

≡

UNCONFINED COMPRES...

...

Print Format

Items EIE

Language

en

Letter Head

EIE wihout ISO





eie INSTRUMENTS PVT. LTD.

(An ISO 9001:2015 Certified Company)

# UNCONFINED COMPRESSION TESTER FOR ROCK - DIGITAL MOTORIZED 500 KN - IS 9143



As per IS:9143. Consist of a Load frame of 500 KN Loading with digital load indication (Higher capacity also available) Platens as per ASTM 2938 available at extra cost. Manufactured as per International design, Plate model for highest mechanical stability, accurate centering of load and excellent repeatability. Manual pace rate control, auto stop and manual release on failure of test specimen. Reading of Load in KN and N/mm<sup>2</sup> with auto calculation. with Pace Rate indication. Manual Pace rate Control will have certain limitations. **CTM with Automatic Pace rate control is recommended for accurate Pace rate Setting.** Further details as mentioned in Technical Part on following pages.

**Introduction:**

- The digital UCS testing machine has been designed to meet the need for a simple, economic and reliable means to test ROCK for its unconfined compressive strength
- The design expressive of simplicity, both of construction and operation, makes the machine easy to use and maintain.
- The digital machines are provided with a MANUAL pace rate controller, to enable maintain a constant rate of loading.

**Salient Features of EIE - Digital UCS Machine:**

- 2 line Alphanumeric display with backlite, displaying - Actual Load / Peak load, Rate of loading and Calculated load in N/mm<sup>2</sup> (as soon as sample fails)
- Four column high stiffness and high stability fully welded construction of the load frame.
- Direct reading of compressive strength in N/mm<sup>2</sup> -No calculation required.
- Peak hold facility.
- Can manually control pace rate from 1 KN/Sec to 20 KN/sec.
- Pace rate indication in KN/Sec.
- Bar Graph indication to control the pace rate
- Built in memory for last 10 readings
- Automatic internal calibration(without Proving ring)
- Safety cut out for overload and electrical short circuit.
- Safety door on the front side for operator safety.
- Compact Pumping unit with manually variable rate of loading.

**Scope of supply:**

- High strength rigid structure (Loading Frame)
- Pumping unit (Oil source cabinet)
- Digital Load indicator
- High precision pressure transmitter
- Pair of compression platens
- High pressure hose pipe

**Salient features of data manager PC software (Optional):**

- Two way communication i.e machine operates from computer and from the touch screen controller both (Stat, stop, save data and save graph)
- Results directly saved in excel file
- Graph also saved in excel file
- Capable to save customer name, other details of cutomer, ageing of Rock samples, identification mark of the Rock samples, date and time of testing
- Capable to print direct report from the computer
- Capable to select different test parameters like pace rate, sample size and area from the computer (software)

Note : Rock/Core cutting and grinding machine, MOE attachment and PC software available at extra

**Technical Specification**

|                    |   |            |
|--------------------|---|------------|
| •Capacity          | : | 500 Kn     |
| •Platen size in mm | : | 160 mm Dia |
| •Platen Dia in mm  | : | 120 mm     |

|                            |   |                                           |
|----------------------------|---|-------------------------------------------|
| •Ram Dia in mm             | : | 120 mm                                    |
| •Ram Travel in mm          | : | 50 mm                                     |
| •Vertical daylight in mm   | : | 230 mm                                    |
| •Horizontal daylight in mm | : | 230 mm                                    |
| •Weight approx in kg       | : | 262 Kg.                                   |
| •Platen hardness           | : | More than 550 Vickers hardness            |
| •Electric Motor            | : | 1 HP, Single Phase                        |
| •Operation on              | : | 220 V AC Single Phase.                    |
| •Least count               | : | 0.01 KN                                   |
| •Pace rate control         | : | Manual control from 1 KN/Sec to 20 KN/sec |
| •Overall Dimensions        | : | 660 X 870 X 820 (L X W X D) mm            |

**Note :**  
Use of 3 KVA three phase servo controlled stabilizer is essential to protect the machine against voltage fluctuations. Warranty voids in case of any damage due to power fluctuation.

**Technical Specification**

- Capacity : 500 Kn
- Platen size in mm : 160 mm Dia
- Ram Dia in mm : 120 mm
- Ram Travel in mm : 50 mm
- Vertical daylight in mm : 230 mm
- Horizontal daylight in mm : 230 mm
- Platen hardness : More than 550 Vickers hardness
- Electric Motor : 1 HP, Single Phase
- Operation on : 220 V AC Single Phase
- Least count : 0.01 KN
- Pace rate control : Manual control from 1 KN/Sec to 20 KN/sec
- Overall Dimensions : 660 X 870 X 820 (L X W X D) mm
- Weight approx in kg : 262 Kg.



| Corporate Office:                                                                                                                                                      | Calibration Laboratory:                                                                                                                                                           |                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A-1301, BVR Ek, Opp. Hotel Inder Residency,<br>Near Gujarat College, Ellisbridge,<br>Ahmedabad-380 006.<br>Phone : (079) 6621 1234<br>Website : www.eieinstruments.com | Survey No. 1098, Nr. Mahakali Temple,<br>Opp. Primary School, Village Kubadthal,<br>Tal-Daskroi, Ahmedabad-382 433.<br>Phone: (079)-3520 8300<br>E-mail : info@eieinstruments.com | GST TIN No. : 24AABCE4018L1ZU<br>I.T. PAN No. : AABCE 4018L<br>IEC No. : 0813026598 Dt. 04/03/2014<br>CIN No. : U29199GJ2004PTC045078<br>TAN No. : AHME00572F |

