

# Intelligent Krebs Viscometer

## BEVS 1112

### User Manual

### (Version V201701)



This manual shall be read carefully before starting. Directions included in this operation manual shall be strictly followed.



## Content

1 Company Profile.....	3
2 Product Introduction.....	3
2.1 Technical information.....	3
3 Operation Introduction.....	3
3.1 Safety Notice.....	3
3.2 Operation Environment.....	4
3.3 Placement.....	4
3.4 Power.....	4
3.5 Guidance on Operation.....	4
3.6 Run Setup.....	6
3.7 System Settings.....	7
3.8 Structure.....	8
4 Calibration.....	8
5 Product maintenance.....	8
6 Order information.....	9

## 1 Company Profile

BEVS Industrial Co., Ltd. is a leading developer & manufacturer that specializes in coatings, ink, painting, resin testing instruments and laboratory whole solution.

We offer the complete and unique products in this field to meet customer's challenging demands of today and tomorrow, the products are complied with the standards of ISO, ASTM, DIN, BS, EN etc.

With strong supports and hard work by lots of end-users and worldwide agents, BEVS become more and more famous in the world and provides more competitive values for our customers.

## 2 Product Introduction

BEVS 1112 is an automatic viscometer which is applied in testing most non-Newton fluids such as paint, glue, paste, printing ink, etc and equipped with a DC motor for guaranteeing the speed stable at 200 RPM through the microprocessor current control. The touch screen is able to display Krebs units (KU), g (gm) and cP (cP). Converting from Krebs value to cP centipoise, please with reference to ASTM D562 industrial standard. Its measurable range is: 40 ~ 141 KU, 32 ~ 1099 gm and 27 ~ 5274 cP.

### 2.1 Technical information

Range: 40~141KU/ 27-5274cp/ 32-1099g

Resolution: 0.1KU/1g /5cP

Accuracy:  $\pm 1\%$  of full scale

Repeatability:  $\pm 0.5\%$  of full scale

Rotation speed: 200rpm $\pm$ 1rpm

Power consumption: Max.35W

Power: 200~250V or 100-120V

## 3 Operation Introduction

### 3.1 Safety Notice

3.1.1 Read the manual carefully before operation.

3.1.2 Keep this manual for later use.

3.1.3 Learn all safety alarm on the machine.

3.1.4 Pay attention to the voltage input.

3.1.5 Do not tear down the machine on your own.

### 3.2 Operation Environment

3.2.1 Ensure the machine running without under the condition as: over-heated, wet, vibrated, near heater, magnet or water and no lightning protection device.

3.2.2 Adapted Conditions

Temp: 10-35°C

Moisture: 15-85%

### 3.3 Placement

3.3.1 Ensure to put the machine on a firm and horizontal desktop with suitable plug.

3.3.2 Keep the machine facing to the operator.

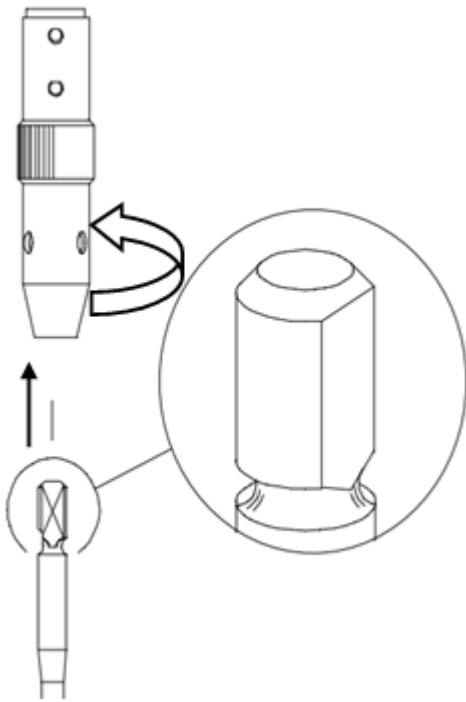
### 3.4 Power

3.4.1 You must use the power supply with a ground wire.

3.4.2 The machine input voltage is 200 ~ 250V, 50 ~ 60HZ.

### 3.5 Guidance on Operation

3.5.1 Ensure the clean rotor spindle into the mounting chuck, push it up to the limit position and then rotate it by 90° ;



- 3.5.2 Fill test sample into tin, make sure that distance between liquid level and cup is within 20mm;
- 3.5.3 Connect power (220V 50Hz);
- 3.5.4 Turn on the power switch;
- 3.5.5 Turn on the machine you will see the boot screen;
- 3.5.6 Entering the main interface for the first time, the instrument must be set preferably as shown on Figure 1;
  - 3.5.6.1 Main interface displays in real Krebs Units (KU), in grams (gm) and in centipoise (cP) viscosity value units and real-time temperature of the external environment.
  - 3.5.6.2 Status Display area shows the current operating status of the machine including up, down, testing, testing done, standby and malfunction alerts.
  - 3.5.6.3 Up and down will be automatically shielded during the test, no respond.
  - 3.5.6.4 Real-time curve displays changes recording the test sample viscosity.
  - 3.5.6.5 Click the off button to turn off the instrument, press any touch display area will restart the instrument. Click Run button and the machine will automatically detect whether the instrument is at an appropriate place or not, if it is detected in a suitable position, the instrument will automatically start the test. If it is not a suitable location, the instrument automatically lifts to the appropriate position and then begin testing the viscosity of the sample.

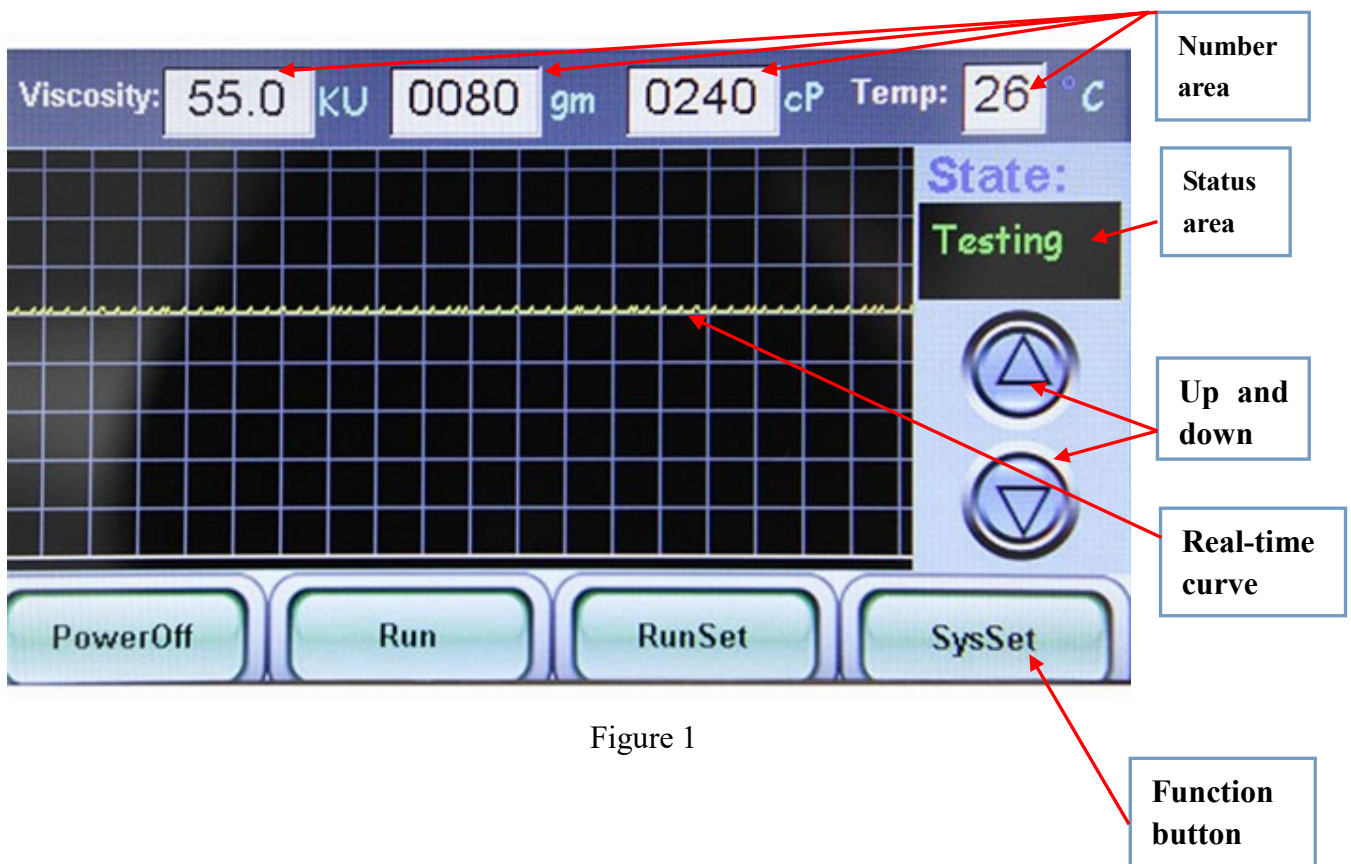


Figure 1

### 3.6 Run Setup

In the main interface, click the Settings button to enter the interface shown in Figure 2.

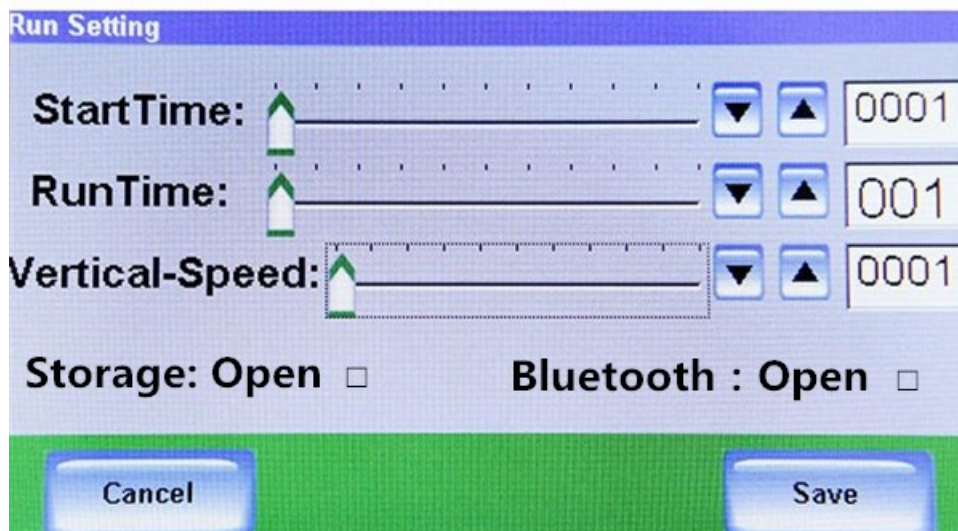


Figure 2

#### 3.6.1 Set the automatically-start test time from 0-99 minutes



3.6.2 Set running time from 10-60 seconds, 22 seconds is recommended.

3.6.3 Set the speed of lifting of which range is 03-09 seconds.

3.6.4 Data storage and Bluetooth function on and off is available.

3.6.5 When data storage on, data is automatically saved up to 5000 groups of test data; turn on the Bluetooth and open APP on your phone, test data will be synchronized to the phone which can operate the machine (Please see BEVSAPP for operating instructions).

3.6.5 All settings must be saved and then effect.

### 3.7 System Settings

3.7.1 Backlight adjustable.

3.7.2 Open or close a beep

3.7.3 Open energy-save the screen will be sleeping and the device will go into standby if the user does not click on the screen for a long time.

3.7.4 All settings must be saved and then effect.

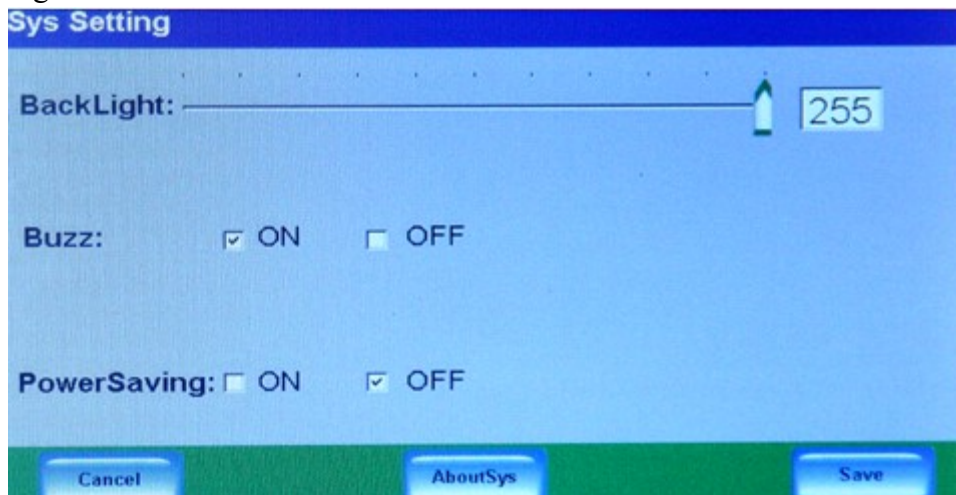


Figure 3

### 3.8 Structure



Figure 4

## 4 Calibration

- 4.1 The machine is calibrated at the factory.
- 4.2 Recommended calibration period is 1 year.

## 5 Product maintenance

- 5.1 Regular maintenance.
  - 5.1.1 Before servicing the instrument, ensure that the equipment is turned off and the power supply is powered off.
  - 5.1.2 Clean base residual stains.
  - 5.1.3 Use a soft cloth to clean the instrument, no corrosive chemical.



## 6 Order information

BEVS 1112 Intelligent Krebs Viscometer