

THERMAL ENGINEERING LABORATORY



Laboratory : Thermal Engineering Laboratory
Laboratory In-charge : Mr.T.Nithyanandam
Technical supporting staff : Mr.K.Murugesan
Area of the laboratory : 18.2 X 12.5 Sq.M

Major Equipments:

- Single Cylinder 4 stroke Diesel Engine with rope Brake dynamometer
- Single cylinder air cooled 4 stroke petrol engine with electrical dynamometer
- Single cylinder 4 stroke Diesel Engine with electrical dynamometer
- Single stage twin cylinder air compressor test rig
- Cut section model of single cylinder 4 stroke diesel engine
- Cut section model of single cylinder 4 stroke Petrol engine
- Cut section model of single cylinder 2 stroke petrol engine
- Redwood viscometer
- Saybolt Viscometer
- Flash and fire point Open Cup apparatus (cleaveland)
- Multi cylinder 4 stroke petrol engine test rig with Hydraulic Dynamometer
- Retardation test arrangement in 4 stroke Diesel engine
- Variable speed air Blower test rig
- Steam Generator and Turbine test rig
- Single Cylinder 4 stroke diesel engine 5 HP DC Gen Motoring test
- Flash and fire point Closed Cup apparatus (Pensky Martin)
- Two stage Twin Cylinder air compressor Test Rig

Major Experiments:

- Conduct performance test on Single Cylinder 4 stroke Diesel Engine with rope Brake dynamometer
- Conduct performance test on Single cylinder air cooled 4 stroke petrol Engine with electrical dynamometer
- Conduct Heat Balance test on Single cylinder 4 stroke Diesel Engine with electrical dynamometer
- Conduct performance test on Single stage twin cylinder air compressor test rig
- Draw valve timing diagram in 4 stroke diesel engine
- Draw valve timing diagram in 4 stroke Petrol engine
- Draw Port timing diagram in 2 stroke petrol engine
- Determine viscosity of given sample of oil by Redwood viscometer
- Determine viscosity of given sample of oil Saybolt Viscometer
- Determine of oil Flash and fire point of given sample of oil by Open Cup apparatus (cleaveland)
- Conduct Morse test on Multi cylinder 4 stroke petrol engine test rig with Hydraulic Dynamometer
- Conduct Retardation test on 4 stroke Diesel engine
- Conduct performance test on Variable speed air Blower test rig
- Conduct performance test on Steam Generator and Turbine test rig
- Conduct test on Single Cylinder 4 stroke diesel engine 5 HP DC Gen Motoring test and find out friction power
- Determine of oil Flash and fire point of given sample of Closed Cup apparatus (Pensky Martin)
- Conduct performance test on two stage Twin Cylinder air compressor Test Rig