# Tablet Friability Tester CS-3

# User's Manual

Shanghai Lorderan Scientific Instrument Co., Ltd.



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#### Introduction

Thanks for purchasing CS-3 Tablet friability tester product designed/ manufactured by us. Prior to use, pls. Read user's manual carefully, this will ensure proper use of this tester and improve your job efficiently.

#### Product registration

Prior to use this product, please fill up attached user registration card and mail to us, this will ensure to get our service in future.

#### Technical service

Pls. contact our marketing department for any service during warranty. And fill up/mail back user's registration card.

If you have any problems, Pls. try to find answers in user's manual first, or you can call our marketing department.

#### Proper operation

Prior to install/use this instrument, make sure you have read this manual carefully, for any concerns pls. Contact with our marketing department.

- Transport with care. Any incline, convert, and hit this product is prohibited.
- Check and protect all safety related labels.
- No using damaged product, No using damaged power cord.
- Turn off power supply before maintenance, or moving.

#### Contact Us

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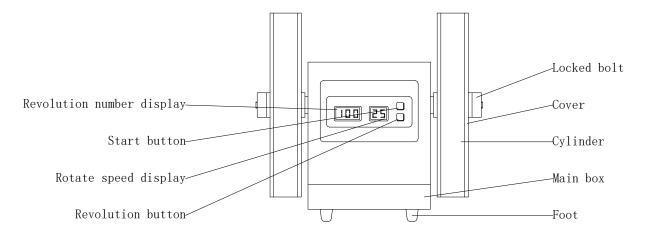


#### Introduction

#### **Brief Introduction**

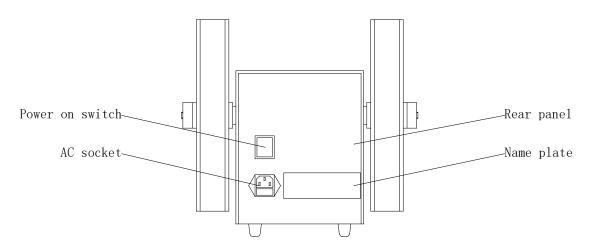
CS-3 Tablet Friability Tester is composed of control system, transmission system, and rotation accessories etc. And central controlled function is performed by MPU. The features are: well structures, auto and simple operations, high accuracy and sensitivity, and stable working performance.

CS-3 Tablet Friability Tester main box consist of bottom, foot, box, front panel, rear panel etc.



#### Front panel include:

- Revolution number display
- Rotate speed number display
- Start button
- Revolution button
- Product model
- Manufacturer



#### Rear panel include:

- Power on switch
- AC socket(fuse jack included)
- Name plate



#### Function description

#### Revolution number display

3-digital LCD to indicate preset revolution numeric or actual revolution numeric.

#### Rotate speed number display

2-digital LCD indicates preset rotate speed numeric or actual speed numeric.

#### Revolution button

Revolution button is to preset revolution numeric. Press this button, can preset revolution numeric, with beep sound.

#### Start button

Start button is to control rotation part / transmission system status. Press this button, can start/stop rotation part and transmission system, with beep sound.

#### • Power on switch

Power on switch is main power switch. In ON position, tester is in working status; OFF position, stop working.

Before connecting to AC power, please ensure it's in OFF position!

#### • AC socket

AC socket is connected to the power supply with power cord offered in this tester. Fuse is under the AC socket, include attached one 1A fuse and backup one.

<u>Please make sure AC power supply is connected properly!</u>
When change fuse, make sure same spec part is used for tester safety!

#### **Specifications**

ModelCS-3Drum Number2Drum RadiusDia 286mmDrum Depth39 mmTablet Fall Height156 mmRotation Speed25 rpm

Rotation Speed Accuracy ±1 rpm
Rotation Count 10~900 r
Rotation Count Accuracy ±1 r

Power Supply 220V/ 50 Hz, 110V/ 60 Hz



Power	50W

Dimension 370×300×340 mm

Weight 12 kg

#### Environment requirement

Usage temperature	+18°C~+28 °C
Store temperature	-10°C~+50 °C
Humidity	20%~80% RH

#### Installation

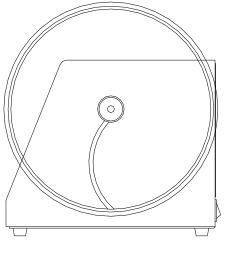
#### Unpacking and Inspection

Open package, take out manual, tester, and accessories; and check items according to packing list. Any mismatch/damage happened, please contact sales department immediately.

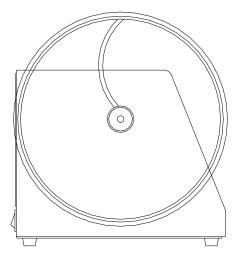
#### Tester settled

Tester must be placed in stable work station/ table and put damping/ rubber pad between table and tester.

Install the rotation part (don't confuse left & right side) onto the level axis and lock them.



Right



Left

The bolts on the left and right side are fasten by front rotate and loosen by back rotate.

Minimum space required around tester is 0.5m, to ensure heat escaping, clean tester periodically to prevent dusty affect normal operation.

#### Connect to the power supply

Connect the socket & AC power supply source with attached power cord.



#### Operation

#### Power on

Turn the power switch to ON position, the indicator light--initializes the tester for 10 minutes, then it's ready for operation.

The first status is reset position, revolution numeric is auto set to 100R, the rotation speed is 25RPM.

#### Revolution preset

The first status is reset position, revolution numeric is auto set to 100R.

If you want to change the revolution numeric, press the REV button first, then the revolution numeric changes to 110R.Repeat the revolution numeric changes to 120R.The revolution numeric changes accordingly when press the button continuously. The revolution numeric display changes follow it. The button changes loop.

Rotation count: 10-900R.

#### Test

Put the rotation part off and open the cover, put in 6.5G sample material and close the cover, put it onto the level axis and lock the bolts. Press start button, the test process is begins. After 100R rotating at 25RPM, the rotation part stops to measure the sample's friability.

#### Power off

Turn switch to OFF position, the indicator is off, tester stop.

#### Demonstration

- (1) Power on.
- ② Put the rotation part off and open the cover, put in sample material and close the cover, put it onto the level axis and lock the bolts.
- ③ Press start button, the test is begin.
- 4 After 100R rotating, the rotation part stop, measure sample's friability.
- ⑤ Same measurements can be completed by carry out 2-4 steps repeatedly.
- 6 Clear test, please press reset button.

#### Maintenance

The box and parts must be cleaned periodically. Do not use steel brush, it will result in damage to the tester.

After testing every time, please clean rotation parts and ensure dry to avoid damage to the tester.

#### Troubleshooting

• Can not power on



Check whether the voltage is OK and fuse is OK, please refer to the rating marked in nameplate while installation.

If the tester does not work after checking above items, please don't repair it by yourself and contact our marketing department please.



## Packing list

## The CS-3 Tablet friability tester include following items typically:

Tester—
Power cord—
Rotation accessories—
User's manual —
Product quality guarantee
User's registration card—



#### Product quality guarantee

- This quality guarantee covers the scope of CS-3 Tablet friability tester.
- Start from purchasing date; warranty period is one year.
- This quality guarantee is effective from receiving registration card filled by users.
- During warranty, we offer free charge service for troubleshooting in normal cases, but for any cases caused by flood, fire, earthquake, or other calamity, is excepted.
- During warranty, in one of the following cases, we will charge for material/service:
- No product quality guarantee, mismatch with this guaranty or wrong record/remark.
- Damages caused by unusual working environment.
- Damages caused by disassembly, install, extend, move or modify without our permission.
- Damages caused by repairing without our permission.
- Keep this guarantee in proper place and any other issue is provided.
- The guarantee is only applicable in Chinese mainland.

#### **Using Instruction**

- Proper operation & maintenance will prolong the working time of the instrument. Please follow the manual's instruction carefully.
- When the power supply is unstable, pls. Use AV regulator. Pay special attentions to the information related to power supply, temperature, humidity in the manual.
- Always keep the instrument cleaning. Disassembly/move any parts of the tester is prohibited.
- In case of trouble present, pls. Stop using, call us or dealer for help.

#### Registration card

Name		
Address		
ZIP	E-mail	
Tel	Fax	
Product		
Model	S/N	