

# 《OPERATION INSTRUCTION》



## UCT SERIES ULTRASONIC THICKNESS GAUGE





|                      |  |                        |  |
|----------------------|--|------------------------|--|
| <b>Warranty Card</b> |  |                        |  |
| <b>Purchaser</b>     |  |                        |  |
| <b>Product Name</b>  |  | <b>Purchasing Date</b> |  |
| <b>Model</b>         |  | <b>Serial No</b>       |  |
| <b>Manufacturer</b>  |  |                        |  |

*Please use this warranty card as proof of warranty !*

|                     |  |                           |           |
|---------------------|--|---------------------------|-----------|
| <b>Certificate</b>  |  |                           |           |
| <b>Serial No</b>    |  |                           |           |
| <b>Product Name</b> |  | <b>Date of Production</b> |           |
| <b>Model</b>        |  | <b>Inspector</b>          | <b>01</b> |
| <b>Conclusion</b>   |  |                           |           |

# UCT Series Ultrasonic Thickness Gauge

## Operation guide

### Part1.Panel Introduction

- 1) : Press this button to automatically calibrate the probe after it is placed on the standard piece and stationary.
- 2) : After the measurement is completed, press this button to save the measurement data.
- 3) : Power switch key
- 4) : Tap to switch between commonly used "sound speed"
- 5) : Light on key
- 6) : Menu Options Key
- 7) : Confirm key
- 8) : Used as up and down selection keys in the menu, In addition, the addition and subtraction of sound speed can be adjusted on the sound speed interface.

## Part 2 Instrument usage:

1.Insert the probe into the host first (the order of the two plugs is not divided before and after)

2.Press  to Power on.

3. Instrument calibration: First, apply coupling agent to the standard piece, and then place the probe vertically on the standard piece. At this time, the instrument will show measurement values. Stabilize and do not loosen the probe, and simultaneously

press ,Until 4.00mm appears on the instrument, it indicates that calibration is complete.

4. Non steel or iron workpieces require reverse measurement of the sound velocity of the workpiece:

Find a sample of the same material as the workpiece to be measured as the reference plate (which can be cut or a position can be found on the workpiece), and then use a caliper to measure the known thickness of this plate (such as 5.3mm). At this time, use a probe to measure the reference plate (assuming the measured

value is 5.6), pick up the probe,press   to adjust the measured value to 5.3 (actual value of the workpiece),At this time,

press ,The instrument will automatically calculate the sound velocity of this workpiece and save the parameters. Then you can use this parameter to measure this type of workpiece, or you can record this sound velocity value and input it directly for future measurements.

(Note: Due to the influence of coupling on ultrasonic thickness measurement, it is recommended to ensure that the measurement points are smooth and flat as much as possible, and apply sufficient coupling agent during measurement.)

Back cover closing method:

When closing the rear cover, please push the dot position and lower the cover accordingly.



Part 3 Parameter :

| Model               |                                                                               |                                                                                                                                          |
|---------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Testing principle   | Ultrasonic principle                                                          |                                                                                                                                          |
| Range               | 0.75-300mm (steel)                                                            |                                                                                                                                          |
| Sound speed range   | 1000~9999 m/s                                                                 |                                                                                                                                          |
| Calibration         | 4.0mm (steel)                                                                 |                                                                                                                                          |
| Working mode        | Single point thickness measurement and scanning thickness measurement         |                                                                                                                                          |
| Measurement cycle   | 4 times/second for single point measurement,10 times/second for scanning mode |                                                                                                                                          |
| Indication accuracy | <10mm:±0.04mm;<br>>10mm:±0.5%H+0.01mm                                         |                                                                                                                                          |
| Storage capacity    | 2000 thickness measurement data                                               |                                                                                                                                          |
| Work environment    | -20-50℃, ≤90%RH                                                               |                                                                                                                                          |
| Power Supply        | AA type alkaline battery                                                      | Lithium battery                                                                                                                          |
| Size                | 170*80*38mm                                                                   | 125*71*27mm                                                                                                                              |
| Difference          | Basic model, plastic shell, 2 AA type alkaline battery                        | Upgraded version, lithium battery charging, metal shell dustproof and anti-interference, can be connected to a computer to transfer data |