

Madanapalle Institute of Technology and Science

Department of Civil Engineering

Concrete Technology Lab		
Sr. No	Equipment Name	Equipment Image
1	Vicat Apparatus	
2	Le Chatelier's Apparatus	
3	Compression Testing Machine (CTM) 3000kN Capacity	

<p>4</p>	<p>Vee Bee Test Apparatus</p>	
<p>5</p>	<p>Compaction Factor Apparatus</p>	

6	Pan Mixer	
7	Hot Air Oven	
8	Rebound Hammer	

9	Ultrasonic Pulse Velocity (UPV) Apparatus	 A photograph of an Ultrasonic Pulse Velocity (UPV) apparatus. It consists of a laptop computer connected to a handheld electronic device and two ultrasonic transducers. The laptop screen displays a software interface with graphs and data. The handheld device is connected to the transducers via cables. The setup is placed on a wooden surface.
10	Table Vibrator	 A photograph of a table vibrator. It is a large, blue metal frame with a wooden top surface. The frame is supported by four vertical legs, each equipped with a large coil spring. The device is used for testing the vibration resistance of materials or structures.
11	Compressometer	 A photograph of a compressometer. It is a blue metal frame with a central vertical column. At the top of the column is a cylindrical chamber. A pressure gauge with a yellow face is attached to the side of the column. The device is used for measuring the compressive strength of concrete or other materials.

12	Cylindrical Concrete Mould	
13	Concrete Mould	
14	Sieve set for Fine and Coarse Aggregate	

15	Flow Table Apparatus	 A photograph of a Flow Table Apparatus. It consists of a blue metal base with a circular wooden top. A stainless steel funnel is mounted on the wooden top. A horizontal metal arm with a blue handwheel is attached to the side of the base, used to rotate the table.
16	Slump Cone	 A photograph of a Slump Cone. It is a dark, conical metal mold used for testing the consistency of fresh concrete. A long, thin metal rod is inserted into the top of the cone. A horizontal metal bar is attached to the side of the cone, and a vertical metal rod is attached to the bottom, used to lift and move the cone.

17	Thickness Gauge	
18	Weighing Balance	

Advanced Concrete Technology Lab

Sr. No	Equipment Name	Equipment Image
1	Muffle Furnace	 A blue muffle furnace is shown on a wooden table. The furnace has a large front door with a handle and a control panel below it. The control panel features a digital display, a red emergency stop button, a green start button, and a black dial. The furnace is situated in a laboratory setting with a window in the background.
2	Cement Vibrating Machine	 A red and blue cement vibrating machine is shown. It consists of a red cylindrical motor unit mounted on a blue base. The machine is used for compacting concrete. It is located in a laboratory with various equipment and materials visible in the background.
3	Universal Testing Machine (UTM)	 A blue and white universal testing machine (UTM) is shown. It is a large, industrial-grade machine used for testing the strength of concrete and other materials. The machine has a blue frame and a white base. It is located in a laboratory with a concrete wall in the background.

4	Accelerated Curing Tank	 A blue, rectangular, industrial-grade accelerated curing tank with a control panel on the right side, situated in a laboratory or workshop.
5	L Box Apparatus	 A black, rectangular L-shaped apparatus, likely used for testing concrete specimens, mounted on a metal stand.
6	U Box Apparatus	 A black, U-shaped apparatus, likely used for testing concrete specimens, mounted on a metal stand.
7	Concrete Core Cutter	 A red and black concrete core cutter machine, including a vertical cutting head and a red power source, positioned in a workshop.

8 Lync Pan Mixer



Soil Mechanics Lab

Sr. No	Equipment Name	Equipment Image
1	Casagrande Apparatus	 A photograph of a Casagrande liquid limit apparatus. It features a large, circular, brass-colored bowl mounted on a black base. To the right of the bowl, there is a wooden handle and a small rectangular box with a red button. The entire setup is placed on a light-colored surface.
2	Standard Penetration Test Equipment	 A photograph showing a group of people gathered around a Standard Penetration Test (SPT) rig. The rig is a tall, dark metal structure with a vertical rod extending downwards. The people are standing on a dirt ground, and there are trees in the background.
3	Sieves and Sieve Shaker for Grain Size Analysis	 Two photographs related to grain size analysis. The left photograph shows three people in a laboratory setting. One person is operating a blue sieve shaker machine. The right photograph shows a stack of five brass sieves of different sizes, stacked vertically. The sieves have red labels on them. The word "MITS" is visible at the bottom right of the image.

4	Permeability of soil	
5	Compaction test	

6	CBR Test	
7	Consolidation test	

<p>8</p>	<p>Unconfined compression test</p>	 A blue unconfined compression test apparatus is shown in a laboratory setting. It consists of a vertical frame with a central loading mechanism and a specimen placed on a base. A blue bucket is positioned in front of the machine. The background shows a window with wooden frames and a wall with a sign that says "PETA ALATUS".
<p>9</p>	<p>Tri-axial Compression test</p>	 A tri-axial compression test apparatus is shown in a laboratory. It features a blue frame with a central testing chamber and various gauges and valves. A computer monitor and keyboard are connected to the machine, indicating data acquisition. The background includes a wall with posters and a window.
<p>10</p>	<p>Direct shear test</p>	 A direct shear test apparatus is shown in a laboratory. It consists of a blue frame with a central testing chamber and a computer monitor and keyboard connected to it. The background includes a wall with posters and a window.

11	Hydrometer	
12	Swelling Pressure test	 <p>• Don't use mobile phones during lab hours. • Don't try to repair any faulty instrument.</p>

Highway Engineering Lab

Sr. No	Equipment Name	Equipment Image
1	Aggregate Impact Test Apparatus	 A blue aggregate impact test apparatus consisting of a vertical frame with a horizontal bar at the top, a cylindrical container in the middle, and a base with a circular opening. It is mounted on a concrete base.
2	Los Angeles Abrasion Testing Machine	 A large blue Los Angeles Abrasion Testing Machine with a large rotating drum and a motor. A label on the front reads "LOS-ANGELES ABRASION TESTING MACHINE".
3	Universal Penetrometer	 A universal penetrometer with a circular dial at the top, a vertical rod, and a base with a circular opening. It is connected to a blue power supply unit.

4	Standard Tar Viscometer	 A photograph of a Standard Tar Viscometer. It consists of a stainless steel cylindrical chamber mounted on a white, four-legged stand. A black handle is attached to the side of the chamber. To the right of the stand is a separate white control box with a large black dial and a power switch. The entire setup is on a light-colored tiled floor.
5	Pensky Martens Flash and Fire Point Apparatus	 A photograph of a Pensky Martens Flash and Fire Point Apparatus. It features a blue base with a black control knob. A stainless steel burner assembly is mounted on top, with a glass chimney and a blue control panel on the left side. The apparatus is placed on a black base on a tiled floor.
6	Ductility Testing Machine	 A photograph of a Ductility Testing Machine. It is a long, blue, rectangular machine with a control panel on the left side featuring several buttons and a dial. The machine has a long horizontal frame with rollers and a specimen holder in the center. It is positioned on a tiled floor against a plain wall.

7	Marshall Stability Test Apparatus	 A blue Marshall Stability Test Apparatus is shown. It consists of a blue base with a control panel on the left side, featuring a power switch and a pressure gauge. Two vertical metal columns rise from the base, supporting a horizontal crosshead. A circular dial is attached to the crosshead, and a vertical rod extends downwards from the center of the crosshead. The apparatus is positioned in a laboratory setting with a yellow wall and a white door in the background.
8	Aggregate Crushing Value Test Apparatus	 The Aggregate Crushing Value Test Apparatus is shown. It features a grey plastic base with a square top and four legs. On top of the base is a circular metal container with a lid. The lid is slightly ajar, revealing a smaller circular metal container inside. Two wooden handles are attached to the top of the lid. The apparatus is placed on a light-colored floor.

Environmental Engineering Lab

Sr. No	Equipment Name	Equipment Image
1.	pH meter	
2.	Conductivity Meter	
3.	Turbidity Meter	

4.	Dissolved Oxygen Meter	 A handheld dissolved oxygen meter with a blue and white casing. It features a digital LCD display at the top, a control knob, and three yellow circular buttons at the bottom. A black probe is attached to the side.
5.	Muffle Furnace	 A white muffle furnace with a teal-colored door. The door has a handle and a viewing window. A control panel with a digital display and several buttons is mounted on top of the unit.
6.	Hot Air Oven	 A white hot air oven with a teal-colored door. The door has a handle and a viewing window. The control panel at the bottom features two large dials and several buttons.

7.	BOD Incubators	
8.	UV-Visible Spectrophotometer	
9.	Digital Flocculator	
10.	Digital COD Digester	

Surveying Lab

Sr. No	Equipment Name	Equipment Image
1	Ranging Rods	
2	Levelling Staff	
3	Wooden Cross Staff with Iron Pole	
4	Metal Fibre Glass Tape	

5	Measuring Chain	
6	Arrows	
7	Auto-Level	

8	Total Station	
9	Vernier Theodolite	
10	Prism	

11	Dumpy Level	 A white dumpy level instrument is shown mounted on a red carrying case. The instrument features a telescope with a black eyepiece and objective lens, and a circular level vial. It is positioned on a white base within the case.
12	Ordinary Planimeter	 An ordinary planimeter instrument is shown inside a blue velvet-lined case. The instrument consists of a horizontal beam with a sliding carriage and a vertical wheel, used for measuring the area of irregular shapes.
13	Prismatic Compass	 A prismatic compass instrument and its black carrying case are shown on a wooden surface. The compass has a circular lens and a rotating bezel. The case is open, revealing the instrument inside.

14	Aluminium Tripod Stand	
15	Plane Table	
16	Wooden Tripod Stand	

17

Electronics Digital
Theodolite



Model Testing (Structural Dynamics) Lab

Sr. No	Equipment Name	Equipment Image
1	Shake Table	
2	Loading Frame (50T)	
3	Hydraulic Crane	