

## No. 2285

### Zahn cup

This instrument is used for measuring viscosity of gravure printing ink, etc. The cup is immersed in the subject liquid. On pulling up the cup from the liquid, start the stopwatch to measure the time till the liquid is completely discharged from the cup.

Select a suitable cup so that the time length may be within 20 to 40 seconds.

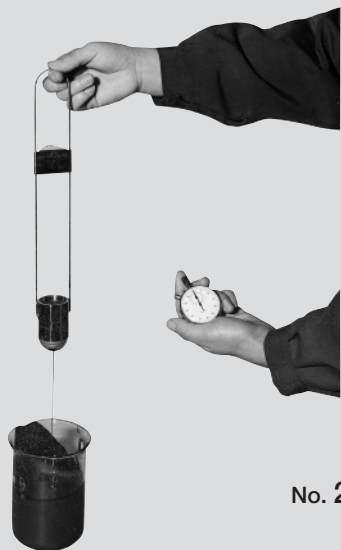
<Guide for selection of discharge orifice>

Cup	Orifice diameter	Measurement range (cst)
2	2 mm	approx. 0 to 70
3	3 mm	approx. 20 to 250
4	4 mm	approx. 80 to 700
5	5 mm	approx. 200 to 1000
6	6 mm	approx. 400 to 2000
7	7 mm	approx. 900 to 3000

**Referential standard:** JIS Z-8803-1991

**Outer dimensions:** 40×40×350 mm

**Instrument weight:** 100g



No. 2285

## No. 2287

### Constant-area parallel-plate viscometer (improved model)

This is a high precision constant-area viscometer free of defects causing errors with the conventional glass-plate falling type viscometer. It uses a stainless steel rod instead of glass plate, with the support housing that holds the rod vertically, and the measurement table to receive the specimen. In measurement, the rod is dropped from a certain height, to read the change in ink thickness by a differential transformer, and the read value is converted to yield value by the formula. The temperature of the rod support housing and measurement table is kept constant by the jacket configuration in which hot water is circulated from the constant water temperature tank.

**Outer dimensions:** 400×350×500 mm

**Instrument weight:** 40 kg



No. 2287

## No. 2288

### Parallel-plate viscometer (spread meter)

The spread meter is one of methods for measuring fluidity of lithography and letterpress printing inks. This instrument is used to determine "spread" of ink. Test principle: a certain amount of ink is placed between two parallel plates, to deform the ink by dead weight of the plates. Along with time elapsed, the ink spreads in circular shape. With increase of the circular area, pressure applied on the ink decreases. After a certain length of time, the diameter of the spread ink is measured. Yield value is determined from the ink spreading speed.

**Glass plate dimensions:** 150×100×6 mm

**Glass plate weight:** 115 ± 1 g

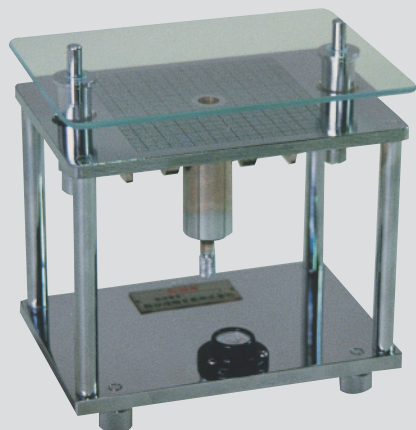
**Specimen hole size:** 10 ± 0.03 mm in inner diameter

**Specimen hole volume:** 0.5 cm<sup>3</sup>

**Referential standard:** JIS K-5701-2000

**Outer dimensions:** 150×150×160 mm

**Instrument weight:** 2 kg



No. 2288