

FUELS AND LUBRICANTS LABORATORY

This laboratory determines the closed cup flash and fire points of petroleum products and mixtures to ascertain whether they give off inflammable vapors below a certain Temperature and determines the closed cup and open cup flash and fire points of petroleum Viscosity of lubricating oil is measured by an instrument known as viscometer.

The viscosity of given oil is determined as the time of flow in Engler's seconds and find the calorific value of the given gaseous fuel (LPG). Bomb calorimeter is normally used for determining the higher calorific value of solid fuels.

We can determine the cloud & pour point of a given fuel / lubricant / oil, using cloud and pour point apparatus.

ASTM method for Distillation of Petroleum Products at atmospheric pressure objectives and determining the boiling range of Kerosene and the curve by using ASTM distillation.

The facilities available in the laboratory

- Grease Penetrometer Apparatus
- Say bolt viscometer
- Red wood viscometer-I
- Redwood viscometer-II
- Engler's Viscometer Apparatus
- Bomb Calorimeter
- Junkers Gas Calorimeter
- Ables Flash and fire point Apparatus
- Pensky martens Apparatus
- Drop point of grease Apparatus

- Distillation Apparatus
- Cloud and Pour point Apparatus

S.No	Name of major equipments	Photo
1.	Ables Flash and fire point Apparatus	

S.No	Name of major equipments	Photo
2.	Pensky martens Apparatus	

S.No	Name of major equipments	Photo
3.	Say bolt viscometer	

S.No	Name of major equipments	Photo
4.	Red wood viscometer-I	


S.No	Name of major equipments	Photo
5.	Redwood viscometer-II	

S.No	Name of major equipments	Photo
6.	Englers Viscometer Apparatus	

S.No	Name of major equipments	Photo
7.	Junkers Gas Calorimeter	

S.No	Name of major equipments	Photo
8.	Bomb Calorimeter	

S.No	Name of major equipments	Photo
9.	Grease Penetrometer Apparatus	

S.No	Name of major equipments	Photo
10.	Drop point of grease Apparatus	

S.No	Name of major equipments	Photo
11.	Distillation Apparatus	

S.No	Name of major equipments	Photo
12.	Cloud and Pour point	 A photograph of a laboratory instrument used for determining cloud and pour points. The instrument consists of a white cylindrical base with a blue lid. Two yellow tubes are inserted into the lid, each passing through a red and white seal. The instrument is supported by two black legs. The background is a plain, light-colored wall.

