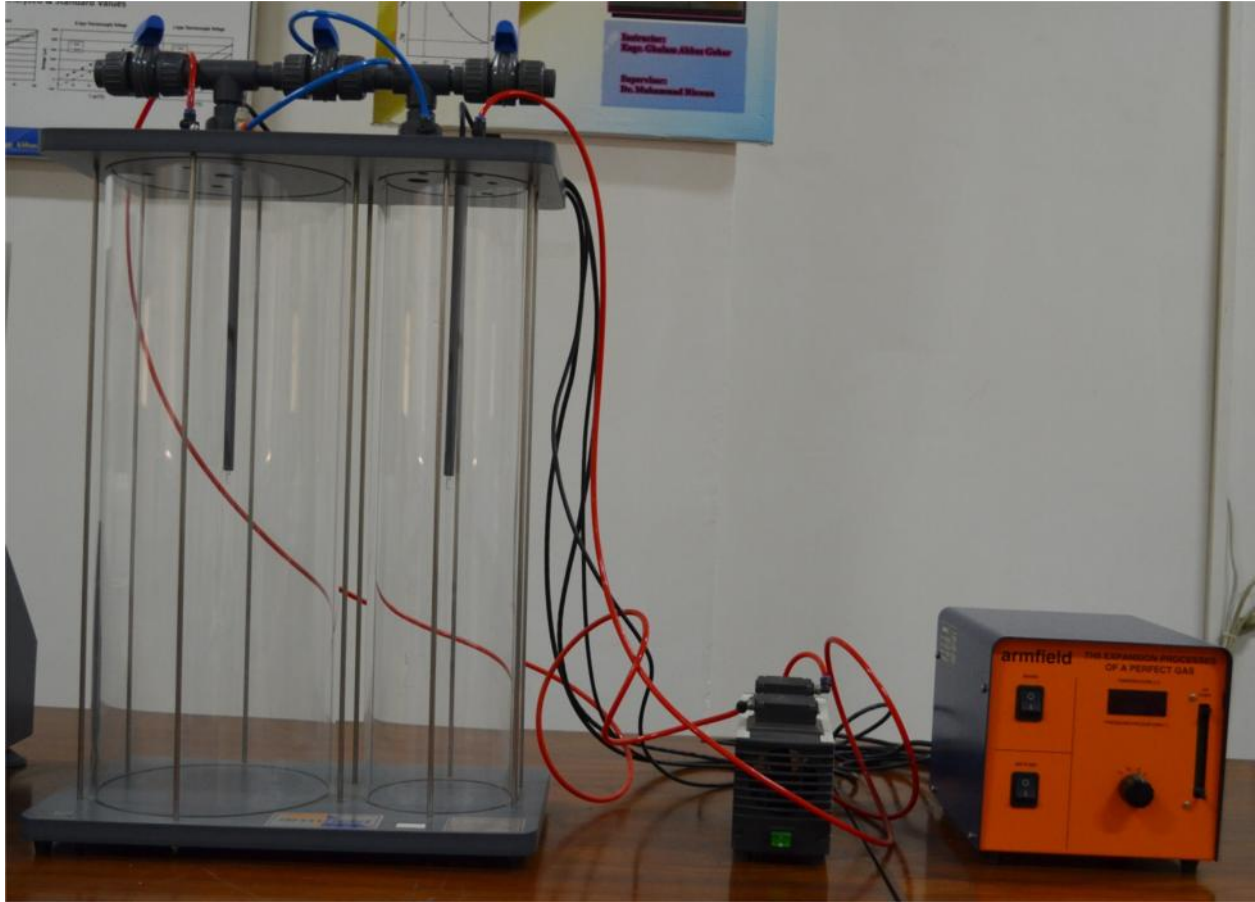
2) Pressure Measurement and Calibration



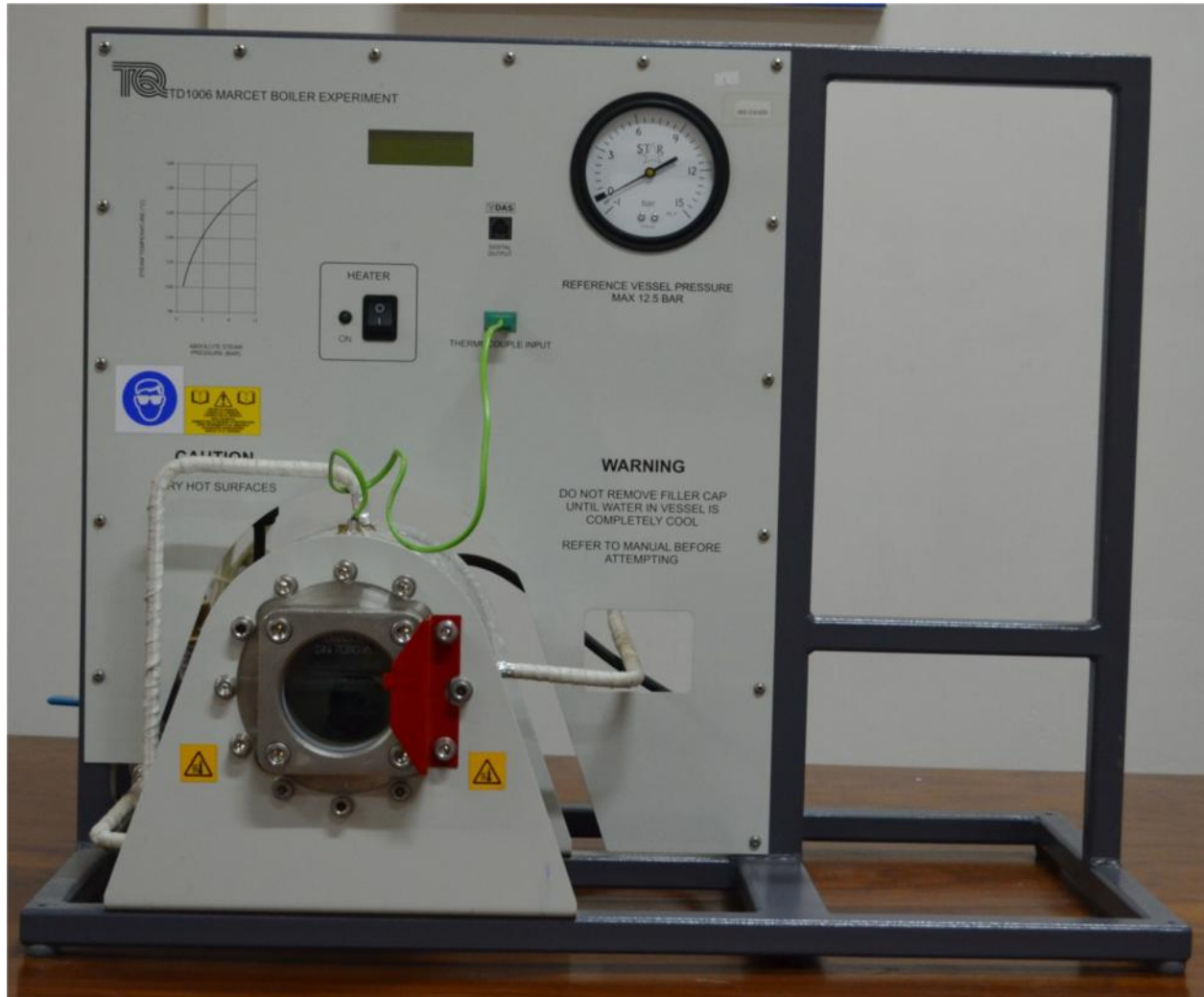
3) Temperature Measurement & Calibration



4) Expansion of Perfect Gases Apparatus



5) Marcet Boiler



6) Multi Stage Centrifugal Compressor



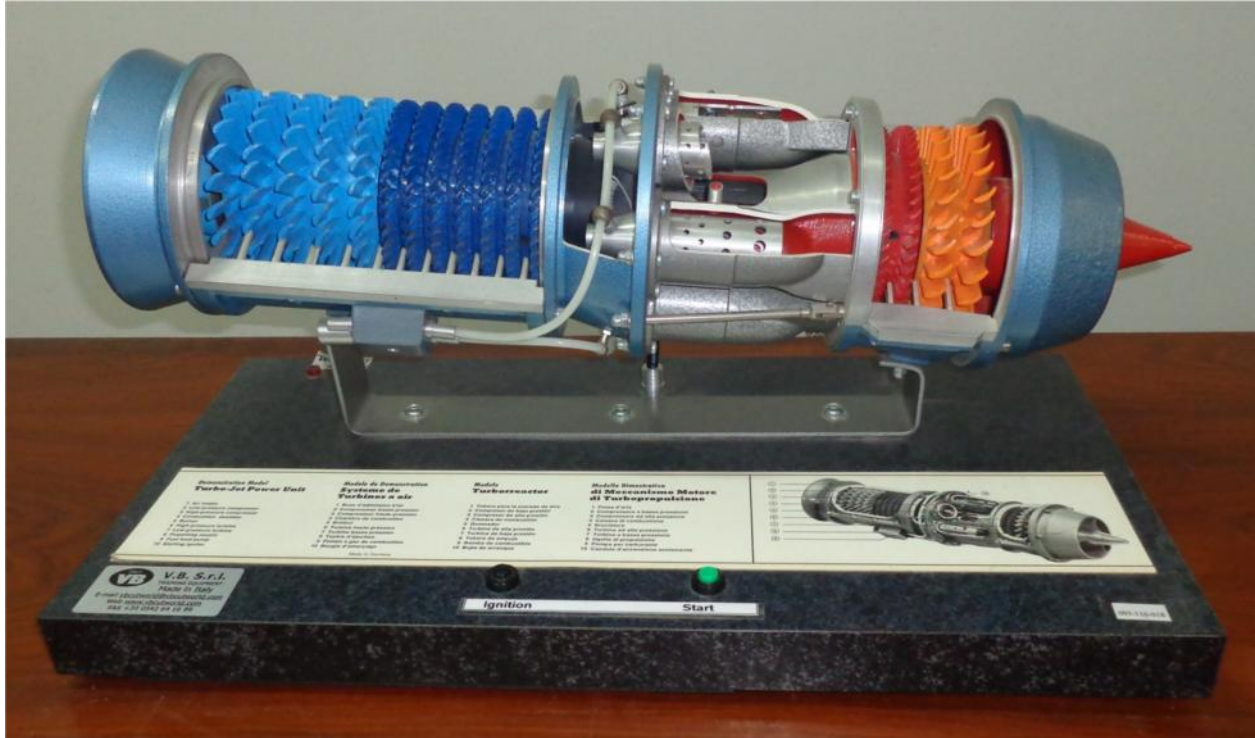
7) Single-Cylinder Steam Engine



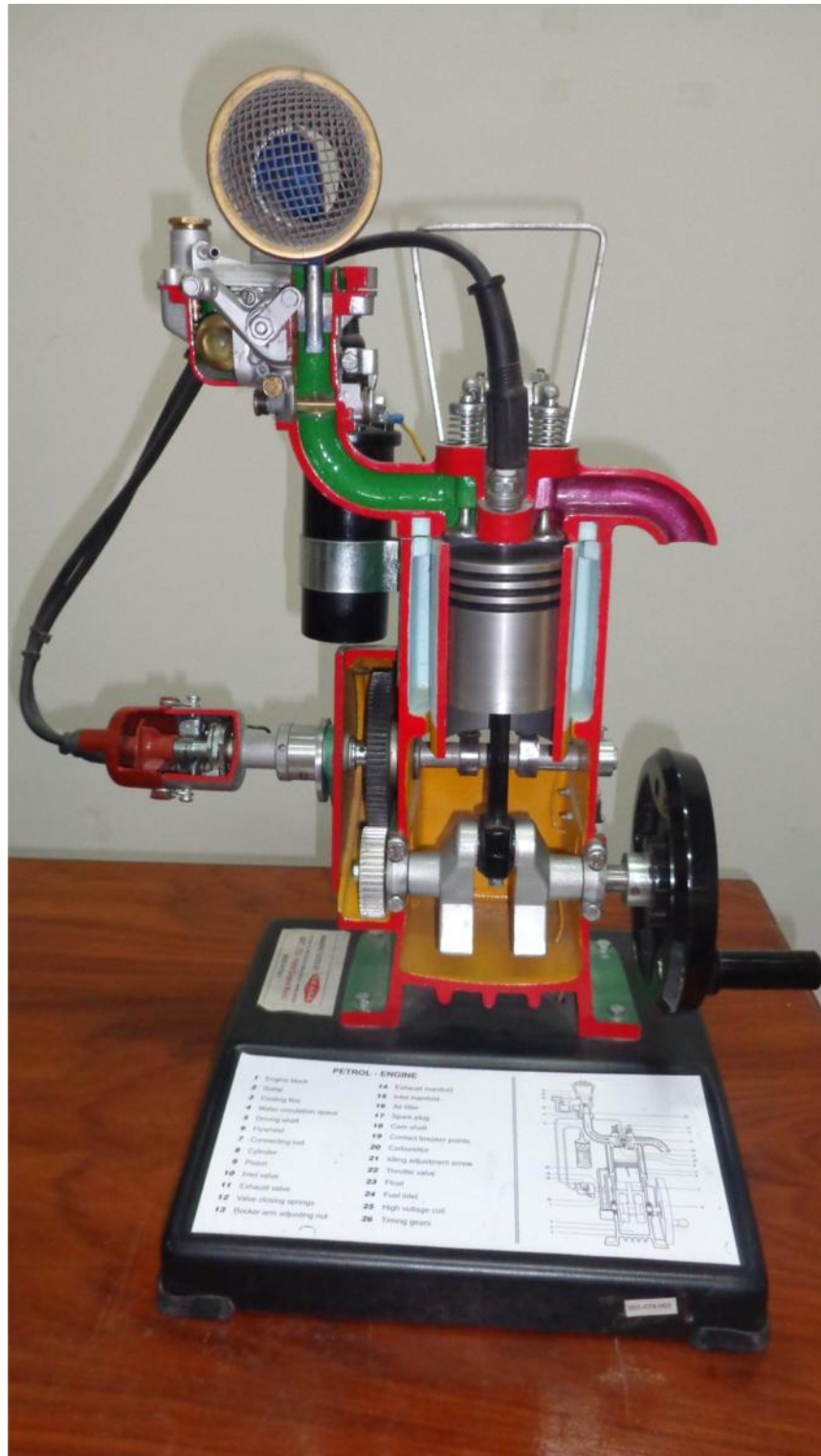
8) Functional Wankel Engine Model



9) Functional Turbo Jet Engine Model



10) Four Stroke Petrol Engine Model



11) Four Stroke Diesel Engine Model

