# SYD-1884B Density, Kinematic Viscosity, Viscosity Index Tester

## Summary

This instrument is designed and made as per national standard of People's Republic of China GB/T 1884, GB/T 265 and GB/T 1995. It can determine the density(liquid petroleum products) as per GB/T 1884, the kinematic viscosity(Newtonian liquids) as per GB/T 265 and viscosity index(Lubricating oils) as per GB/T 1995.

## Main technical features

- Multifunctional instrument. It can determine the density of crude oil and liquid petroleum products, kinematic viscosity of liquid petroleum products and viscosity index of lubricating oils.
- Microprocessor and colored LCD technology. English bilingual menu. Light-touch screen. Easy to operate.
- It can test 4 samples at a time. Two for kinematic viscosity test and another two for density test. Or 4 kinematic viscosity tests. The parameters such as temperature, time, coefficient of capillary viscometer tube and density value can be inputted in or displayed on the light-touch screen.
- New-type temperature sensor. The temperature resolution is 0.01℃. Temperature control precision is ±0.04℃.
- The internal semiconductor refrigeration device is installed, and the refrigeration device will start automatically when the test temperature is set to 20 ℃ ~ 35 ℃.
  It can save 99 coefficients of capillary viscometer.

## Main technical specifications

- Capacity of bath： Φ300mm×340mm
- Temperature range： (20~100)℃
- Resolution： 0.01℃
- Temperature precision： ±0.04℃
- Temperature sensor：PT100
- Timing precision： ±0.01s
- Display： 5.6 inch colored LCD
- Sample amount： 4 samples
- Power supply： AC(220±10%)V, 50Hz±1Hz
- Total power consumption：≤1500W
- Working environment： Ambient temp.:(15~35)℃, RH＜85%
- Dimension： 620mm×510mm×600mm
- Net weight： 41.5kg

## Viscosity

| Diameter(D) | Suitable samples | Range(mm2/s)(mm2/s) | Time no less than(s) | |
|---|---|---|---|---|
| 0.4 | Transparent samples | 0.6～1.7 | 350 | |
| 0.6 | Transparent samples | 1.7～8.5 | 200 | Standard |
| 0.8 | Transparent samples | 5.4～27 | 200 | |
| 1 | Transparent samples | 13～65 | 200 | |
| 1.2 | Transparent samples | 28～140 | 200 | |
| 1.5 | Transparent samples | 70～350 | 200 | |
| 2 | Transparent samples | 200～1000 | 200 | |
| 2.5 | Transparent samples | 520～2600 | 200 | |
| 3 | Transparent samples | 1060～5300 | 200 | |
| 3.5 | Transparent samples | 1980～9900 | 200 | |
| 4 | Transparent samples | 3400～17000 | 200 | |
| 5 | Transparent samples | 5000～20000 | 200 | |
| 6 | Transparent samples | 8000～30000 | 200 | |

## Density

| Test Range g/ml | Scale value g/ml | Standard temp.℃ | Length mm |
|---|---|---|---|
| 0.600-0.650 | 0.0005 | 20/4 | 300±10 |
| 0.650-0.700 | 0.0005 | 20/4 | 300±10 |
| 0.700-0.750 | 0.0005 | 20/4 | 300±10 |
| 0.750-0.800 | 0.0005 | 20/4 | 300±10 |
| 0.800-0.850 | 0.0005 | 20/4 | 300±10 |
| 0.850-0.900 | 0.0005 | 20/4 | 300±10 |
| 0.900-0.950 | 0.0005 | 20/4 | 300±10 |
| 0.950-1.000 | 0.0005 | 20/4 | 300±10 |
| 1.000-1.050 | 0.0005 | 20/4 | 300±10 |
| 1.050-1.100 | 0.0005 | 20/4 | 300±10 |