

## FLOATING CARRIAGE MICROMETER



With Sylvac DRO & PROBE

- Measurement timesaved upto 40% with the new electronic system.
- Avoids calculation and measurement errors.
- 100% assured reliability .
- Mechanical Floating Carriage Micrometer Upgradable to Electronic Model.
- Software available for external thread gauges.

### FCDM SOFTWARE :

- Automatic tolerance calculation.
- Thread formula is evaluated automatically with following options.

#### Option No. 1 (FCDM V. 1.0.0)

- Thread Plug Gauge : (IS: 4218 (Part IV)-1976 - Metric)
- Thread Plug Gauge: Metric, Metric-INTFIT and G– Thread.
- Taper Thread Plug Gauge: NPT & BSPT.
- With RS 232 Cable to connect the display unit to P.C.

#### Option No. 2 (Qualisyst Software : (External / Internal)

Thread gauge - ISO Metric M, ISO Metric MJ, Unified UNJ , UNC, Whitworth, ISO pipe G threads, ISO Trapezoidal, ACME Trapezoidal, Stub Trapezoidal, Miniature, BSW, BSF, BSC, BA, Buttess, Helicoil, Knuckle, screw threads as per various National & International standards.

- With RS 232 Cable to connect the display unit to P.C.
- Provide full traceability of gauge history, each measurement is recorded with the operator, the master gauge & the machine equipment used.
- Gauge history can be stored according to due date, type, department and nominal dimensions.

### Standard Accessories of Electronic Model With Sylvac Digital Display Unit

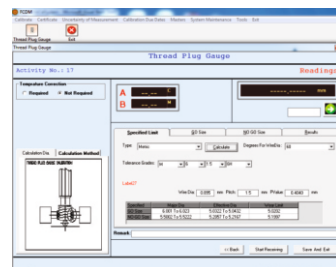
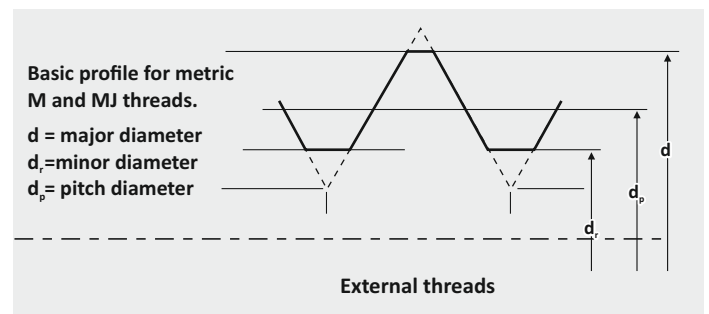
- 7 segment, 8 digit 7.8 x 3.5mm display unit
- Preset : Zero Setting
- ±Direction measurement
- mm / inch conversion only for Sylvac
- Output: RS-232
- Resolution: 0.0001mm
- Repeatability: 0.0002mm
- Accuracy with P10 probe: 0.002mm
- External Contact Foot Pedal (Optional)



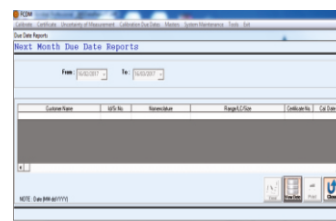
### Features :-

- All slide ways and wearing parts are hardened to prevent wear during prolonged use.
- Vee-centres are made from High Quality Alloy Steel for longer life.
- The micrometer and fiducial indicator anvils have Tungsten Carbide tips to provide greater life.
- Complete test Certificate is provided in two types for accuracies of the machine
- The "Odd Flute Tap" or "Radial Measurement Attachment" is supplied with all standard models.
- All the casting parts are stress relieved and painted.
- Tungsten Carbide Pads are provided for minimum wear at the V-guide ways for the centers.
- Designed to measure Metric, Whitworth, BSPT/NPT threads.

### Application :-



Measuring window for threads measurement



Gauge History Report

ACCURATE Metrology & Automation					
Test				Issue Date: 10/1	
Calibration Certificate Of	Certification Number	Calibration Date	Calibration Due Date	Page No. of Pg.	
1	10101	10/01	10/01	1 / 1	
Name & Address of Client: ... And 10101					
Client DC No. & Date: ...					
Case Number: ...					
Description & Identification of Instruments: ...					
Pre-Status of Calibration Item: ...					
Reference Standard & Calibration Method: ...					
Position of Calibration: ...					
Calibration carried out at: ...					
Uncertainty of Measurement: ...					
Calibration Equipment Used: ...					
Traceability: ...					
Calibration Equipment Used: ...					
Traceability: ...					
Calibration Equipment Used: ...					
Traceability: ...					
Wear Date: 0.3550					
OBSERVATIONS					
TPD	By Major Dia	By Eff Dia	By Wear Limit	Major Dia	Effective Dia
0.1	1.1	0.0 1.1	0.01	10.10	1.1
No-Dia	0.10	0.010	1.	10.10	1.1
Remarks: m. m.					
Note: ...					
Calibrated By: ... Authorized By: ...					

Calibration Certificate Formats

### With Digital Dial (Mitutoyo or Sylvac Optional)

Used jointly with dead weight spindle head. It has digital LCD display with character height of 8.5mm.

- Output : Opto Electronic RS-232
- Range : 25mm
- Resolution : 0.001mm
- Repeatability : 0.001mm
- Accuracy : 0.003mm
- Preset, Min/Max, Data memory, Tolerance indicator display



# TECHNICAL DATA

FCDM Model 0 - 100 mm			
Specificaation	Mechanical	(With Digital Dial)	(With Electronic Display)
Capacity	Dia. 4" / 100 mm		
Length between centres	8.25" / 215 mm		
Measuring Device	Drum	Dial	DRO & Probe
Least Count	0.0002mm/0.00001"	0.001mm	0.0001mm
FCDM Model 0 - 175 mm			
Specificaation	Mechanical	(With Digital Dial)	(With Electronic Display)
Capacity	Dia. 7" / 175 mm		
Length between centres	12.5"/315 mm		
Measuring Device	Drum	Dial	DRO & Probe
Least Count	0.0002mm/0.00001"	0.001mm	0.0001mm

## Standard Accessories of Mechanical Model Micrometer Drum

Non-rotating anvil type micrometers having 25 mm travel with mm graduations. The thimble of the micrometer is graduated for reading of 0.002 mm & the vernier scale facilitates direct reading of 0.0002 mm. Micrometer anvil has non rotating feature to avoid twisting of thread measuring wires and prisms. Measuring face shank dia. is 6.35mm and 10mm for 0-100mm and 0-175mm models respectively.

- Range: 25mm
- Resolution: 0.0002 mm
- Repeatability: 0.002 mm
- Accuracy: 0.004 mm



## Dead Weight Spindle Head

Replaces the fiducial indicator and mechanical system

- Range : 10/25mm .
- Repeatability : 0.0005mm

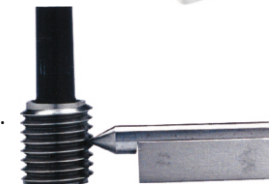


## Odd Flute Attachment

For measuring the odd flute, attachment is provided with all models.

## Taper Thread Plug Measurement Accessory

For determining the effective, major and minor diameter of taper thread plug. Taper thread plugs of BSPT/ NPT type can be measured.



## Thread measuring prisms

- Conforms to IS-6150:1971 for measurement of minor diameter of screw thread. Available in four types of pairs - A, B, C, D, according to the type of thread and pitch



## Accessories for thread measurements Plain Cylindrical Standards (Setting masters)

Conforms to IS-4349:1987.

They are produced to close limits of roundness and concentricity.

Concentricity : 0.0025 mm  
Available in set (3-100 mm)  
or in loose (3-160 mm)



## Thread measuring cylinders (Thread measuring wires)

Conforms to IS-6311:1978 and are supplied in pairs. These cylinders can be used for measurement of pitch diameter for various thread forms.

Available in 21 pairs from 0.17mm to 6.35mm

- Hardness: 60 ±2 H RC
- Material: HSS



## Female Centres

Optional accessory or holding small thread gauges, taps having male centres either at one or at both ends. All centres are made from High Quality Alloy Steel material for longer life.

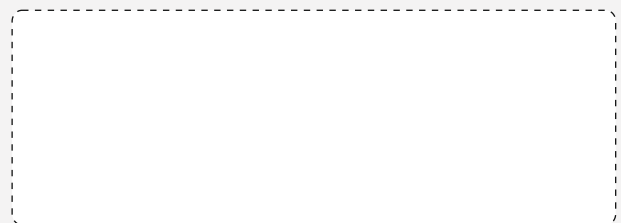


## Accurate Metrology And Automation Company

(Formerly "Aditya Engineering Company")

- 📍 **Head Office** : 67, Hadapsar Industrial Estate, Pune-411 013, Maharashtra, India.
- ☎ **+91-20- 6606 9595, +91 86000 23615**
- 📍 **Works** : A/P - Khalad, Saswad Jejuri Road, Tal. Purandhar, Pune-412 301, India.
- ☎ **+91 99700 02528** | ✉ **adityaengg@adityaengg.com** | 📄 **GST : 27AACFA5688G1ZA**
- ☎ **+91 86000 21671** | 🌐 **www.adityaengg.com** | 📄 **PAN : AACFA5688G**

Authorised Distributor :



### • Sales Branch Offices •

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| <b>Pune</b> : +91 99700 02573     | <b>Delhi</b> : +91 80107 32455     |
| <b>Nashik</b> : +91 74474 64750   | <b>Bhiwadi</b> : +91 95551 81100   |
| <b>Kolhapur</b> : +91 86000 23613 | <b>Bengaluru</b> : +91 95903 25411 |
| <b>Gujarat</b> : +91 91759 83127  | <b>Chennai</b> : +91 90214 12461   |
| <b>Kolkata</b> : +91 76776 20966  |                                    |

Note : Due to continuous Improvements at our end, Specifications are subject to change without prior notice.