Mr. Jagdish Ghia

+91 9892063369

PETROLEUM, OIL, GREASE, PAINT TESTING EQUIPMENTS

501, Krishna Kunj, 6th Road, Santacruz (East), s

Mumbai -400055. India

Email.: canna.instruments@gmail.com

GSTIN/UIN: 27AACPG3016AZ1L

INDEX

Category Canna-01 Abel Flash Point Apparatus

Manual with energy regulator

Manual with digital indicator

Semi-automatic

Automatic

Description

IS – 1448(P-20) (without thermometer).

1. Manual model, temperature control with energy regulator & with oil jet or gas jet test flame
……Do…… with digital indicator……
2. Semi-automatic model
3. Fully automatic model

Optional Spares (Price can be quoted on request)

1. Cup with lid
2. Collor for abel Cup Thermometer
3. Heater Unit
4. Heater Element

Category Canna-02 Aniline Point Apparatus

Method A with infrared heater

Method B

Description

Method A: As per IP 12 & IS 1448 (P-3), ASTM D 611 method a complete with jacket. Aniline point is used to characterize pure hydrocarbons and to indicate the aromatic content of hydrocarbon mixtures. Equal volumes of aniline and sample or sample plus n heptane are stirred together while being heated at a controlled rate. After the two phases become miscible, the mixture is cooled at a controlled rate and the temperature at which the two phases separate is the aniline point or mixed aniline point of the sample.

Method B: The aniline point method B is a thin-film procedure used to determine the aniline point of hydrocarbon solvents and petroleum products that are too dark to test using method A of ASTM D611. The method involves:

- Mixing equal parts of aniline and the sample or sample plus n-heptane in a test tube.
- Heating the mixture at a controlled rate while stirring,
- Cooling the mixture at a controlled rate,
- Recording the temperature at which the two phases separate as the aniline point.

An aniline point apparatus is used to perform the test and includes:

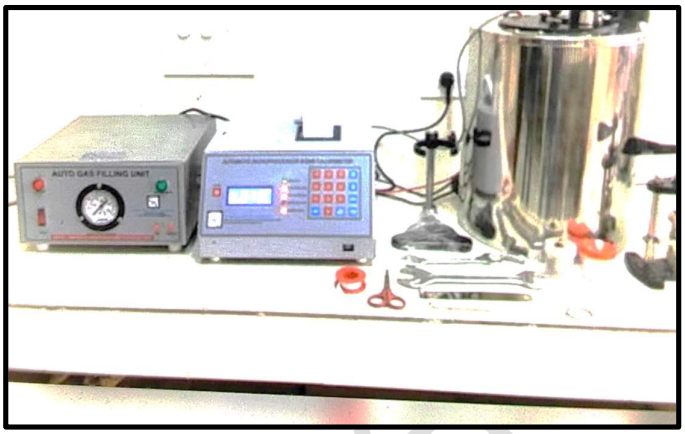
- An electric heating device with an electronic regulator
- A speed regulator for stirring and pumping the test samples
- A heat-resistant Pyrex beaker
- An adjustable support for the pumping motor
- A heat-resistant, graduated Pyrex test tube

Optional Spares for Method A (Price can be quoted on request)

1. Outer jacket with cork.
2. Tube with cork
3. Brass Stirrer Inner
4. Infrared Heater
5. Thermometer for above

Category Canna-03 Bomb Calorimeter

Semi- automatic



Automatic

Description

As per IP 12 & ASTM D 4809 complete with one stainless steel bomb with crucible, 3000 cc capacity jacketed vessel, motorized stirrer, briquette press, firing unit, pressure gauge with copper pipe, fittings, magnifying glass, nichrome wire 40 swg & Digital Thermometer.

-do- Automatic Model.

A. Manual bomb calorimeter

1) Temp detection manual
2) Calculation manual
3) Oxygen filling manual

---------do--------temp detection automatic

B Fully automatic model

1) Temp rise detection automatic
2) Calculation automatic
3) Auto oxygen filling
4) Printer pc connectivity

Optional Spares (Price can be quoted on request)

1) S.S. Bombs
2) Valve
3) Neoprene Washer
4) Stainless Steel Crucible
5) Tablet

Category Canna-04 Carbon Residue Conradson

Description

As per IP 13 & ATSM D 189 IS – 1448 (P-122) This test method determines relative coke forming property of petroleum oils. The test method also covers the determination of the amount of carbon residue left after evaporation and pyrolysis of an oil, and is intended to provide some indication of relative coke-forming propensity. Complete (Single test Apparatus) with Porcelain crucible.

Optional Spares (Price can be quoted on request)

1. Meker burner for above
2. Porcelain crucible
3. Nichrome triangle
4. Inner crucible with lid
5. Outer crucible with lid

Category 05 Cloud and Pour Point Apparatus

Refrigerated Model

Description

As per IP -15 & 219 & ASTM D 2500, IS 1448 (P- 10) (without thermometer). This test method determines the lowest temperature of a liquid specimen when the smallest observable cluster of wax crystals first appears upon cooling under prescribed conditions (cloud point) and to determine the lowest temperature at which movement of the oil observed (Pour Point)

A. Double Test Apparatus

With insulated body S.S.

Use with dry ice With 2 tubes……

----------do----------4 Tubes----------

Optional Spares (Price can be quoted on request)

1. Glass Jar
2. Metal Jacket
3. Cork Sheet
4. Neoprene gasket

B. Cloud & Pour Point Refrigerated

1. Refrigerated model with one compartment of -55 ^{0}C.
2. Refrigerated model with one compartment of -70 ^{0}C.
3. Refrigerated unit with three compartments of 0 ^{0}C, -17 ^{0}C & -34 ^{0}C.
4. Refrigerated unit with four compartments of 0 ^{0}C, -17 0C, -34 ^{0}C & -70 ^{0}C.

Category Canna-06 Copper Strip Corrosion Test Apparatus

Description

As per IP 154 & IS 1448 (P-15) (without thermometer) & ASTM D 130 & ASTM D 1838 only bath for 6 bombs (50^0C & 100^0C) with Copper Strip test assesses the relative degree of corrosivity of petroleum products including aviation fuels, natural gasoline, solvent, kerosene, diesels, lubricating oil & other products. This test method detects the presence of components in liquefied petroleum gases which may be corrosive to copper.

Optional Spares (Price can be quoted on request)

1. Stainless steel bomb
2. Test tube 25mm X 150mm
3. Copper Strip
4. Inspection Tube
5. O' ring
6. Vice Single Strip
7. Grit Paper
8. Carbide grain (Per Kg.)
9. Test Tube Hanger

Category Canna-07 Distillation Range Apparatus for Petroleum Products

Double

Single

Description

As per IP 123 & IS 1448 (P – 180) & ASTM D 86 (without thermometer) with one flask of 125 cc, One Cylinder of 100 cc. and two asbestos Board. SS cooling bath with condenser tube

Electrically heated model with voltage Power Regulator and geared heater unit of side or front delivery type.

Optional Spares (Price can be quoted on request)

1.100 cc cylinder

2. 125 cc flask

3. 250 cc flask

4. Asbestos board (32, 38 & 70 mm hole)

5. Ceramic base Heating Unit

6. Heater Element Replaceable

7. Silicon cock for flask

8. Silicon cock for side arm

Category Canna-08 Dean and Stark Apparatus

Description

For estimation of moisture in lubricating oils as per IP – 74, ASTM D- 95 IS 1448 (P - 40) with one 10 cc receiver, condenser & mental. This test method covers the determination of water in the range from 0 to 25 % volume in petroleum products, tars, and other bituminous materials by the distillation method. It is used for determining the water content by heating up to the boiling point of the water and then condense that steam with the help of the condenser to get the water content in percentage form.

Optional Spares (Price can be quoted on request)

1. 2 cc receiver
2. 5 cc receiver
3. 10 cc receiver
4. 500 ml flask
5. Condenser
6. Heater for above with energy regulator (mental)

Category Canna-09 Dielectric Breakdown voltage of insulating oils

Different type of electrodes

Description

As per ASTM D 877, ASTM D 1816, IP-295. The dielectric breakdown voltage of an insulating liquid is of importance as a measure of the liquid's ability to withstand electric stress without failure. The dielectric breakdown voltage serves to indicate the presence of contaminating agents such as water, dirt, cellulosic fibres, or conducting particles in the liquid, one or more of which may be present in significant concentrations when low breakdown voltages are obtained.

1. Insulating Oil Tester Cap.0-60 Kv

……..Do……..Motorised Voltage Control

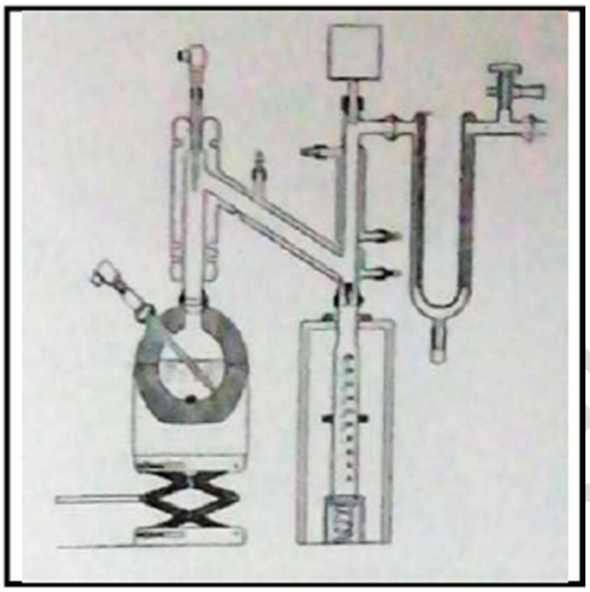
2. ----------Do----------Cap. 0-100kv

……..Do……..Motorised Voltage Control

Optional Spare (Price can be quoted on request)

3. Cell for above

Category Canna-10 Distillation of Petroleum Products at Reduced Pressures



Description

As per ASTM D 1160, (without Pressure Regulator). This test method covers the atmospheric distillation of petroleum products using a laboratory batch distillation unit to determine quantitatively the boiling range characteristics of such products as natural gasolines, light and middle distillates, automotive spark-ignition engine fuels, aviation gasolines, aviation turbine fuels.

Optional Spares (Price can be quoted on request)

1. Pressure Regulator
2. Circulating Bath

Category Canna-11 Existent Gum for 5 test baths

Description

Fitted with pressure gauge as per IP 131 & ASTM D 381 & IS 1448 (P – 29) with 5 beakers complete (without thermometer)

Optional Spares (Price can be quoted on request)

1. Steam Super Heater, Steam Generator
2. Beaker
3. Conical Adaptor
4. Pressure Gauge
5. Flow Meter (For Air)
6. Flow Meter (For Steam)

Category Canna-12 Ford Cup B4

Description

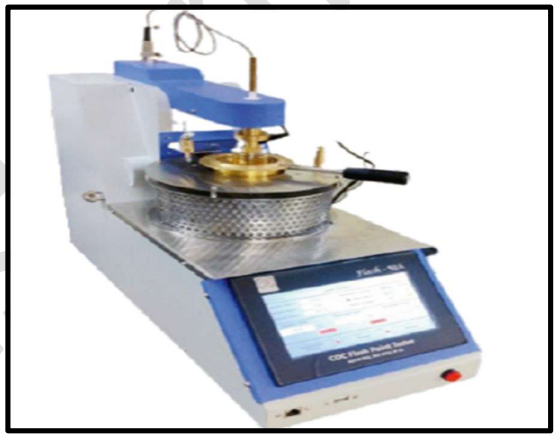
As per IS 101, B-4 type complete with stand & level cup only. Flow cups supply viscosity data generally expressed in seconds flow time when the fluid is flowing through a hole at a given temperature. Viscosity is calculated from this flow time to centistokes (CST). Paint, ink, varnishes and similar industries use flow cups to calculate the viscosity quickly

Category Canna-13 Flash and Fire point Apparatus Cleveland

Manual

Manual with digital control

Semi-automatic



Automatic

Description

As per IP 36 ASTM D 92, IS 1448 (P 69) (without Thermometer). Oil jet or gas jet test flame.

1) Manual model, temperature control with energy regulator.

……..Do…….. with Digital Indicator.

2) Semi-Automatic Model

3) Automatic Model

Optional Spares (Price can be quoted on request)

1. Cup with Handle
2. Hot Plate Concealed

Category Canna-14 Florescent Indicatory Adsorption (FIA) Apparatus

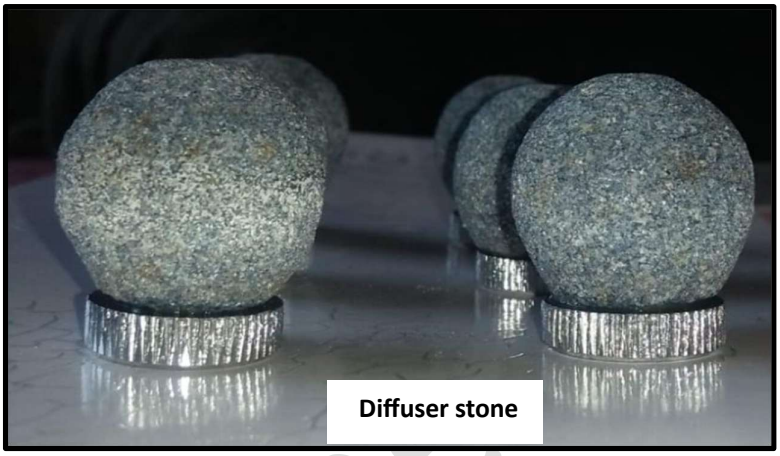
Description

As per ASTM D 1319 – IP 156, IS 1448 (P - 23) Comprises wall mounted unit for two columns, pressure gauge, valves, gas manifold & Vibrator (without column & ultra violet light source). Canna make FIA is a series of apparatus used for the determination of saturated, non-aromatic olefins, and aromatics in petroleum fractions that distil below 315°C (600°F) by Fluorescent Indicator Adsorption (FIA Method). It is available in 6, 4, and 2 position versions.

Optional Spares (Price can be quoted on request)

1. Ultra Violets Light Source
2. Vibrator Unit Hand Operator
3. Standard Columns
4. Hypodermic needle
5. Hypodermic Syringe
6. Cleaning needle Stainless Steel
7. Dyegell for above (Per 10 grams)
8. Vibrator Unit with Stand

Category Canna-15 Foaming Apparatus for testing characteristics of lubricating oils



Description

As per IP 146, ASTM D 892 &IS 1012, IS 1446 with one jar
and Flowmeter (without volume meter)
–do—with two jars

Optional Spares (Price can be quoted on request)

1. Volume Meter
2. 1 lit. Cylinder
3. Diffuser Stone
4. Flow Meter

Category Canna-16 Freezing Point Apparatus for Aviation Fuels

Description

As per IP 16 & ASTM D 2386 IS 1446

A) complete with vacuum flask & wooden cabinet (without thermometer)

B) -do- with Motorise Stirring.

Optional Spares (Price can be quoted on request)

1. Jacketed Sample Tube
2. Unsilvered Vacuum Flask
3. Brass Packing Gland
4. Stirrer
5. Wooden Cabinet

Category Canna-17 Oxidation stability for Gasoline

Description

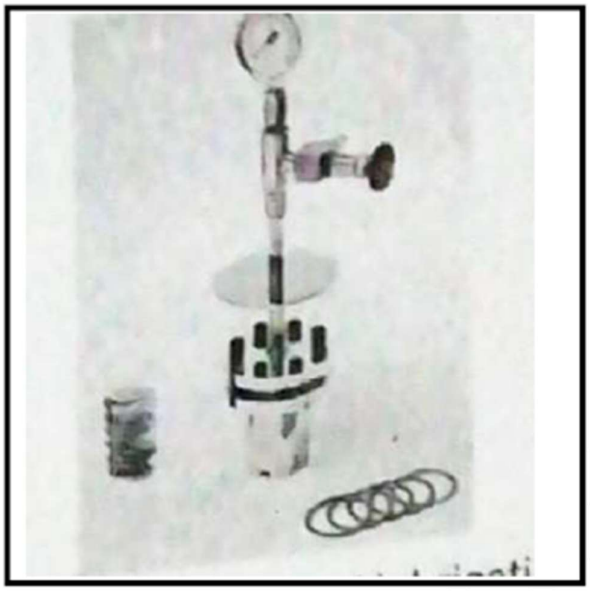
As per ASTM D 525 – IP 40 IS 1448 A) water bath

for two unit along with one bomb assembly (Needle valve & Pressure Gauge) & glass sample container with cover B) –do—with pressure recorder

Optional Spares (Price can be quoted on request)

1. Bomb made of Stainless Steel
2. Pressure gauge 0-200 PSI
3. Pressure Recorder
4. Glass Sample container with cover
5. 'O' ring for bomb Oxygen Charging Lead
6. Oxygen Charging Lead

Category Canna-18 Oxygen stability for lubricating grease by Oxygen Bomb Method



Description

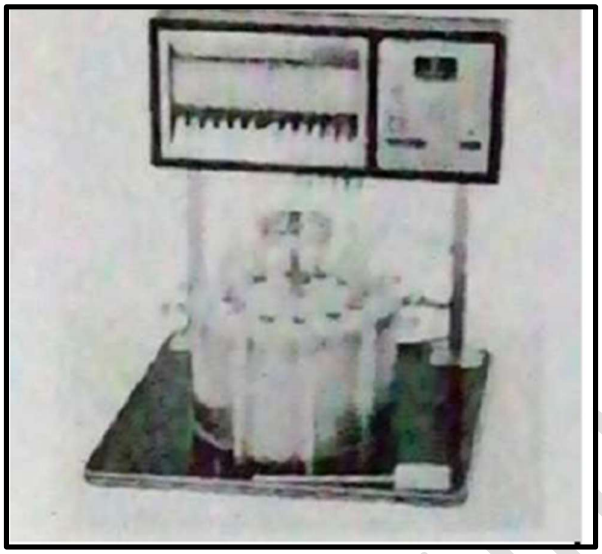
As per ASTM D 942 – IP 142 Effect of Copper on Oxidation Stability of lubricating grease A) With water bath for two unit along with one bomb assembly (Needle valve & Pressure Gauge) & Glass Dish. B)

– do—with pressure recorder

Optional Spares (Price can be quoted on request)

1. Bomb made of Stainless Steel
2. Pressure gauge 0-200 PSI
3. Pressure Recorder
4. Glass Dish
5. 'O' ring for bomb Oxygen Charging Lead
6. Oxygen Charging Lead

Category Canna-19 Oxygen stability of inhibited mineral turbine oils



Description

Oxidation stability of straight mineral oil IP 306 Oxidation stability of mineral insulating oil IP 307

Stability – corrosion test for non-aqueous fire-Resistant Fluids IP 331

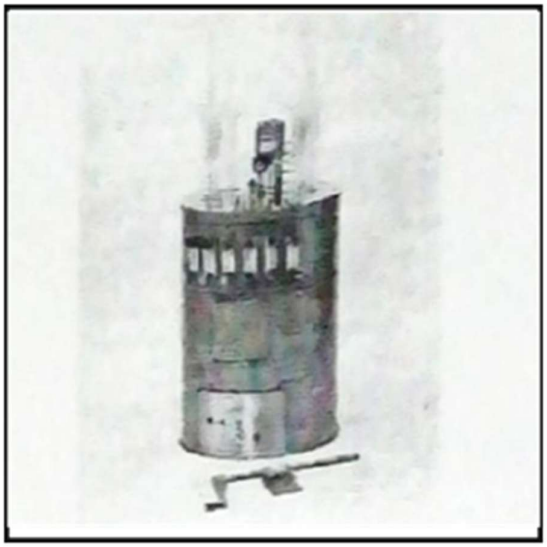
Oxidation stability of inhibited mineral insulating oils IP 335

Twelve test Aluminium block bath. Glassware six-way set comprising twelve combined oxidation/absorption tube

Optional Spares (Price can be quoted on request)

1. Oxidation/absorption Tube
2. Iron catalyst wire
3. Copper catalyst wire
4. 12 Set of flowmeters

Category Canna-20 Oxidation characteristics of inhibited steam



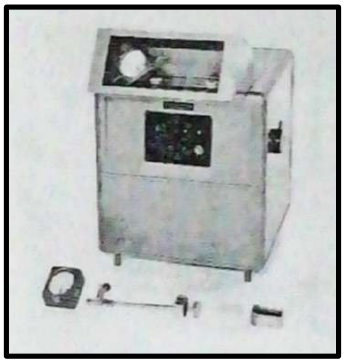
Description

Turbine oils as per ASTM D 943.Oxidation stability of Distillate Fuel oil (Accelerated Method) as per ASTM D 2274.Determination of the sludging tendencies of inhibited mineral oils as per ASTM D 4310. Six- Test temp, Controlled oil bath. Glass ware- condenser, test tube, delivery tube.

Optional Spares (Price can be quoted on request)

1. Steel Catalyst wire
2. Copper catalyst wire
3. Wire colling mandrel
4. 6 set of flow meter

Category Canna-21 Oxidation stability of Inhibited Mineral Insulating Oil by Pressure Vessel



Description

Steam turbine oils by Rotating Bomb method with one bath & one bomb as per ASTM D 2112, ASTM D 2272 IP 229

Category Canna-22 Pensky Martins Flash Point Tester Closed

Manual

Semi-automatic

Automatic

Description

As per IP 34, ASTM D 93 & IS 1448 (P-21) (without thermometer)

1. Manual model, temperature control with energy regulator with oil jet test flame
   ….Do……With digital indicator and motorised stirring
2. Semi-Automatic Model
3. Automatic Model

Optional Spares (Price can be quoted on request)

1. Flexible Drive for motorise stirrer
2. Brass cap with Lid shutter & stirrer
3. Thermometer collar
4. Motorise stirrer with flexible drive

Category Canna-23 Ramsbottom Carbon Residue Apparatus

Description

As per IS 1448 (P-8) ASTM D 524 and IP 14 with 5 Nos coking bulbs. This test method measures the deposit forming tendency of fuels & guidelines of processing of refinery products. The method also covers the determination of the amount of carbon residue left after evaporation and pyrolysis of an oil. Round bath 14-inch diameter 10-inch- high with voltage carrier and digital indicator in separate unit.

Rectangular bath compacts with digital controller

Optional Spares (Price can be quoted on request)

1. Coking bulb
2. Coking bulb filling Rack
3. Tongs

Category Canna-24 Redwood Viscometer

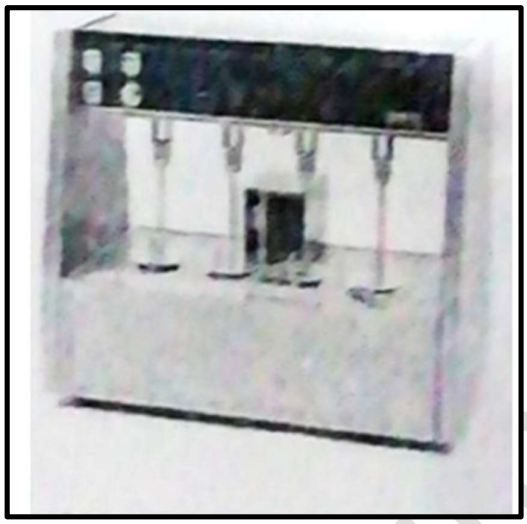
A. No.1 (without thermometer) according to IP 70 Used for determination of Viscosity of lubricating oils and fuels with Stainless steel jet (Viscosity below 2000 secs) A) Electrically heated model with energy regulator. B) Electrically heated model with Power Regulator.

B. No.2 (without thermometer) as per IP 70 with stainless steel jet (viscosity above 2000 secs) A) Electrically heated model with energy regulator. B) Electrically heated model with power regulator.

Optional Spares (Price can be quoted on request)

1. Cup with ball valve
2. Viscosity Cup

Category Canna-25 Rust preventing characteristic of steam turbine oil in presence of water



Description

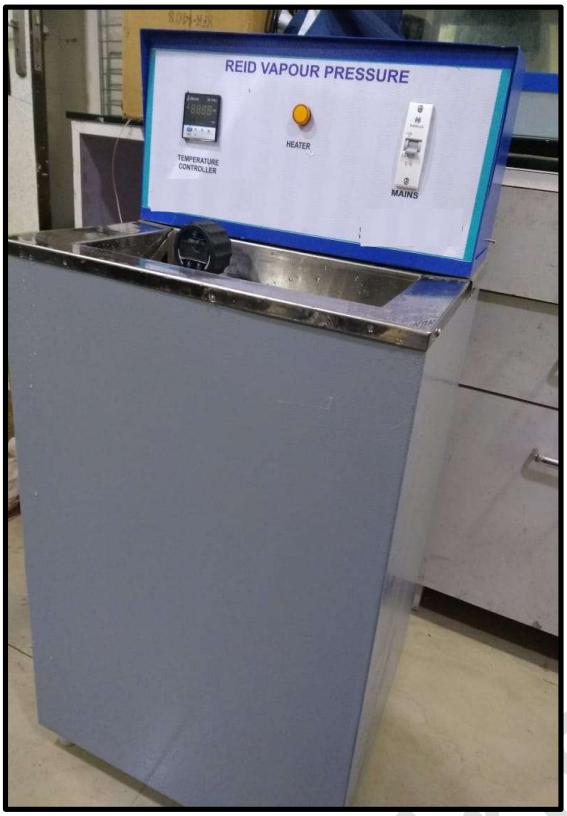
As per IP-135 & ASTM D 665 & IS 1448 (P-96) (without thermometer) Determines a lubricant's ability to prevent rusting of metal surfaces.

Suitable for steam turbine oils, gear oils, hydraulic oils and other types of inhibited mineral oils. A steel test specimen is immersed in a heated mixture of sample oil and water which is stirred continuously during the test.
A) 4 tests apparatus complete **B)** -do – 6 tests apparatus.

Optional Spares (Price can be quoted on request)

1. Beaker
2. Test piece
3. Stirrer
4. Acrylic lid

Category Canna-26 Reid Vapor Pressure Test



Description

As per IP 69 IS 1448 (P-39) ASTM D 323 ASTM D 1267

A. Bath for Two bomb Test with motorised stirrer controlled by Digital Controller.

Do for 4 tests Do for 6 tests

B. Vapour Pressure bomb consisting Air chamber gasoline chamber 20% -do – 33 1/4%

C. Air chamber with straight through valve bleeder valve assembly gasoline chamber with inlet valve 20% -do – 33 1/4%

D. Gauge for above as per IP 69

0-15 PSI

0-30 PSI

0-45 PSI

0-100 PSI

Manometer on wooden stand with metallic socket but without Mercury. Metallic socket for above as per IP-69. Bleeder valve. Stright through valve

Category Canna-27 Silver Corrosion by Aviation Turbine Fuels

Description

As per IP 227, ASTM D 4636 (without thermometer) Bath for 6 tests with thermostatically control - do – with digital control

Optional Spares (Price can be quoted on request)

1. Vice
2. Test tube amber glass
3. Cold finger condenser
4. Glass cradle
5. Silver strip 99% purity

Category Canna-28 Sulfur by bomb Method

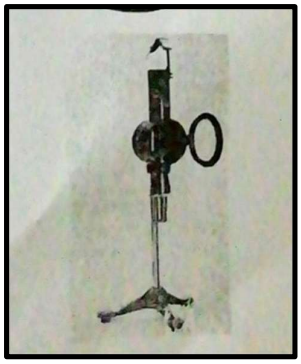
Description

As per IS 1448 (P-33) IP 61 & ASTM D 129 consisting of one S.S. crucible, one oxygen filing device and one container. This test method covers the determination of sulfur in petroleum products, including lubricating oils containing additives, additive concentrates, and lubricating greases that cannot be burned completely in a wick lamp. The test method is applicable to any petroleum product sufficiently low in volatility that it can be weighed accurately in an open sample boat and containing at least 0.1 % sulfur.

Optional Spares (Price can be quoted on request)

1. Valve
2. Crucible
3. Ignition Wire
4. Cotton Thread
5. Firing Unit
6. Oxygen Charging Lid

Category Canna-29 Smoke Point Apparatus



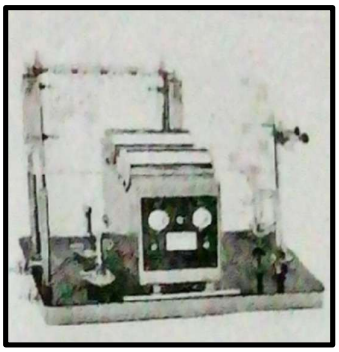
Description

As per IP 57 & IS 1448 (P-31) & ASTM D 1322. Smoke point is the maximum height, in millimetres, of a smokeless flame of fuel burned in a wick-fed lamp of specified design. This test method covers a procedure for determination of the smoke point to measure combustion quality of aviation turbine fuel & kerosene.

Optional Spares (Price can be quoted on request)

1. Candle
2. Wick

Category Canna-30 Sulfur content -Quartz tube method



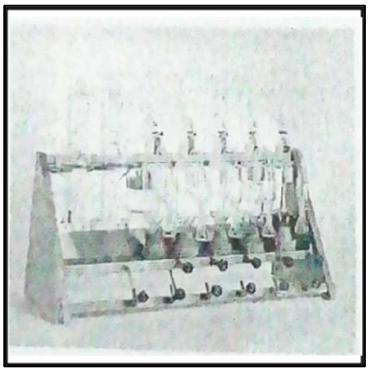
Description

As per ASTM D 1551 IP 63, IS 1448 (P-33) comprises of dual furnace transformer supply 24 volts to heater temp. Up to 1000C, pt- Pt/Rh thermocouple mounted on heavy stand along with clamps and control panel. This test determines the sulfur content within the range of 0.1 to 5 percent by weight in petroleum oils which cannot be burned completely in a wick lamp. The sample is burned in a quartz tube, then driving the combustion gas by a current of air through oxygenated water.

Optional Spares (Price can be quoted on request)

1. Quarts tubes
2. Burner for LP Gas
3. Glassware
4. Quartz tubes
5. Right angled connectors
6. Primary absorbers
7. Secondary absorbers
8. Splash bulbs
9. Scrubbers
10. Levelling bulbs

Category Canna-31 Sulfur by lamp method



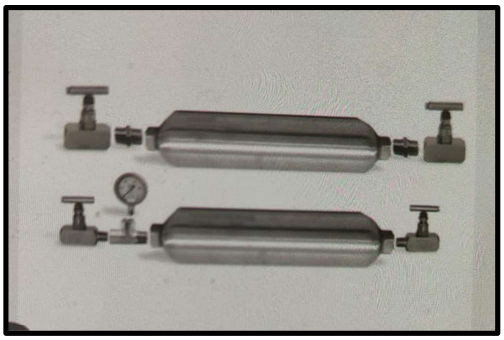
Description

As per IP 107 & IS 1448 (P-34) & ASTM D 1266 complete with all glass parts, Manifolds, the test method provides a means of monitoring the sulfur level of various petroleum products & additives to predict performance handling or processing properties This test method covers the determination of total sulfur in liquid petroleum products in concentrations from 0.01 to 0.4 mass %. A) 3-unit apparatus. B) 6-unit apparatus.

Optional Spares (Price can be quoted on request)

1. Synthetic Air Unit
2. Chimney
3. Reservoir
4. (Burner) Manometer
5. Pressure regulator

Category Canna-32 Sampling bombs stainless steel



Description

As per ASTM D 1265, ASTM D 1266 IP 104, IP 51 IP 181

A. Single valve model maximum working pressure 250 bar (3265 Ibf/in^2) - 50 ml, 100 ml

B. Double valve model- 50 ml, 250 ml, 500 ml, 1000 ml (with pressure guage)

Optional Spares (Price can be quoted on request)

1. Straight through valve 1/8 BSP Female (for single valve bombs)
2. Right angle valve 1/8 BSP male to 1/8 Female (for double value bombs)

Category Canna-33 Sediment by Extraction Apparatus of Crude and Fuel Oils

Description

As per IP 53 & ASTM D 473 & IS 1448 Complete

Optional Spares (Price can be quoted on request)

1. Thimble
2. Metal Condenser
3. Glass Cup
4. Flask 1 litre
5. Thimble Basket

Category Canna-34 A.S.T.M. Thermometers

(Made in accordance with the standards issued by American Society for Testing & Materials)

A.S.T.M. Equivalent	Purpose	I.P. Ref	Range (degree celcius ° c)	Total Length(mm)	Immersion Length
1C	Partial Immersion		-20/150c x 1c	322	76
2C	Partial Immersion	62C	-5/300c x 1c	395	76
3C	Partial Immersion	73C	-5/400c x 1c	415	76
5C	Cloud & Pour	1C	-38/50c x 1c	230	108
6 C	Low Cloud & Pour	2C	-80/20c x 1c	230	76
7C	Low Distillation	5C	-2/300c x 1c	385	Total
8C	High Distillation	6C	-2/400c x 1c	385	Total
9C	Low pensky- Martens	15C	-5/110c x 0.5c	290	57
10C	High pensky- Martens	16C	90/370c x 2c	290	57
11C	Cleveland Open Flash	28C	-6/400c x 2c	310	25
12C	Density Wide Range	64C	-20/102c x 0.2c	420	Total
13C	Loss on heating	47C	155/170c x 0.5c	165	Total
14C	Wax melting point	17C	38/82c x 0.1c	375	79
15C	Softening point low	60C	-20/80c x 0.2c	395	Total
16C	Softening point high	61C	30/200c x 0.5c		
17C	Saybolt Viscosity		19/27c x 0.1c	275	Total
18C	Saybolt Viscosity	23C	34/42c x 0.1c	275	Total
19C	Saybolt Viscosity		49/57c x 0.1c	275	Total
20C	Saybolt Viscosity		57/65c x 0.1c	275	Total
21C	Saybolt Viscosity		79/87c x 0.1c	275	Total
22C	Saybolt Viscosity	24C	95/103c x 0.1c	275	Total
23C	Engler Viscosity		18/28c x 0.2c	212	90
24C	Engler Viscosity		39/54c x 0.2c	235	90
25C	Engler Viscosity		95/105c x 0.2c	212	90
26C	Stab. Test of Sol. Nitrite		130/140c x 0.1c	463	Total
27C	Turpentine Distillation		147/182c x 0.5c	301	76
28C	Kinematic Viscosity	31C	36.6/39.4c x 0.05c	310	Total
29C	Kinematic Viscosity	34C	52.6/55.4c x 0.05c	305	Total
33C	Aniline Point	20C	-38/42c x 0.2c	420	50
34C	Aniline Point Medium	21C	25/105c x 0.2c	420	50
35C	Aniline Point high	59C	90/170c x 0.2c	420	50
36C	Titer test		-2/68c x 0.2 c	405	45
37C	Solvents Distillation	77C	-2/52c x 0.2c	395	100
38C	Solvents Distillation	78C	24/78c x 0.2c	395	100
39C	Solvents Distillation	79C	48/102c x 0.2c	395	100
40C	Solvents Distillation	80C	72/126c x 0.2c	395	100
41C	Solvents Distillation	81C	98/152c x 0.2c	395	100
42C	Solvents Distillation	82C	95/255c x 0.5c	395	100
43C	Kinetic Viscosity	65C	-51.6/-34c x 0.1c	415	Total
44C	Kinetic Viscosity	29C	18.5/21.5c x 0.05c	310	Total
45C	Kinetic Viscosity	30C	23.6/26.4c x 0.05c	310	Total
46C	Kinetic Viscosity	66C	48.6/51.4c x 0.05c	310	Total
47C	Kinetic Viscosity	35C	58.6/61.4c x 0.05c	310	Total

A.S.T.M. Equivalent	Purpose	I.P. Ref	Range (degree celcius ° c)	Total Length(mm)	Immersion Length
48C	Kinetic Viscosity	90C	80.6/83.4c x 0.05c	305	65
49C	Stomer Viscosity		20/70c x 0.2c	49C	49C
52C	Butadiene B.P		-10/5c x 0.1c	162	Total
53C	Benzene Freezing point		-0.6/10.4c x 0.1c	190	Total
54C	Congealing Point	18C	20/100c x 0.25c	315	Total
56C	Bomb Calorimeter		19/35c x 0.2c	590	Total
57C	Tag Closed Tester L.R		-20/50c x 0.5c	290	57
58C	Tank		-34/49c x 0.5c	305	Total
59C	Tank		-18/82c x 0.5c	305	Total
60C	Tank		77/260c x 1 c	305	Total
61C	Petrolatum M.P	63C	32/127c x 0.2c	380	79
62C	Precision		-38/2c x 0.1c	380	Total
63C	Precision		-8/32c x 0.1c	380	Total
64C	Precision		25/55c x 0.1c	380	Total
65C	Precision		50/80c x 0.1c	380	Total
66C	Precision		75/105c x 0.1c	380	Total
67C	Precision		95/155c x 0.2c	380	Total
68C	Precision		145/205c x 0.2c	380	Total
69C	Precision		195/305c x 0.5c	380	Total
70C	Precision		295/405c x 0.5c	380	Total
71C	Oil in wax	72C	-37/21c x 0.5c	355	76
72C	Kinetic Viscosity	67C	-19.4/-16.6c x 0.05c	305	Total
73C	Kinetic Viscosity	68C	-41.4/-38.6c x 0.05c	305	Total
74C	Kinetic Viscosity	69C	-55.3/-52.5c x 0.05c	305	Total
82C	Fuel Rating Engine		-15/105c x 1c	160	30
83C	Fuel Rating Air		15/70c x 0.5c	170	40
84C	Fuel Rating Ori. Tank		20/80c x 0.5c	160	30
85C	Fuel Rating Surge		40/150c x 1c	310	181
86C	Fuel Rating Mix		95/175c x 1c	170	35
87C	Fuel Rating Coolant		150/205 c x 0.5c	170	40
88C	Vegetable Oil Flash		10/200c x 1c	290	57
89C	Solidification Point		-20/10c x 0.1c	370	76
90C	Solidification Point		0/30c x 0.1c	370	76
91C	Solidification Point		20/50c x 0.1c	370	76
92C	Solidification Point		40/70c x 0.1c	370	76
93C	Solidification Point		60/90c x 0.1c	370	76
94C	Solidification Point		80/110c x 0.1c	370	76
95C	Solidification Point		100/130c x 0.1c	370	76
96C	Solidification Point		120/150c x 0.1c	370	76
97C	Tank		-18/49c x 0.5 c	305	Total
98C	Tank		16/82c x 0.5c	305	Total
99C	Weathering Test		-50/5c x 0.2c	300	35
100C	Solidification Point		145/205c x 0.2c	370	76
101C	Solidification Point		195/305c x 0.5c	370	76

A.S.T.M. Equivalent	Purpose	I.P. Ref	Range (degree celcius ° c)	Total Length(mm)	Immersion Length
102C	Solvents Distillation	83C	123/177c x 0.2c	400	100
103C	Solvents Distillation	84C	148/202c x 0.2c	400	100
104C	Solvents Distillation	85C	173/227c x 0.2c	400	100
105C	Solvents Distillation	86C	198/252c x 0.2c	400	100
106C	Solvents Distillation	87C	223/277c x 0.2c	400	100
107C	Solvents Distillation	88C	248/302c x 0.2c	400	100
110C	Kinematic Viscosity 135C	93C	133.6/136.4c x 0.05c	300	Total
111C	Tar Acids Distillation		170/250c x 0.2c	400	100
112C	Solidification Point		4/6c x 0.02c	220	Total
113C	Bituminous Material	89C	-1/175c x 0.5c	406	Total
114C	Avi.Fuel Freezing Point	14C	-80/20c x 0.5c	300	Total
116C	Bomb Calorimeter		18.9/25.1c x 0.01c	609	Total
117C	Bomb Calorimeter		23.9/30.1c x 0.01c	609	Total
118C	Kinetic Viscosity		28.6/31.4c x 0.05c	310	Total
120C	Kinetic Viscosity	92C	38.5/41.5c x 0.05c	310	Total
121C	Kinetic Viscosity	32C	98.5/101.5c x 0.05c	310	Total
122C	Brookefield Viscosity	94C	-45/-35c x 0.1c	300	Total
123C	Brookefield Viscosity	95C	-35/-25c x 0.1c	300	Total
124C	Brookefield Viscosity	96C	-25/-15c x 0.1c	300	Total
125C	Brookefield Viscosity	97C	-15/-5c x 0.1c	300	Total
126C	Kinetic Viscosity	71C	-27.4/-24.6c x 0.05c	305	Total
127C	Kinetic Viscosity	99C	-21.4/-18.6c x 0.05c	305	Total
128C	Kinetic Viscosity	33C	-1.4/1.4c x 0.05c	305	Total
129C	Kinetic Viscosity	36C	91.6/94.4c x 0.05c	305	Total

Category Canna-35 S.T.P.T.C. Thermometers

(made in accordance with the specifications issued by the Standardisation of Tar Products Tests committee in their handbook “Standard Methods For Testing Tar & its Produces”)

Schedule	A.S.T.M. Equivalent	Range (degree celcius ° c)
T	1C	10 to 20 ° c
T	3C	0 to 120 ° c
T	4C	-2 to 400 ° c
T	5C	15 to 45 ° c
T	7C	65 to 90 ° c
T	8C	70 to 150 ° c
T	9C	50 to 210 ° c
T	11C	105 to 115 ° c
T	12C	130 to 160 ° c
T	14C	150 to 250 ° c
T	16C	175 to 230 ° c
T	17C	19.5 to 75.5 ° c

Canna-36 I.P. Thermometers

I.P. REF	Purpose	A.S.T.M. Equivalent	Range (degree celcius ° c)	Total Length(mm)	Immersion Length (mm)
1C	Cloud & Pour	5C	-38/ 50c x 1c	230	108
2C	Low Cloud &Pour	6C	-80/20c x 1c	230	76
3C	Demulsification		-1/105c x 0.5c	260	Total
4C	Crude Oil Distillation		-4/360c x 2c	310	Total
5C	Low Distillation	7C	-2/300c x 1c	385	Total
6C	High Distillation	8C	-2/400c x 1c	385	Total
8C	Flushing Case Low		0/45c x 0.2c	340	65
9C	Flushing Case Medium		40/85c x 0.2c	340	65
10C	Redwood High		76/122c x 0.2c	340	65
14C	Avi. Fuel Freezing Point	114C	-80/20c x 0.5c	300	Total
15C	Low Pensky-Martens	9C	-5/110c x 0.5c	290	57
16C	High Pensky-Martens	10C	90/370c x 2c	290	57
17C	Wax Melting Point	14C	38/82c x 0.1c	375	79
18C	Congealing Point	54C	20/100.6c x 0.25c	310	Total
20C	Low Aniline Point	33C	-38/42c x 0.2c	420	50
21C	Medium Aniline Point	34C	25/105c x 0.2c	420	50
22C	Oxidation		195/205c x 0.1c	300	100
23C	Reid Vapour Pressure	18C	34/42c x 0.1c	275	Total
24C	Oxidation Stability	22C	95/103c x 0.1c	275	Total
	Abel Oil Cup		10/65c x 0.5c	228	
	Abel Water Bath		32/88c x 0.5c	228	
28C	Cleveland Open flash	11C	-6/400c x 2c	310	25
29C	Kin.Viscosity 20c	44C	18.6/21.4c x 0.05c	300	Total
30C	Kin.Viscosity 25c	45C	23.6/26.4c x 0.05c	300	Total
31C	Kin.Viscosity 37.8c	28C	36.6/39.4c x 0.05 c	300	Total
32C	Kin.Viscosity 98.9c	121C	98.6/101.4c x 0.05c	300	Total
33C	Kin.Viscosity 0c	128C	-2/2 x 0.05 c	300	Total
34C	Kin.Viscosity 54.4c	29C	52.5/56.5c x 0.05c	300	Total
35C	Kin.Viscosity 60c	47C	58/62c x 0.05c	300	Total
36C	Kin. Viscosity 93.3c	129C	91/95c x 0.05c	300	Total
37C	Sludge		144/156c x 0.02c	270	100
38C	Pen		23/27c x 0.1c	260	Total
39C	Density		-1/38c x 0.1c	440	Total
40C	Drop Point Low		20/120c x 1c	250	100
41C	Drop Point High		100/230c x 1c	250	100
42C	Breaking Point		-38/30c x 0.5c	370	250

I.P. REF	Purpose	A.S.T.M. Equivalent	Range (degree celcius ° c)	Total Length(mm)	Immersion Length (mm)
43C	F.P Cut Back(int.)		10/110c x 0.5c	305	61
44C	F.P Cut Back(ext.)		15/121c x 0.1c	305	61
45C	Refractometer		15/30c x 0.2c	160	22
46C	Wentphal Balance		14.5/21c x 0.1c	160	Total
47C	Loss On Heating	13C	150/175c x 0.5c	155	Total
48C	Tank Low		-38/30c x 0.5c	310	Total
49C	Tank Medium		-15/40c x 0.5c	310	Total
50C	Tank High		10/65c x 0.5c	310	Total
51C	Tank Heated Fuel		35/120c x 0.5c	310	Total
52C	Tank Bitumen		90/260c x 1c	310	Total
53C	Tank Cargo		0/80c x 0.5c	310	Total
59C	High Aniline Point	35C	90/170c x 0.2c	420	50
60C	Softening Point Low	15C	-2/80c x 0.2c	395	Total
61C	Softening Point High	16C	30/200c x 0.5c	395	Total
62C	Partial Immersion	2C	-5/300c x 1c	390	76
63C	Petroleum M. P.	61C	32/127c x 0.2c	380	79
64C	Density Wide Range	12C	-20/102c x 0.2c	420	Total
65C	Kin. Viscosity Low	43C	-51.6/-34c x 0.1c	410	Total
66C	Kin. Viscosity Low 50c	46C	48.6/51.4 x 0.05c	300	Total
67C	Kin. Viscosity -17.8c	72C	-19.2/ 16.4c x 0.05c	300	Total
68C	Kin. Viscosity -40c	73C	-41.4/-38.6c x 0.05c	300	Total
69C	Kin.Viscosity -53.9c	74C	-55.3/-52.5 x 0.05c	300	Total
70C	Toast		72/126c x 0.2c	375	100
71C	Kin.Viscosity Low -21.6c	126C	-27.5/-24.7c x 0.05c	300	Total
72C	Oil in Wax	71C	-37/21c x 0.5c	355	76
73C	Partial Immersion	3C	-5/400c x 1c	415	76
74C	Abel Oil Cup W.R.		-35/70c x 0.5c	310	61
75C	Abel Water Bath W.R		-30/80c x 0.5c	310	89
76C	Engler Viscosity		10/65c x 0.5c	240	93
77C	Solvents Distillation	37C	-2/52c x 0.2c	395	100
78C	Solvents Distillation	38C	24/78c x 0.2c	395	100
79C	Solvents Distillation	39C	48/102c x 0.2c	395	100
80C	Solvents Distillation	40C	72/126c x 0.2c	395	100
81C	Solvents Distillation	41C	98/152c x 0.2c	395	100
82C	Solvents Distillation	42C	92/255c x 0.5c	395	100
83C	Solvents Distillation	102C	123/177c x 0.2c	395	100
84C	Solvents Distillation	103C	148/202c x 0.2c	395	100
85C	Solvents Distillation	104C	173/277c x 0.2c	395	100
86C	Solvents Distillation	105C	198/252c x 0.2c	395	100
87C	Solvents Distillation	106C	223/277c x 0.2c	395	100

I.P. REF	Purpose	A.S.T.M. Equivalent	Range (degree celcius ° c)	Total Length(mm)	Immersion Length (mm)
88C	Solvents Distillation	107C	248/302c x 0.2c	395	100
89C	Softening point	113C	-1/175c x 0.5c	405	Total
90C	Kin.Viscosity 82.2c	48C	80.8/83.6 x 0.05c	300	Total
91C	Rapid Flash		0/110c x 1c	200	44
92C	Kin Viscosity 40c	120C	38.6/41.4c x 0.05c	300	Total
93C	Kin Viscosity 135c	110C	133.6/136.4c x 0.05	300	Total
94C	Brookfield Viscosity	122C	-45/-35c x 0.1c	300	Total
95C	Brookfield Viscosity	123C	-35/-25c x 0.1c	300	Total
96C	Brookfield Viscosity	124C	-25/-15c x 0.1c	300	Total
97C	Brookfield Viscosity	125C	-15/-5c x 1c	300	Total
98C	Rapid Flash High		100/300c x 2c	200	44
99C	Kin Viscosity -20c	127C	-21.4/-18.6c x 0.05c	300	Total
100C	Kin Viscosity 80c		78.6/81.4c x 0.05c	300	Total
101C	Medium Pensky - Martins		20/150c x 1c	290	57

Category Canna-37 Viscometer Bath for "U" Tube

Viscosity bath

Vacuum manning Viscosity bath

Description

Viscosity bath in which 6/8 Viscometers can be accommodated. Temperature ranges from room temperature to 1200 C Controlled by Digital Temperature Controller A) Accuracy = 0.10C. B) -do- 0.010C.

The Vacuum manning Viscometer Bath is specially designed for tests that require temperature and vacuum control.

Optional Spares (Price can be quoted on request)

1. Heater
2. Viscometer holder universal
3. Suction bulb
4. Digital Stopwatch
5. Illuminator

Category Canna-38 Viscometer Bath for Low Temperature

Description

Low Temperature for -40C to accommodate 2 Viscometer

Category Canna-39 Viscometer Glass Tube

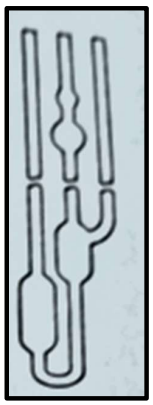
Description

Can be supplied with constant traceable to cannon oil and certified by accredited lab

A. Viscometers, U-Tube, BS/U (Ostwald)

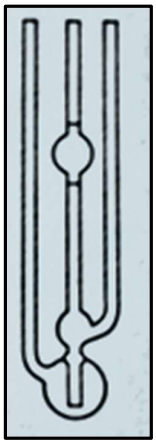
No	Size	Nominal Constant	Viscosity Range Centristroke
0	0	0.001	0.3 to 3
1	A	0.003	0.9 to 3
2	B	0.01	2.0 to 10
3	C	0.03	6 to 30
4	D	0.1	20 to 100
5	E	0.3	60 to 300
6	F	1.0	200 to 1000
7	G	3.0	600 to 3000
8	H	10.0	2000 to 10000

B. Viscometers, (Suspended Level) BS/IP/SL with Centre Sport



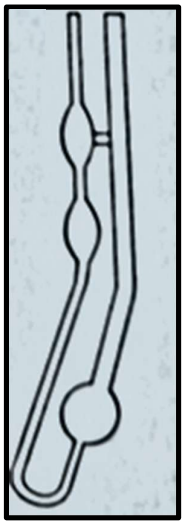
No	Size	Nominal Constant	Viscosity Range Centristroke
1	1	0.01	3.5 to 10
2	1A	0.03	6 to30
3	2	0.1	20 to 100
4	2A	0.3	60 to 300
5	3	1.0	200 to 1000
6	3A	3.0	600 to 3000
7	4	10.0	2000 to 10000
8	4A	30.0	6000 to 30000
9	5	100.0	20000 to 100000

C. Viscometer (Suspended Level) Shortened form BS/IP/SL(S) With Centre Sport



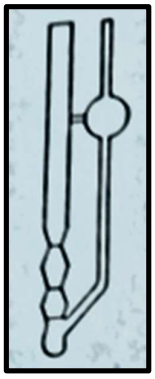
No	Size	Nominal Constant	Viscosity Range Centristroke
1	1	0.0006	1.05
2	2	0.003	2.1 to 3
3	3	0.01	3.6 to 10
4	4	0.03	6 to 30
5	5	0.1	20 to 100
6	6	0.3	60 to 300
7	7	1.0	200 to 1000
8	8	3.0	600 to 3000
9	9	10.0	2000 to 10000

D. Viscometers, Cannon Fenske, for Transparent Liquids (Direct flow) ASTM-D 445/446 Ostwald With Centre Sport



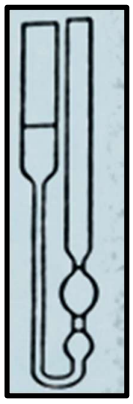
No	Size	Nominal Constant	Viscosity Range Centristroke
1	25	0.002	0.4 to 2
2	50	0.004	0.8 to 4
3	75	0.008	1.6 to 8
4	100	0.015	3 to 15
5	150	0.035	7 to 35
6	200	0.1	20 to 100
7	300	0.25	50 to 250
8	350	0.5	100 to 500
9	400	1.2	240 to 1200
10	450	2.5	500 to 2500
11	500	8.0	1600 to 8000
12	600	20.0	4000 to 20000

E. Viscometers, Cannon Fenske, for Opaque Liquids (Reverse flow) ASTM-D 445/446, With Centre Sport



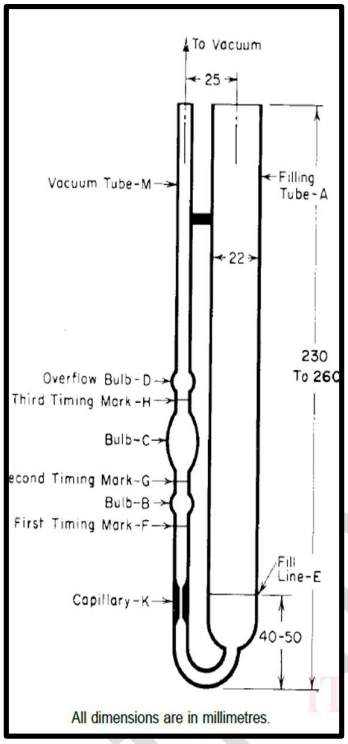
No	Size	Nominal Constant	Viscosity Range Centristroke
1	25	0.002	0.4 to 2
2	50	0.004	0.8 to 4
3	75	0.008	1.6 to 8
4	100	0.015	3 to 15
5	150	0.035	7 to 35
6	200	0.1	20 to 100
7	300	0.25	50 to 250
8	350	0.5	100 to 500
9	400	1.2	240 to 1200
10	450	2.5	500 to 2500
11	500	8.0	1600 to 8000
12	600	20.0	4000 to 20000

F. Viscometers, U-tube Reverse Flow, BS/IP/RF with Centre Sport



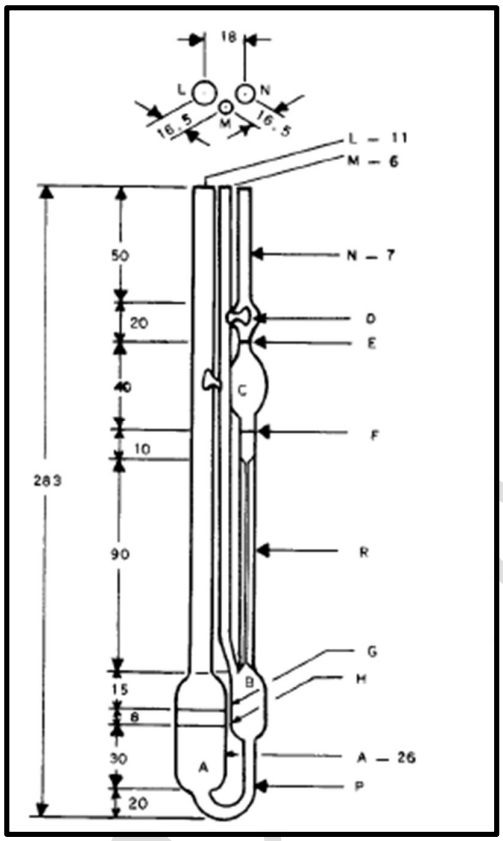
No	Size	Nominal Constant	Viscosity Range Centristroke
1	1	0 .003	0 .6 to 3
2	2	0 .01	2 to 10
3	3	0 .03	6 to 30
4	4	0 .1	20 to 100
5	5	0 .3	60 to 300
6	6	1 .0	200 to 1000
7	7	3 .0	600 to 3000
8	8	10 .0	2000 to 10000
9	9	30 .0	6000 to 30000
10	10	100 .0	20000 to 10000
11	11	300 .0	60000 to 30000

G. Cannon-Manning Vacuum Capillary Viscometer



No	Size	Nominal Constant	Viscosity Range Centristroke
1	4	0.0002	0.0036 to 0.08
2	5	0.0006	0.012 to 0.24
3	6	0.002	0.036 to 0.8
4	7	0.01	0.12 to 2.4
5	8	0.02	0.36 to 8.0
6	9	0.06	1.2 to 24
7	10	0.2	3.6 to 80
8	11	0.6	12 to 240
9	12	2	36 to 800
10	13	6	120 to 2,400
11	14	20	360 to 8,000

H. Ubbelohde Viscometer



No	Size	Nominal Constant	Viscosity Range Centristroke
1	0	0.001	0.3 to 1
2	0C	0.003	0.6 to 3
3	0B	0.005	1.6 to 8.0
4	1	0.01	1 to 5
5	1C	0.03	2 to 10
6	1B	0.05	6 to 30
7	2	0.1	10 to 50
8	2C	0.3	20 to 100
9	2B	0.5	60 to 300
10	3	1.0	100 to 500
11	3C	3.0	200 to 1000
12	3B	5.0	1000 to 5000
13	4	10	2000 to 10000
14	4C	30	6000 to 30000
15	4B	50	10000 to 50000
16	5	100	20000 to 100000

Category Canna-40 Drop Point of Grease Apparatus

Description

A. As per IP 31 (without thermometer) A) complete with Beaker and hand stirrer. B) Apparatus complete with electrical heater. With control and motorized stirrer.

Optional Spares (Price can be quoted on request)

1. Cup assembly
2. Metal Cup
3. Cover
4. Glass Tube

B. As per IP 132, ASTM D 566, 2265 & IS 1448 (P–52) (without thermometer)

A) complete with beaker & hand. Stirrer for a single test.

B) Apparatus complete with electrical heater with control & motorized stirrer for single test.

C) -do- Automatic Model

Optional Spares (Price can be quoted on request)

1. Cup
2. Stick
3. Glass tube
4. Cover

Category Canna-41 Flow cup Viscometer

Description

A type apparatus as per BS 3900 with any of the jets No. 7,10,13,15,20,25 -do- without level. A type apparatus as per BS 3900 with any of the jets No. 2,3,4,5,6 -do- without level. Flow cups supply viscosity data generally expressed in seconds flow time when the fluid is flowing through a hole at a given temperature. Viscosity is calculated from this flow time to centistokes (cSt). Paint, ink, varnishes and similar industries use flow cups to calculate the viscosity quickly.

Optional Spares (Price can be quoted on request)

1. Cup with any type of jet
2. Cup with any type of jet

DIN Cup as per 53211

with any of the jets No. 2,3,5,6 with stand and level -do- without level

Optional Spares (Price can be quoted on request)

1. Cup any type
2. Level
3. Stand
4. Wooden case for each type

Cylindrical cup as per IS – 3944 (1986)

Category Canna-42 Color comparator

2 discs as per ASTM 1500

Hazen Scale with 2 discs (A-5 to 70, B-7 to 250)

Different type of color discs

Levibond comparator UK make

Description:

Color of petroleum product (ASTM color scale) using liquid sample is placed in a test container and compared with a color glass disc of different range. When an exact match is not found and the sample color falls between two standard colors, the higher of the two colors is reported.

Category Canna-43 Paint Panels Mild Steel 4”X 6”

Description

Mild steel 6” × 6”. Mild steel 10” × 10”. Tinned Sheet 30 SWG 2” × 6”

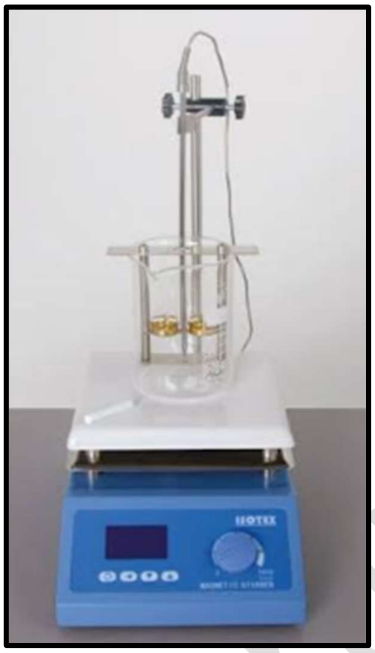
Category Canna-44 Salt Spray Corrosion Chamber

Description

Made of Perpex sheet without compressor as per IS 2074 & without panels: For 52 panels, For 24 panels, For 16 panels. Compressor for above with automatic cut out and ¾ H.P Motor

M.S Panel 4” × 6”

Category Canna-45 Softening point of Bituminous Materials Ring and Ball Method



Description

ASTM D 36 ASTM E 28 ASTM D 2398 IP 58

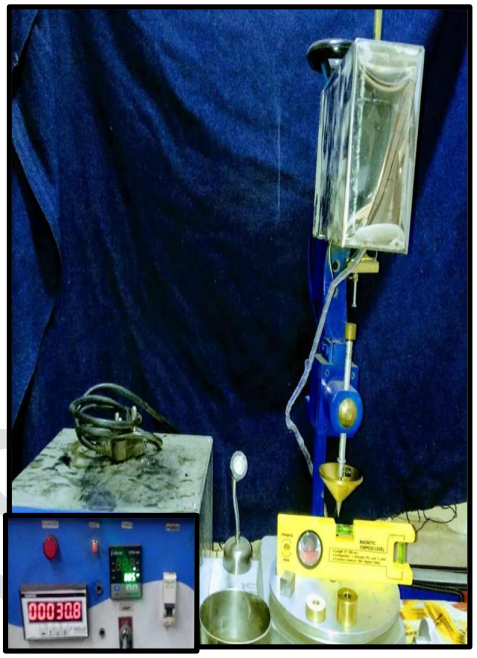
Softening point Apparatus test is a test to determine the temperature at which the bitumen disk is softened & sags downward at specific distance with the magnetic stirrer hot plate at a controlled rate under the weight of steel ball.

-do- Automatic

Optional Spares (Price can be quoted on request)

1. Beaker 800 ml
2. S.S Ball

Category Canna-46 Standard Penetrometer



Description

As per IP 50, IS 1448(P-60) & ASTM D 217, 1403 Without Cone,

Container & Weight. This test method covers determination of the penetration of semi-solid and solid bituminous materials to determine consistency & shear stability for design quality control and identification purposes

1 Standard Penetrometer

2 Standard Penetrometer with Timer

3. Digital Penetrometer with Timer

Category Canna-47 Cold Filter Plugging Point Apparatus

Description

Cold filter plugging point (CFPP) is the lowest temperature, expressed in degrees Celsius (°C), at which a given volume of diesel type of fuel still passes through a standardized filtration device in a specified time when cooled under certain conditions. This test gives an estimate for the lowest temperature that a fuel will give trouble free flow in certain fuel systems. This is important as in cold temperate countries, a high cold filter plugging point will clog up vehicle engines more easily.