

# Dial Test 3D-Alignment and Positioning Indicator

## For Test Indicators

- Advanced way to find zero, the true start point for all 3 axes (X-Y-Z) on workpieces
- Probe gets deflected in any axis until indicator reads “0”. The workface (edge) is in a direct true line with the spindle axis
- No calculations necessary; trials eliminated
- Also serves as coordinate measuring probe to perform inspection of any machined part prior to removal from CNC machine
- Conveniently used on all types of workpieces, including non-conductive materials, plastics, ceramics, wood, etc.
- Contact point electrically insulated for safety on all CNC centers and EDM machines
- Replaceable feeler with predetermined breakpoint prevents damage to workpiece; overrun protection in all 3 axes
- Operates in vertical or horizontal position
- Large 2-1/4” dia. dial face for accuracy
- Graduation for X-Y axis: 0.0032mm (0.00013”); Graduation for Z axis: 0.01mm
- Measuring Range for Z axis: 0 – 6mm; Range for X-Y axis: 0 - 10mm
- □20mm Dia. precision ground shank
- 2 Run-out compensation adjustment screws



Description	STC #	MSC #
3D Dial Test	CMI10628	06433460

# Co-Ax Centering Indicator

**Quick, accurate centering in Boring and Milling Set-Ups.**

## Special Features:

The Co-Ax Indicator provides a simplified method of centering a workpiece or fixture on horizontal or vertical machines, external or internal diameters - also with N/C, EDM and other hard to turn spindles. Face of the indicator remains stationary in any desired position while the machine spindle rotates, thus leaving the operator with both hands free to accurately position the machine table. Operates at any angle from vertical to horizontal without a change. No walking around machine - no mirrors - no contortions.

## Specifications:

- Length 5-1/2
- Shank 3/8 dia. x 7/8 long
- Feeler ball 1/8 dia.
- Measuring range .250 axis offset
- Speed - It is recommended that operating speed not exceed 800 RPM approx.
- Capacity depends on Feelers installed, but overall range is: 5/32 - 12 Internal Diameter, 0 - 12 External Diameter.
- Dial readings: 0-40
- Locating accuracy: +/-0.0002"



Description	STC #	Size	MSC #
Retaining Rod	CMI0127-1		
Straight Feeler	CMI0127-2	1.77"	
Straight Feeler	CMI0127-3	4.00"	
Straight Feeler	CMI0127-4	6.06"	
Curve Feeler	CMI0127-5	1.81"	
Curve Feeler	CMI0127-6	4.00"	
Curve Feeler	CMI0127-7	6.06"	
Center Point Feeler	CMI0127-8	2.07"	
Above all	CMI0127		06451405

# Dial Test Indicator

All Indicators meet or exceed Federal Specifications for accuracy. Their exceptional design and quality assures you a lifetime of accuracy and total reliability.

## Special Features:

- Independent, interchangeable movement transmits measuring value via rack & pinion.
- Auto-reverse mechanism with adjustable ball bearings, provides ultra-smooth action.
- Contact points can swivel to reach any location.
- Universal mounting: dovetails supplied at top, front and back for proper set-up.
- Adjustable bezel and dial easily set and reset to zero. Microfine graduations on dials.
- Dial face color is white or black. We can also supply colors as requirement of customers.
- Your choice of dial diameters: 1.25" or 1.58"
- Universal style and Vertical style are optional.
- Replacement dovetail clamping stems: 7/32" diameter and 1/4" diameter
- Supply fitted plastic case.



Description	STC # (Dial Dia.)		Measuring Range	Graduation	Customer #
	□1.25"	□1.58"			
<b>Inch</b>					
Universal Style	CMI0388-1	CMI0388-3	0.03"	0.0005"	
Vertical Style	CMI0388-9	CMI0388-11	0.03"	0.0005"	
Universal Style	CMI0388-17	CMI0388-19	0.0008"	0.0001"	
Vertical Style	CMI0388-25	CMI0388-27	0.0008"	0.0001"	
<b>Metric</b>					
Universal Style	CMI0388-5	CMI0388-7	0.8mm	0.01mm	
Vertical Style	CMI0388-13	CMI0388-15	0.8mm	0.01mm	
Universal Style	CMI0388-21	CMI0388-23	0.2mm	0.002mm	
Vertical Style	CMI0388-29	CMI0388-31	0.2mm	0.002mm	

# Digital Indicator

## Features:

- Auto power on/off
- Zero setting at any position
- Metric/Inch system interchange at any position
- Fast tracing of maximum or minimum measuring value during measurements
- With data output interface
- Data holding function



STC #	Range	Resolution	Customer #
CMI0178-1	0" – 0.4"/0 – 10mm	0.0005"/0.01mm	
CMI0178-2	0" – 1.2"/0 – 30mm	0.0005"/0.01mm	
CMI0178-3	0" – 2"/0 – 50mm	0.0005"/0.01mm	

# Digital Micron Indicator

## Features:

- Auto power on/off
- Zero setting at any position
- Metric/Inch system interchange at any position
- Fast tracing of maximum or minimum measuring value during measurements
- With data output interface
- The back lug of indicator can be changed 90° for easy clamping.



Range: 0" - 0.2"



Range: 0" - 0.4"

STC #	Range	Resolution	Customer #
CMI0177-1	0" - 0.2"/0 - 5mm	0.00005"/0.001mm	
CMI0177-2	0" - 0.4"/0 - 10mm	0.00005"/0.001mm	
CMI0177-3	0" - 0.6"/0 - 15mm"	0.00005"/0.001mm	

## Economy Dial Indicators

- Hard satin-chrome finished case
- Easy-read crisp graduations
- Gear wheels are made of hard brass.
- Hard chrome plated stem, precision ground and lapped
- Interchangeable hardened chrome point
- Meet or exceed applicable Federal specifications
- Dial face color is optional, such as white, black, red, orange, yellow, etc.
- Supplied with back lug ; Dial Dia.: 2-3/8”
- Bezel knurled; easily adjusted thru 360°.
- Available in metric graduations.



Des.	STC#	Dial Reading	Measuring Range	Grad.	MSC #
Inch Dial	CMI10613	0 - 100	0” – 0.25”	0.001”	76450022
Inch Dial	CMI10615	0 - 100	0” – 0.50”	0.001”	76450063
Inch Dial	CMI10617	0 - 100	0” – 1.00”	0.001”	76450071
Inch Dial	CMI10619	0 - 100	0” – 2.00”	0.001”	76450089
Inch Dial	CMI10614	0 - 100	0” - 0.25”	0.0005”	
Inch Dial	CMI10616	0 - 100	0” – 0.50”	0.0005”	
Inch Dial	CMI10618	0 - 100	0” – 1.00”	0.0005”	
Inch/Metric Dual Dial	CMI10621	0 - 100	0” – 1.00” /0 – 25.4mm	0.001” /0.02mm	
Metric Dial	CMI10626	0 - 100	0 – 10mm	0.01mm	
Metric Dial	CMI10627	0 - 100	0 – 25mm	0.01mm	

## Rectangular Digital Indicator

**Features:**

- Manual power on/off
- Metric/Inch system interchange at any position
- Zero setting at any position
- With data output interface



STC #	Range	Resolution	Customer #
CMI0169	0.4"/10mm	0.005"/0.01mm	
CMI0170	0.8"/20mm	0.005"/0.01mm	
CMI0171	1.2"/30mm	0.005"/0.01mm	

**Digital Thickness Gage**

**Features:**

- Horizontal Style
- Manual power on/off
- Metric/Inch system interchange at any position
- Zero setting at any position
- With data output interface
- Easy to measure thin products, such as paper, medical cloth, loss of disk-brake, etc.



STC #	Range	Resolution	Customer #
CMI0173	0 – 0.5"/0 – 12mm	0.005"/0.01mm	

## Circular Digital Thickness Gage

### Features:

- Auto power on/off
- Metric/Inch system interchange at any position
- Zero setting at any position
- With data output interface
- Display holding function
- Fast tracing of minimum value or maximum value during measuring



STC #	Range	Resolution	Customer #
CMI0174	0 – 1”/0 – 25mm	0.005”/0.01mm	

## Mini Digital Thickness Gage

### Features:

- Manual power on/off
- Metric/Inch system interchange at any position
- Zero setting at any position
- With data output interface



STC #	Range	Resolution	Customer #
CMI0175	0 – 1”/0 – 25mm	0.005”/0.01mm	



## Shockproof Dial Indicator

- Machined case.
- Real shockproof
- Jeweled bearing
- Flat back
- Revolution counter
- Easy-read crisp graduations
- Gear wheels are made of hard brass.
- Dial reading can be made as per requirement of customers, such as 0 - 100, 0 - 50 - 0, etc.
- Hard chrome plated stem, precision ground and lapped
- Steel contact ball and ceramic contact ball are optional
- Meet or exceed applicable Federal specifications
- Dial face color is optional, such as white, black, red, orange, yellow, etc.
- Available in metric graduations.



Des.	STC#	Dial Reading	Measuring Range	Grad.	Customer #
Inch Dial	CMI10613	0 - 100	0" - 0.40"	0.001"	
Inch Dial	CMI10615	0 - 100	0" - 1.00"	0.001"	
Metric Dial	CMI10617	0 - 100	0 - 5mm	0.001"	
Metric Dial	CMI10619	0 - 100	0 - 10mm	0.01mm	
Metric Dial	CMI10614	0 - 100	0 - 30mm	0.01mm	

