

# NDJ-1C Brookfield Viscometer

## Summary

The instrument is designed and made as per T0625 “Asphalt Brookfield Rotational Viscosity Test (Brookfield Viscometer Method)” in the Industry Standard of People’s Republic of China JTJ052 Specification and Test Methods of Bitumen and Bituminous Mixture for Highway Engineering. It is suitable to determine absolute viscosity of Newtonian liquids and apparent viscosity of Non-Newtonian liquids.

## I. Main technical features

1. The instrument adopts the advanced mechanical design technologies and manufacturing techniques, and uses microcomputer technologies for temperature control, data collection and data process.
2. The display is a background light, ultra-brighten LCD. It is also equipped with a micro-printer for printing.
3. The test data can be shown on the LCD in real time or printed out through the printer. It can also connect to a computer through the RS232 communication port.
4. According to the measurement of the viscosity of the liquid to choose the speed with the use of speed, meet the requirements of different range of measurement.

## II. Main technical specifications

1. Measurement range:  $100 \text{ mPa}\cdot\text{s} \sim 2 \times 10^5 \text{ mPa}\cdot\text{s}$  (If you select the No.30 spindle, the measurement range can be extended to  $4 \times 10^5 \text{ mPa}\cdot\text{s}$ )
2. Spindle: No.21, 27, 28 and 29 total 4 pieces of spindles (the No.30 spindle is optional)
3. Rotation speed: 5RPM, 10 RPM, 20 RPM, and 50 RPM
4. Measurement error:  $\pm 1\%$  (F·S); (If you select the No.30 spindle, it will be  $\pm 3\%$  (F·S))
5. Temperature control range: room temperature  $\sim 200 \text{ }^\circ\text{C}$
6. Temperature control accuracy:  $\pm 0.1 \text{ }^\circ\text{C}$
7. Sample cylinder: 20 ml
8. Power supply: AC 220V $\pm 10\%$ , 50 Hz
9. Ambient temperature:  $5 \text{ }^\circ\text{C} \sim 35 \text{ }^\circ\text{C}$  (when the controlling temperature is close to ambient temperature, please run the air conditioner to let the ambient temperature be  $5 \text{ }^\circ\text{C}$  lower than the controlling temperature)
10. Relative humidity:  $\leq 80\%$

## III. Optional accessories

1. NDJ-1C Brookfield Viscometer and Computer communication software(CD)
2.  $300^\circ\text{C}$  high temperature heating furnace
3. 30# rotator

