

MULTI-INDICATORS OPERATION AND CARE MANUAL

To take full advantage of Multi-indicators, read this manual thoroughly before using it. After reading, retain this manual for future reference. Specifications of Multi-indicators and the information in this manual are subject to change without notice.

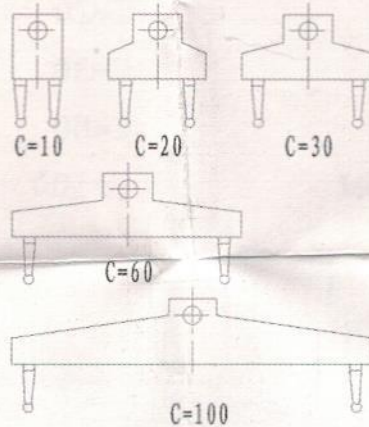
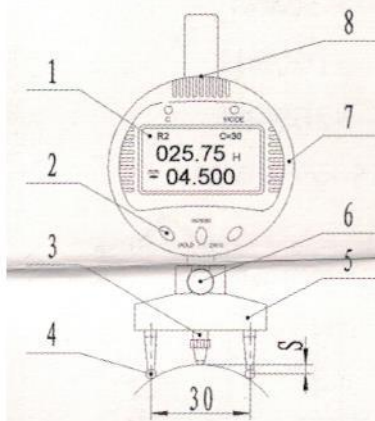
Introduction

1. While measuring the radius of arc, measuring it using "R" gages commonly, but application range of "R" gages is limited, because it only measure standard radius of arc, and getting data from comparison measurement, so can't get accurate data of workpiece. Multi-indicators can measure random radius of arc, apply for measurement radius of arc and plastic mould manufacturing.

2. Multi-indicators have five different length measuring jaws, for choose corresponding measuring jaws, while measuring arc face.

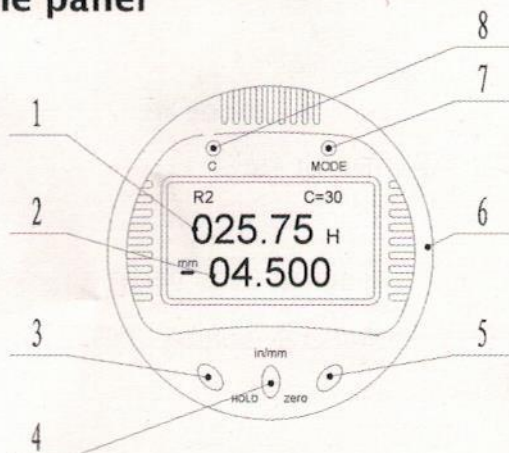
Multi-functions : 1) Application as indicators 2) Outside measurement 3) Inside measurement
4) Depth measurement 5) Step measurement

Nomenclature Measuring Jaws



- 1 . The LCD
- 2 . The control panel
- 3 . Measuring spindle
- 4 . Spherical measuring head
- 5, The base
6. Clamping bolts
7. Data output
- 8 . Battery lid

The panel



1. Display radius of arc
2. Display length, while measuring arc, display chord data
3. Data hold
4. Inch/Metric changeover
5. Zeroset and Power off
6. Data output
7. Functions changeover
8. Measuring jaws changeover

OPERATIONS

Power on Short pressing key: ZERO

Zeroset Short pressing key: ZERO, can zeroset at any locations. Before inside measurement and outside measurement, make three spindles lie a same plane, then pressing key: ZERO

Inch, Metric Pressing key: UNIT, can inch/metric changeover.

Data hold and release Pressing key:HOLD,the LCD will display "H",instrument hold data.

Functions changeover Pressing key:MODE,can select measuring functions:inner acr,outer acr,length,depth,step.When first row of the LCD display "R1",the instrument enter inner arc measurement.When first row of the LCD display "R2",the instrument enter outer arc measurement.Third row of the LCD display:length,depth,step.

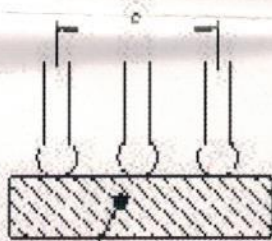
Note: "R1" and "R2" can auto-changeover.

Power off long pressing key: ZREO,or auto power off after several minutes

Replace Jaws Select suitable measuring jaws according to workpiece size.Measuring jaws specifications:10,20,30,60,100,after replace measuring jaws,press key:C,make the LCD display number=measuring jaws size.Example:If select 30 measuring jaws,then the LCD should display "C=30".

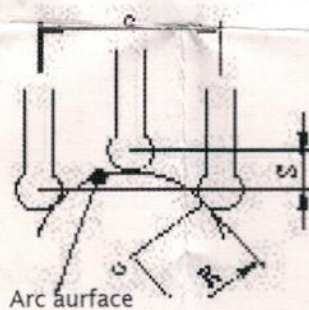
Measuring operations

Outside arc	the best measuring range	Inside arc	the best measuring range
C=10	R=5 --> 13MM	C=10	R=6.5 --> 15MM
C=20	R=11--> 30MM	C=20	R=14--> 30MM
C=30	R=22-->100MM	C=30	R=27-->100MM
C=60	R=94-->260MM	C=60	R=94-->260MM
C=100	R=255-->700MM	C=100	R=255-->700MM



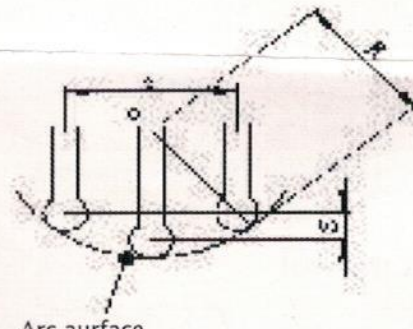
Platform

Zero set



Arc surface

Outside arc



Arc surface

Inside arc

C:Jaws center distance

S:Spindle linear distance

R:The radius of acr

Technical specifications

Measuring range:linear 0-13mm, Linear deviation: $\Delta S \leq 0.02\text{mm}$ Radius:5--9999.9mm

Radius deviation: $\Delta R \leq 1\%R$

Power:3V Li battery(CR2032)

Workable temp: $0 \pm 40^\circ\text{C}$

Storage temp: $-20^\circ\text{C} \pm 60^\circ\text{C}$

Humidity:comparatively $\leq 80\%$

Trouble shooting

Falure

Possible situation

Corrective measures

Digits flash rapidly

Battery power low

Replace new battery

The display is locked

Circuit problem

Remove battery,and install in after 30 seconds

Nothing appears on the LCD

1.Battery has poor contact

1.Let circuit short circuit

2.The voltage is low

2. Replace new battery