



Dhanbad Instruments LLP is in ISO 9001:2008 certified company. We are leading provider of Mechanical Engineering Lab products in East India. We have entire range of solution for Mechanical Engineering. For any kind of solutions related to Mechanical Engineering please feel free to contact us.

1. Strength of Material Lab Equipments

- a. Universal Testing Machine
- b. Impact Testing Machine
- c. Torsion Testing Machine
- d. Spring Testing Machine
- e. Erichen Cupping Testing Machine
- f. Tensile Testing Machine
- g. Rockwell Hardness Tester
- h. Fatigue Testing Machine
- i. Brinell Hardness Tester
- j. Metallurgical Inverted Microscope
- k. Muffle Furnace
- l. Belt Grinder
- m. Specimen Mounting Press
- n. Izod Striker
- o. Extensometer
- p. Two in one Belt Grinder and many more....



2. I.C. Engine Lab Equipments

Petrol Engine Test Rig

- a. Single Cylinder Two Stroke Petrol Engine Test rig :
With Rope Brake Dynamometer
- b. Single Cylinder Four Stroke Petrol Engine Test rig :
With Rope Brake Dynamometer
- c. Multi Cylinder Four Stroke Petrol Engine Test rig :
With Rope Brake Dynamometer & Morse Test arrangement



Diesel Engine Test Rig

- a. Single Cylinder Four Stroke Diesel Engine Test rig (5 H.P.) :
With Rope Brake Dynamometer
- b. Multi Cylinder four Stroke Diesel Engine Test rig :
With Rope Brake Dynamometer
- c. Twin Cylinder four Stroke Diesel Engine Test rig :
With Rope Brake Dynamometer



Cut Section Models

- a. Cut Section Model of Actual Single Cylinder Two Stroke Petrol Engine :
For plotting the Port Timing Diagram
- b. Cut Section Model of Actual Single Cylinder Four Stroke Petrol Engine :
For plotting the Valve Timing Diagram
- c. Cut Section Model of Actual Single Cylinder Four Stroke Diesel Engine :
For plotting the Valve Timing Diagram

Air Compressor Test Rig

- a. Single Stage, Single Cylinder Air Compressor Test rig
- b. Two Stage, Twin Cylinder Air Compressor Test rig



Air Blower Test Rig

- a. Constant Speed Air Blower Test rig (Energy Meter Type)
- b. Variable Speed Air Blower Test rig (Energy Meter Type)

3. Fluid Mechanics & Hydraulics Lab

- a. Co-Efficient of Discharge Apparatus
- b. Notch Apparatus
- c. Impact of Jet Apparatus
- d. Venturimeter and Orificemeter Apparatus
- e. Bernoulli's Theorem Apparatus
- f. Reynolds Apparatus
- g. Rota Meter Test Apparatus
- h. Metacentric Height of Ship Model
- i. Wind Tunnel
- j. Hydraulic Bech
- k. Heleshaw Apparatus
- l. Pilot Static Tube Apparatus
- m. Free & Forced Vortex Flow Apparatus



4. Dynamics of Machine Lab Equipments

- a. Whirling of Shaft Apparatus
- b. Vibration Lab
- c. Motorized Gyroscope
- d. Universal Governor Apparatus
- e. Static and Dynamic Balancing Apparatus
- f. CAM Analysis Apparatus
- g. Journal Bearing Apparatus
- h. Epicyclic Gear Apparatus
- i. Three Stage Spur Gear
- j. Corollis Components of Apparatus
- k. Spur Gear Set
- l. Rack & Pinion
- m. Whit worth Quick Return Mechanism
- n. Scotch Yoke Mechanism
- o. Reversing Gear
- p. Internal Gear Pinion Drive
- q. Slip & Creep Measurement Apparatus
- r. Epicyclic Gear Train & Holding Torque Apparatus



5. Heat & Mass Transfer Lab

- a. Thermal Conductivity of Insulation Power
- b. Heat Transfer in Natural Convection
- c. Heat Transfer in Forced Convection
- d. Critical Heat Flux Apparatus
- e. Heat Pipe Demonstrator
- f. Heat Transfer Through Composite Wall
- g. Parallel Flow And Counter Flow Heat Exchanger
- h. Shell And Tube Heat Exchanger
- i. Unsteady State Heat Transfer
- j. Plate Type Heat Exchanger
- k. Boiling Heat Transfer Unit
- l. Thermal Conductivity of Solid and Liquid
- m. Stefan Boltzman Apparatus Heat Transfer Through Lagged Pipe
- n. Emmissivity Measurement Apparatus
- o. Drop And Film Wise Convensy



6. Fluid Mechinery Lab

- a. Pelton Wheel Turbine Test Rig
- b. Francis Turbine Test Rig
- c. Kaplan Turbine Test Rig
- d. Hydraulic Ram Test Rig
- e. Gear Oil Pump Test Rig
- f. Axial Flow Pump Test Rig
- g. Centrifugal Pump Test Rig
- h. Reciprocating Pump Test Rig
- i. Tilting Fume Apparatus
- j. Wind Tunnel Test Rig



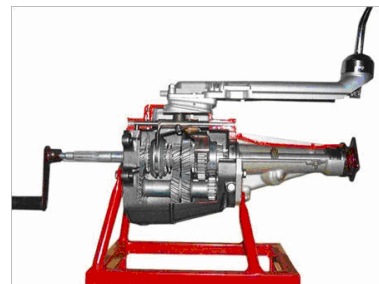
7. Refrigeration & Air Conditioning Lab

- a. Window Type Air Conditioner Test Rig
- b. Ice Plant Tutor
- c. Air Conditioning Test Rig
- d. Cold Storage Test Rig
- e. Mechanical Heat Pump Test Rig
- f. Air Washer Test Rig
- g. Cooling Tower Test Rig
- h. Refrigeration Test Rig



8. Automobile Engineering Lab

- i. Sectional Working Model Of 2 Stroke Petrol Engine
- ii. Sectional Working Model Of 4 Stroke Petrol Engine
- iii. Sectional Working Model Of 2 Stroke Diesel Engine
- iv. Sectional Working Model Of 4 Stroke Diesel Engine
- v. Gas Turbines Or Turbojet Engine Ram Jet Engine Wankel Engine
- vi. 4 Stroke 1 Cylinder Vertical Diesel Engine
- vii. 2 Stroke 1 Cylinder Scooter Engine
- viii. 2 Stroke 1 Cylinder Motorcycle Engine
- ix. 4 Stroke 1 Cylinder Motorcycle Engine
- x. Mock Layout Of Car Wiring
- xi. Mock Layout Of Tractor Wiring
- xii. Coil Ignition System Of An Automobile
- xiii. Electronic Ignition System Of An Automobile
- xiv. Fuel Supply System Of A Petrol Engine
- xv. Fuel Supply System Of A Diesel Engine
- xvi. Fuel Supply System Of A 4 Cylinder Diesel Engine
- xvii. Working Model Of Motor Car Steering : Made of Machine
- xviii. Working Model Of Tractor's Steering
- xix. Actual Cut Section Car Steering Unit
- xx. Actual Working Model of Power Steering of Car
- xxi. Demonstration Tractor Differential (Working Model)
- xxii. Demonstration Differential Gear (Working Model)
- xxiii. Differential Gear Assembly (Actual Cut Section)
- xxiv. Rear Axial Assembly (Actual Cut Section)
- xxv. Band Brake
- xxvi. Band and Block Brake
- xxvii. Single Shoe Brake
- xxviii. Double Shoe Brake Internally Expanding Brake
- xxix. Disc Brake
 - (a) Disc Brake Model
 - (b) Disc Brake Actual Working
- xxx. Mechanical Brake System
- xxxi. Power Brake (Actual Working)
- xxxii. Air Brake (Actual Working)
- xxxiii. Hydraulic Brake Unit
- xxxiv. Hydraulic Brake Unit (Two Brake Drums)
- xxxv. Hydraulic Brake Unit (Four Brake Drums)
- xxxvi. Claw Clutch
- xxxvii. Conical Friction Clutch
- xxxviii. Plate Clutch Centrifugal
- xxxix. Clutch Multi plate Clutch



9. CNC Machines & Trainers

- a. CNC Lathe Trainer
- b. CNC Milling Machine
- c. Hydraulics Trainer
- d. Pneumatic Trainer



10. Measurement & Instrumentation Lab

- a. Strain Gauge Transducers Trainer
- b. Flow Control Trainer
- c. Level Control Trainer
- d. Pressure Control Trainer
- e. Temperature Control Trainer
- f. Water Pressure Control Trainer
- g. Control Valve Characteristics Trainer
- h. Pressure to Current Measurement Trainer
- i. Vibration Measurement Trainer



11. Heat Engine Lab Equipments

- a. Model of Lancashire Boiler
- b. Model of Cornish Boiler
- c. Model of Babcock And Wilcox Boiler
- d. Model of Locomotive Boiler
- e. Model of Cochran Boiler Vertical Water Tube Boiler
- f. Model of Lamont Boiler
- g. Model of Benson Boiler
- h. Model of Loeffler Boiler
- i. Model of Valox Boiler
- j. Model of Marcet Boiler
- k. Model of Stirling Boiler
- l. Model of Nestler Boiler
- m. Lever Safety Valve
- n. Spring Loaded Safety Valve
- o. Dead Weight Safety Valve
- p. Combined High Steam And Low Water Safety Valve
- q. Water Gauge Model
- r. Stop Valve Hopkinson Type
- s. Feed Check Valve
- t. Steam Injector
- u. Pressure Gauge
- v. Blow Off Cock
- w. Reducing Valve
- x. Fusible Plugs
- y. Anti-Priming Pipe and many more...

