

THE SAYBOLT STANDARD UNIVERSAL VISCOMETER

Standard

For testing Cylinder Valve and similar oils with bath at and oil at	212° Fahr. ✓ 210° "
For Testing Reduced Black Oils, Bath & Oil at	150° "
For Testing Spindle, Paraffine, Red and other distilled oils bath & oil at	100° " ✓

The Ring Gas Burner is used to bring the bath to the prescribed temperature and turned low, or off during the operation of test. The large size of the bath except for the higher temperatures usually permitting making one test without reheating.

For using at 210/212 temperature, Salt may be added to the bath water to prevent the water boiling and spluttering into the oil tube.

On the surface of the Salt Water bath there must be poured a thin strata of oil to prevent any salt creeping up and being deposited around or in the overflow cup.

DIRECTIONS FOR MAKING THE TEST.

1. Have the bath of water prepared at the prescribed temperature.
2. Have the oil strained into one of the tin cups, in which cup it may be heated up to about the Standard temperature.
3. Clean out the tube with some of the oil to be tested by using the plunger sent with the instrument.
4. Place the cork (as little distance as possible) into the lower outlet coupling tube just enough to make air tight, but not far enough to near touch the small outlet jet of the tube proper (1/8 to 1/4 inch may be enough.)
5. Pour the oil from the tin cup (again through the strainer) into the tube proper until it overflows into the overflow cup, up to and above

-2-

the upper edge of tube proper.

6. Now again see that the bath is at the prescribed temperature.
7. Use the thermometer sent with the instrument by stirring to bring the oil just to the standard temperature.
8. Remove the thermometer .
9. Draw from the overflow cup with a pipette, all the surplus oil down to and below the upper edge of tube proper, this insures a positive starting head.
10. Place the 60 C. C. Flask under and directly in line with the outlet jet, and as close to the coupling tube as is practical to permit of room for drawing the cork.
11. With the watch in left hand draw the cork with the right, and simultaneously start the watch.
12. The time required in the delivery of 60 C. C. is the viscosity.
13. Clean out the tube proper before each test with some of the oil to be tested.
14. No drill or other instrument should ever be used in the small outlet jet of tube proper.