State-of-the-art, and first of its kind in India *Pseudo Dynamic Test Facility* to perform the experiments on prototype structural models incorporating *PsD Apparatus*, a Non-yielding and stiff integrated reaction floor-wall assembly. 10x15x4.0 m three cell box girder floor and 10.5 m high, 2 m thick post-tensioned wall with anchorages at 0.6 m grid capable of 2 MN for axial load and 1.5 MN for shear loads.

![Pseudo Dynamic Test Facility](image1)

![2,500 kN Closed Loop Computer Controlled Servo-Hydraulic Universal Testing Machine (UTM: MTS Model 311.41)](image2)

![600 LPM Silent Flo Hydraulic Power Unit](image3)

![Computer Controlled Closed Loop Servo Hydraulic Actuators (50 kN – 1,000 kN; Total 09 nos.)](image4)
MTS FT-60 Controller (4 Channels 4 Station) with capability of Pseudo-Dynamic Hybrid Simulation Tests and Real Time Hybrid Simulation Tests using dynamic fatigue rated actuators in combination with SCRAMnet boards and Target computer

MTS FTGT and 407 servo-hydraulic controllers

Real time 132 Channels data acquisition system (NI-PXie8880)

50 kN Servo-Hydraulic Uni-axial Shake Table of size 1.2 m X 1.8 m with capability of performic tests up to 1.5 m/s velocity at 50 Hz

Model 600RD Instron 3,000 kN and Reihle 1,350 kN Compression Testing Machine

Calmetrix Calorimeter Model PCAL HPC
Rheometer Make: Anton Paar

Ambient and Forced Vibration Measuring system with PCB accelerometers, Impact Hammer and Data Acquisition System

Starterkit "Wireless Accelerometer & Bean Gateway Outdoor & BeanScape Multi-WSN"
Dynamic Signal Analyzer

Fiber Optic Based Temperature and Strain Measurement system

Electro Dynamic Shaking Table and Eccentric Mass Shaker System (indigenously fabricated)
E.O.T. cranes (20 Tonnes and 5 Tonnes)

Force-controlled hydraulic jacks (10-50 kN capacities; Make: Enerpac)

6000kN Column Testing machine (WPM, Germany) upgraded (in-house) to servo-controlled CTM

2,000 kN Tinius Olsen UTM upgraded for online display and recording test parameters

- Electronically controlled sensors: LVDTs/DCDTs, strain gauges, Velocity Meters (induction type) and Accelerometers (both force balance and capacitive types)
- Traditional devices: Dial gauges and proving rings
- PC-Based Data Acquisition System (Make: NI) of different capabilities

- Facilities and equipment are available for handling and preparation of concrete
- Wet concrete properties measurement related equipment
- Temperature controlled ovens and Furnaces
- In-situ Property Evaluation equipment like Flat Jacks
- Concrete core-cutting machine
- Schmidt hammers
- Ultrasonic pulse velocity measuring systems
- Micro-cover meter
- Half-cell surveyor for corrosion measurement
- Diamond cutter for cutting and dressing concrete and rock
- Pre-stressing jacks for 7 mm and 8 mm wires
- Vertical Band Sawing Machine
Torque wrenches

Diamond cutter