

Glass Thickness Meter

Code: 86200

User Manual V5.04

Please read this manual carefully before using and reserve it for reference.

I. Product introduction

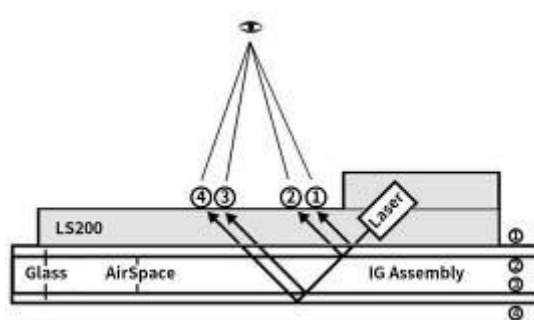
The Glass Thickness Meter is mainly used on measuring glass and air space in insulated glass (IG), it also can measure individual panes of glass and the thickness of a glass bottle etc, special for those situations where common ruler can not easily do it.

This Thickness Meter utilizes the light reflection principle to achieve its function. When laser is set against the surface of glass, Laser reflection beams off the surfaces of glass appear on the graduated scale of the meter. The readings are taken from a single side of glass and the user can get the thicknesses of glass, the air space at the same time. High quality red laser gives the reliable measuring result.

Standards for the product

GB/T 11944-2012 Sealed insulating glass unit

JJF1224-2009 Calibration Specification for Reinforced Concrete Covermeter and Floorslab Thickness Tester



II. Parameters

Dimensions	160mm×55mm×25mm (L×W×H)
Range	Glass Thickness Scale 70mm, Air Space Scale 34mm
Weight	250g
Resolution	±0.5mm
Power Supply	CR2032 battery 3V
Minimum measurement size	10mm×100mm
Supply Voltage	DC3V
Operating Current	20mA
Operating Power Consumption	60mW

III. Operation

Prior to every reading, verify the meter is resting flatly against the glass surface. Do not tilt the meter or place any items under the meter when taking readings. Tilting the meter in any way will adversely affect the accuracy of the readings.

The meter can easily measure glass thickness, air space, overall IG thickness, individual panes of glass in a laminated assembly, bullet resistant and triple pane assemblies. The meter also has been successfully tested for measuring thickness of mirrors and other transparent materials.

For single pane glass two reflection beams will occur, double glazing four beams will occur, Triple glazing, six beams will occur.

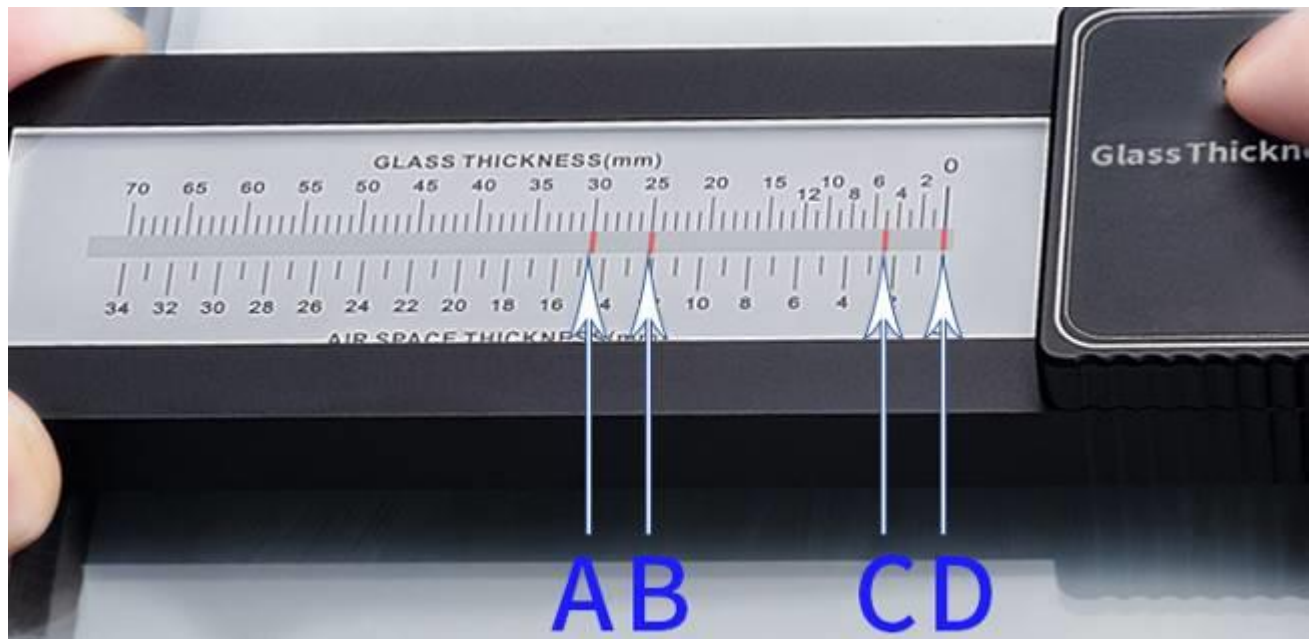
IV. Measure thickness of IG units

Put the meter flatly against the insulated glass surface (two layers), press the Power Switch and hold on, 4 red reflection beams will be seen on the scale. The reflection beams "C" and "D" is the thickness of the first layer glass on "GLASS THICKNESS" scale, "D" will align with the "zero point", and so the thickness of first layer glass is the number of "C" on the "GLASS THICKNESS" scale.

- $A = 30\text{mm}, B = 25\text{mm}, C = 5\text{mm}, D = 0\text{mm}$.
- The thickness of first layer glass is $C - D = 5\text{mm}$.
- the thickness of bottom layer is $A - B = 5\text{mm}$.

Distance between B and C on the "AIR SPACE THICKNESS" scale is the air space.

- $B = 12\text{mm}, C = 2.4\text{mm}$.
- The thickness of the air space is $B - C = 9.6\text{mm}$.



V. Notes

1. It is imperative that the measured glass surfaces is kept clean and free of any debris, otherwise causing incorrect readings.
2. Keep the scale clean; do not wipe the meter with alcohol, or other organic dissolvent.
3. Replace the batteries. Remove the four screws located on the bottom surface of the meter. Replace the CR2032 batteries and refasten the cover. Be sure to install the batteries correctly (polarity +/-).



4. Keep the meter far away from high temperature or high humidity.
5. This product emits a laser beam from the back side. Do not point the laser at anyone's eyes. Always check the other side of the window being tested to ensure that no one will be looking directly into the laser.

VI. Standard packing list

No.	Description	Quantity	Unit
1	Glass Thickness Meter	1	pcs
2	User Manual	1	pcs

VII. Service

1. The meter has one-year warranty. If the meter works abnormally, please send the whole meter to the company for maintenance
2. Provide users with spare parts and lifelong maintenance services
3. Provide the users with the meter inspection service for free
4. Free technical support for long term