



**BANBROS ENGINEERING PVT. LTD.**

The Precision Measurement People

# COMPUTERIZED UNIVERSAL TESTING MACHINE



**BCUM-SERIES**



**BANBROS BCUM-Series** electromechanical universal testing machines can perform a wide range of mechanical tests including tensile, compression, bend, peel, tear, friction, and shear testing. These systems are designed to test materials, components, and products in accordance with ASTM, ISO, and other industry standards. Compatible with hundreds of accessories for a wide range of applications, these universal testing systems are available in a multiple sizes and configurations for R&D, QC, and other mechanical testing up to 100 kN force.

**TECHNICAL SPECIFICATION :**

| Model No.               | BCUM-0.5KN                                                                                          | BCUM-1KN | BCUM-2.5KN | BCUM-5KN                                                                                                     | BCUM-10KN             | BCUM-25KN | BCUM-50KN | BCUM-100KN |
|-------------------------|-----------------------------------------------------------------------------------------------------|----------|------------|--------------------------------------------------------------------------------------------------------------|-----------------------|-----------|-----------|------------|
| Load capacity           | 0.5Kn                                                                                               | 1Kn      | 2.5kN      | 5Kn                                                                                                          | 10Kn                  | 25Kn      | 50Kn      | 100Kn      |
| Load L.C.               | 0.1N                                                                                                |          | 1N         |                                                                                                              | 0.01Kn                |           |           | 0.1Kn      |
| Grip Separation Min-Max | 0-300mm                                                                                             |          |            |                                                                                                              | 0-800mm               |           |           |            |
| Compression space       | 300mm                                                                                               |          |            |                                                                                                              | 800mm                 |           |           |            |
| Testing Speed           | Step-less speed of 2.5 to 25mm/min OR 5 to 50mm/min OR 10 to 100mm/min OR 50 to 500mm/min           |          |            |                                                                                                              |                       |           |           |            |
| Elongation L.C.         | 0.1mm with digital rotary encoder                                                                   |          |            |                                                                                                              |                       |           |           |            |
| Motor capacity          | 0.5hp                                                                                               |          |            | 1hp                                                                                                          |                       | 2hp       | 3hp       |            |
| Input Power             | Single phase 220V 50Hz                                                                              |          |            |                                                                                                              | Three phase 440V 50Hz |           |           |            |
| Safety Feature          | Overload Protection                                                                                 |          |            | Emergency Stop, Over-travel protection, Over load protection & Auto Break judgement provided with each model |                       |           |           |            |
| Design Feature          | Heavy duty 'Best in class' twin guided double pillar design for best stability and higher stiffness |          |            |                                                                                                              |                       |           |           |            |

**DIGITAL READ OUT (DAQ), DATA ACQUISITION SYSTEM) : -**

- High Resolution 24 Bit Adc , Ads 1232 Used For A Better Accuracy.
- 2x16 Or 4x20 Dot Matrix Lcd Display For Manual Operation.
- 8 Keys Provided To Easy Manual Operation.
- Load Zero Facility By Key.
- Displacement Zero Facility By Key.
- One Can Make Manual Test With Read Out.
- Peak Load And Peak Displacement Hold Facility.
- Manual Entry Of Speed.
- Auto Calibration Through Daq.
- Over Load Protection.
- Over Displacement Protection
- Extensometer And Rubber Extensometer Facility Optional.



#### SOFTWARE SPECIFICATIONS AND FACILITIES :-

- Pc Based Dynamic Software.
- Fully Pc Controlled Software.
- Protection With A Password To Avoid Misuse.
- Real Time Graph.
- Load Vs Displacement Graph.
- Load Vs Time Graph.
- Displacement Vs Time Graph.
- Stress Vs Strain Graph.
- Single Test And Single Report.
- Multi Test And Multi Report.
- Statistical Analyse Of Multi Report.
- Test Report During Test.
- Test Reports Re Call Facility From History.
- Data Back Up And Restore Facility.
- Customer End Report Generation.
- Reports Saved As Word, Excel And Pdf Format.
- This Software Supports Windows 7,8,10,11,