Department of Civil Engineering, NIT Calicut

500kN SERVO HYDRAULIC ACTUATOR SYSTEM

Photo of Instrument:

Instrument Name	500kN Servo Hydraulic Actuator system
Instrument Model & Serial No.	BISS, Bangalore
Instrument Make	Bi-03-Ec-801-05
Category of Instrument	(Advanced Manufacturing facility / Characterization and Testing / Computational Facility / Bioscience and Technology / Sample preparation)
Description of Instrument	500kN Actuator and Control System
Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)	Servo hydraulic actuator is double ended double acting high precession linear actuator. **Model:** AC-02-0250S **Capacity:** Compression 500kN, Tension 350kN **Stroke(mm):** ±75mm **Actuator area(mm^2):** Compression 25446.9; Tension 15943.58 **Rod Thread (Depth) in mm:** M50x2(70)
Application of Instrument (Limited to Major 4 or 5)	1. Strain controlled load application 2. Quasi static reverse cyclic loading
Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.) Guidelines for Sample Submission – User Instructions	• Scale down model which matches with the Reaction frame and supporting floor. • The expected failure load is below 100kN • Any specific support condition required need to fabricated
Types of Analysis / Testing	1. Quasi static cyclic load testing on beam column joint 2. Cyclic three-point load testing on beam

	3. Lateral cyclic load test on concrete frame
Faculty In-Charge Name / Email / Contact	civilhod@nitc.ac.in Head, Civil Engineering Department, NITC
Technical Staff Name / Email / Contact	civilhod@nitc.ac.in
Location of Instrument	Structural Laboratory
Other Details	

User Charges

S.NO.	Type of Analysis / Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National R&D Labs	Industry
1	Axial Compression or Flexure (Cyclic/Monotonic)	Free	1000 per Hour	2000 per Hour	3000 per Hour	4000 per Hour
2	Axial Compression or Flexure (Cyclic/Monotonic)	Free	1000 per Hour	2000 per Hour	3000 per Hour	4000 per Hour
3	Axial Compression or Flexure (Cyclic/Monotonic)	Free	1000 per Hour	2000 per Hour	3000 per Hour	4000 per Hour

Direct request letter to HOD

Slot Booking and Payment Work Flow: