ACCURATE
Metrology & Automation
Since 1984

FLOATING CARRIAGE MICROMETER

CERTI.NO. CC- 2082

With Sylvac DRO & PROBE

- Measurement time saved 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.

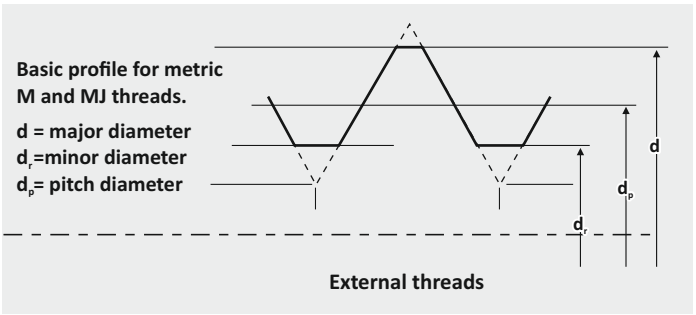
Standard Accessories of Electronic Model With Sylvac Digital Display Unit

- 7 segment, 8 digit 7.8 x 3.5mm display unit
- Preset : Zero Setting
- ±Direction measuement
- 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)

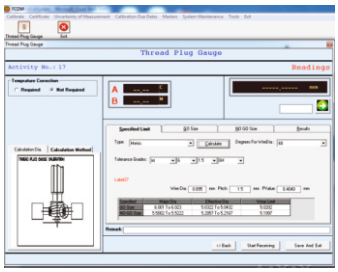
Features :-

- All slide ways and wearing parts are hardened & ground to prevent wear during prolonged use.
- Vee-centres are made from High Quality Alloy Steel for longer life.
- The micrometer and dial 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.

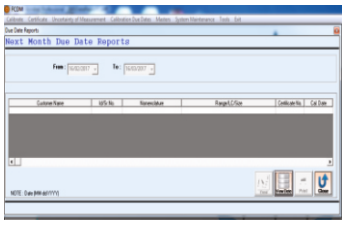
Application :-



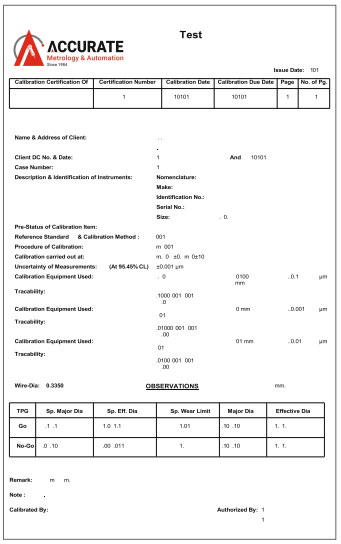
External threads



Measuring window for threads measurement



Gauge History Report



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/0.0005mm
- 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
- Repeatability: 0.002 mm
- Resolution:0.0002 mm
- Accuracy: 0.004 mm

Dead Weight Spindle Head

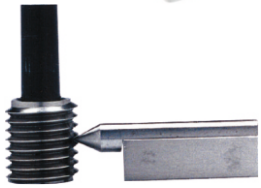
Replaces the fiducial indicator and mechanical system

- 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.

Accessories For Thread Measurements

Thread Measuring Prisms

- Confirms 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

Plain Cylindrical Standards (Setting Masters)

Confirms to IS-4349:1987.
They are produced to close limits of roundness and concentricity.
Concentricity : 0.0025 mm
Available in set (3-100 mm) & (3-160mm)
or in loose (3-160 mm)

* Non Standard setting Master also available on request

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 in Set Or Loose.

- Hardness: 60 ±2 HRC
- Material: HSS

Female Centres

Optional Accessories 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.

*Mandrels set used for holding hollow thread plug gauges.

ACCURATE
Metrology & Automation
Since 1984

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