

PRODUCT GUIDE



MECHANICAL
CIVIL
AUTOMOBILE
MACHINERY TOOLS



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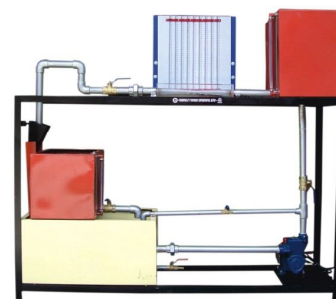
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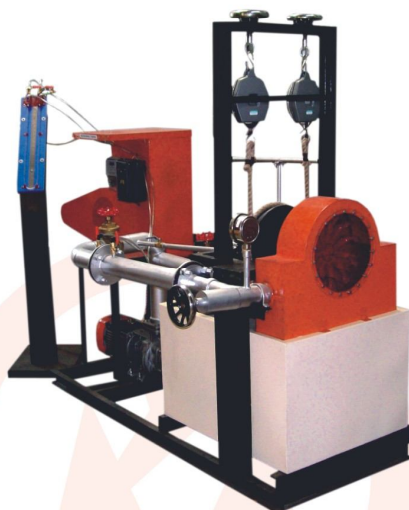
FLUID MECHANICS LAB

- GN 7201 Bernoulli's Theorem Apparatus
- GN 7204 Reynold Apparatus
- GN 7206 Discharge Over Notches
- GN 7208 Impact of Jet of Vanes
- GN 7210 Pitot Tube Setup
- GN 7214 Hydraulic Ram Test Rig
- GN 7217 Flow Through Orifice & Mouthpiece
- GN 7220 Orificemeter Test Rig
- GN 7222 Venturimeter Test Rig
- GN 7225 Venturimeter & Orificemeter Test Rig
- GN 7228 Nozzle Meter Test Rig
- GN 7230 Losses due to Friction in Pipe Lines
- GN 7233 Losses due to Pipe Fitting, Sudden Enlargement & Contraction
- GN 7235 Free Vortex Apparatus
- GN 7237 Forced Vortex Apparatus
- GN 7240 Free & Forced Vortex Apparatus
- GN 7242 Piezometer tube apparatus (Capillary tube Viscometer)
- GN 7245 Newton Law of Viscosity Apparatus
- GN 7247 Metacentric Height Apparatus
- GN 7250 Center of Pressure Apparatus
- GN 7252 Darcy's Law Apparatus
- GN 7255 Axial Fan Flow Apparatus
- GN 7258 Jet Pump Test Rig
- GN 7260 Gear Pump Test Rig
- GN 7262 Centrifugal Pump Test Rig
- GN 7265 Reciprocating Pump Test Rig
- GN 7267 Single Stage Air Compressor Test Rig
- GN 7269 Double Stage Air Compressor Test Rig
- GN 7272 Tilting Bed Flow Channel
- GN 7275 Pelton Wheel Turbine Test Rig
- GN 7278 Francis Turbine Test Rig
- GN 7280 Kaplan Turbine Test Rig

- GN 7285 Hydraulic Bench with following experimental modules
- GN-BT Bernoulli's Theorem Experiment Unit
- GN-VO Venturimeter and Orifice Experiment Unit
- GN-FN Flow Over Notches Experiment Unit
- GN-FT Flow Through Orifice & Mouthpiece Experiment Unit
- GN-PT Losses Due to Friction in Pipe Line Experiment Unit
- GN-PS Losses in Pipe Fittings, Sudden Enlargement and Contraction Experiment Unit
- GN-IJ Impact of Jet of Vanes Experiment Unit
- GN-PT Pitot Tube Experiment Unit



BERNOULLI'S THEOREM APPARATUS



PELTON WHEEL TURBINE TEST RIG



IMPACT OF JET OF VANES

HEAT TRANSFER LAB

- GN 7301 Stefan Boltzman Apparatus
- GN 7304 Emissivity Measurement Apparatus
- GN 7307 Dropwise and Filmwise Condensation App.
- GN 7308 Pool Boiling Apparatus (Critical Heat Flux)
- GN 7310 Thermal Conductivity of Insulation Powder
- GN 7313 Thermal Conductivity of Insulation Slab
- GN 7315 Thermal Conductivity of Liquids
- GN 7318 Thermal Conductivity of Metal Rod
- GN 7320 Heat Transfer From A Pin Fin
- GN 7325 Heat Transfer in Forced Convection
- GN 7328 Heat Transfer in Natural Convection
- GN 7330 Heat Transfer Through Composite Walls
- GN 7335 Heat Transfer Through Lagged Pipe
- GN 7337 Mechanical Equivalent of Heat Apparatus
- GN 7340 Conduction Composite Cylindrical Apparatus
- GN 7344 Heat Pipe Demonstrator
- GN 7346 Calandria Evaporator
- GN 7350 Single Effect Evaporator
- GN 7352 Double Effect Evaporator (Multi Effect)
- GN 7355 Open Pan Evaporator
- GN 7358 Shell & Tube Heat Exchanger
- GN 7360 Parallel/Counter Flow Heat Exchanger



HEAT TRANSFER IN NATURAL CONVECTION



POOL BOILING APPARATUS



HEAT TRANSFER FROM A PIN FIN

MASS TRANSFER LAB

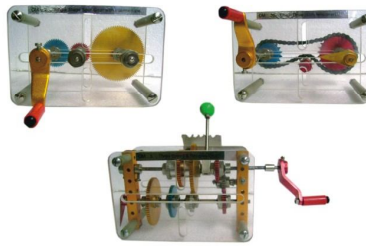
- GN 7370 Absorption in Packed Bed
- GN 7373 Absorption in Wetted Wall Column
- GN 7375 Batch Crystallizer
- GN 7378 Bubble Cap Distillation Setup
- GN 7380 Experimental Water Cooling Tower
- GN 7382 Fluidized Bed Dryer
- GN 7385 Liquid Extraction in Packed Bed
- GN 7387 Liquid in Liquid Diffusion Apparatus
- GN 7389 Natural Draft Tray Dryer
- GN 7390 Packed Distillation Column
- GN 7392 Rotary Dryer
- GN 7394 Simple Steam Distillation Setup
- GN 7395 Solid-Liquid Extraction (Bonnoto Type)
- GN 7397 Solid-Liquid Extraction (Packed Bed Type)
- GN 7399 Vapour-Liquid Equilibrium Set-Up
- GN 7400 Wetted Wall Column, Humidification & De-Humidification Study



Mechanical Engineering Lab

APPLIED MECHANICS LAB

- GN 7401 Bell Crank Lever
- GN 7403 Bending of Beam Apparatus
- GN 7405 Compound Lever
- GN 7407 Compound Screw Jack
- GN 7410 Deflection of Beam Apparatus
- GN 7415 Friction Slide Apparatus
- GN 7418 Hook's Law Apparatus
- GN 7420 Inclined Plane and Friction Apparatus
- GN 7422 Inclined Plane and Friction Apparatus (Wooden Base & without Weight)
- GN 7425 Jib Crane
- GN 7428 Fly Wheel (20cm)
- GN 7430 Parallel Forces Apparatus Overhang Beam
- GN 7432 Parallelogram of Forces Apparatus
- GN 7435 Pulley System (First, Second, and Third)
- GN 7438 Screw Jack
- GN 7440 Simply Supported Beam
- GN 7442 Triangle & Parallelogram of forces Apparatus
- GN 7445 Universal Force Table
- GN 7448 Wheel and Differential Axle
- GN 7450 Winch Crab Double Purchase
- GN 7452 Winch Crab Single Purchase
- GN 7455 Worm and Worm Wheel (Double)
- GN 7458 Worm and Worm Wheel (Single)
- GN 7460 Worm and Worm Wheel (Triple)



DIFFERENT TYPES OF GEAR TRAINS



DIFFERENT TYPES OF MECHANISMS

KINEMATICS LAB

- GN 7551 Various Type of Kinematic Links, Pairs, Chain and Mechanisms
- GN 7552 To Study Inversion of 4 Bar Mechanism Single and Double Slider Crank Mechanisms
- GN 7555 Slider Displacement , Velocity and Acceleration agianst Crank rotation for Single Slider Crank Mechanism
- GN 7557 Coefficient of Friction between Belt and Pully
- GN 7560 Gear Train Simple
- GN 7565 Gear Train Compound type
- GN 7570 Gear Train Reverted Type
- GN 7572 Gear Train Epicyclic Type
- GN 7575 Gear Train Differential Type



STATIC & DYNAMIC BALANCING APPARATUS

THEORY OF MACHINE LAB

- GN 7501 Universal Governor Apparatus
- GN 7502 Motorized Gyroscope
- GN 7505 Coriolis Component of Acceleration
- GN 7508 Cam Analysis Machine
- GN 7510 Epicyclic Gear Train Apparatus
- GN 7513 Journal Bearing Apparatus
- GN 7515 Universal Vibration Apparatus
- GN 7518 Whirling of Shafts Demonstrator
- GN 7520 Static & Dynamic Balancing Apparatus
- GN 7522 Models for Different Types of Mechanisms
- GN 7525 Models for Different Types of Gear Trains
- GN 7527 Models for Brake
- GN 7530 Models for Clutch



UNIVERSAL GOVERNOR APPARATUS

STRUCTURE ANALYSIS LAB

- GN 7600 Simple Supported Beam Apparatus
- GN 7603 Clerk's Maxwell (Reciprocal Theorem)
- GN 7605 Deflection of Beam Apparatus (Elastic Properties)
- GN 7608 Three Pin Jointed Truss Apparatus
- GN 7610 Two Hinged Arch Apparatus
- GN 7613 Three Hinged Arc Apparatus
- GN 7615 Deflection of Truss Apparatus (Pin Jointed)
- GN 7618 Behavior of Column and Struts Apparatus
- GN 7620 Column Behavior & Buckling Apparatus (Digital)
- GN 7625 Curved Member Apparatus



COLUMN BEHAVIOR & BUCKLING APPARATUS



SIMPLY SUPPORTED BEAM

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IC ENGINE LAB

- GN 7701 Single Cylinder Two Stroke Petrol Engine Test Rig
- GN 7705 Single Cylinder Four Stroke Petrol Engine Test Rig
- GN 7710 Four Cylinder Four Stroke Petrol Engine Test Rig
- GN 7715 Single Cylinder Four Stroke Diesel Engine Test Rig (Water Cooled)
- GN 7720 Single Cylinder Four Stroke Petrol Engine (To Plotting Valve Timing Diagram). Actual Cut Section Model
- GN 7725 Single Cylinder Two Stroke Petrol Engine (To Plot Port Timing Diagram). Actual Cut Section Model
- GN 7730 Four Cylinder Four Stroke Diesel Engine Test Rig
- GN 7733 Variable Speed Air Blow Test Rig
- GN 7735 Single Cylinder Four Stroke Diesel Engine (To Plotting Valve Timing Diagram). Actual Cut Section Model
- GN 7740 Sectional Working Model of 2 Stroke Petrol Engine
- GN 7745 Sectional Working Model of 4 Stroke Petrol Engine
- GN 7750 Sectional Working Model of 2 Stroke Diesel Engine
- GN 7755 Sectional Working Model of 4 Stroke Diesel Engine



FOUR CYLINDER FOUR STROKE ENGINE



SECTIONAL WORKING MODEL OF ENGINE

STEAM ENGINE MODEL

- GN 7801 Model of Steam Engine
- GN 7803 Steam Engine Model With A Boiler
- GN 7805 Steam Engine 'D' Slide valve
- GN 7807 Model of Piston Valve Steam engine
- GN 7810 Model of Compound Steam Engine
- GN 7812 Model of Uniflow Steam Engine
- GN 7815 Model of Drop Valve Steam Engine
- GN 7818 Model of Mayer Expansion Valve Steam Engine
- GN 7820 Model OF Corliss Valve Steam Engine
- GN 7822 Stephenson Link Motion
- GN 7825 Gooch Link Motion
- GN 7828 Allan Link Motion
- GN 7830 Joy Valve gear
- GN 7833 Walscharet Valve Gear

BOILER MODELS

Boiler Models

- GN 7851 Model Of Lancashire Boiler
- GN 7853 Model Of Cornish Boiler
- GN 7855 Model of Babcock And Wilcox Boiler
- GN 7858 Model of Locomotive Boiler
- GN 7860 Model of Cochran Boiler
- GN 7863 Vertical Water Tube Boiler
- GN 7865 Model of Lamount Boiler
- GN 7867 Model of Benson Boiler
- GN 7870 Model of Loeffler Boiler
- GN 7872 Model of Volex Boiler
- GN 7875 Model of Marcet Boiler
- GN 7878 Model of Stirling Boiler
- GN 7880 Model of Nestler Boiler



BABCOCK AND WILCOX BOILER

Mountings & Accessories of Steam Boilers

- GN 7881 Lever Safety Valve
- GN 7882 Spring Loaded Safety Valve
- GN 7883 Dead Weight Safety Valve
- GN 7884 Combined High Steam and Low Water Safety valve
- GN 7885 Water Gauge Model
- GN 7886 Stop valve Hopkinson Type
- GN 7887 Feed Check Valve
- GN 7888 Steam Injector
- GN 7889 Pressure Gauge
- GN 7890 Blow Off Cock
- GN 7891 Reducing Valve
- GN 7892 Fusible Plugs
- GN 7893 Anti-priming Pipe
- GN 7894 Expansion Steam trap
- GN 7895 Float Steam trap
- GN 7896 Green Economiser
- GN 7897 Sudgen Super heater



CAR STEERING SYSTEM



AUTOMOBILE LAB

- GN 7901 Air Brake (Actual Working)
- GN 7903 Battery Cell Tester
- GN 7905 Battery Hydrometer
- GN 7907 Brake Cylinder
- GN 7910 Brake Disc Type (Actual Working)
- GN 7912 Brake Disc Type (Model)
- GN 7915 Brake Double Shoe
- GN 7918 Brake Internally Expanding
- GN 7920 Brake Single Shoe
- GN 7922 Brake Unit (Hydraulic)
- GN 7925 Brake Unit (Hydraulic) (Two Brake Drum)
- GN 7928 Cam Shafts
- GN 7930 Carburetor (Maruti Car Type)
- GN 7932 Carburetor Solex Type
- GN 7935 Clutch Centrifugal Type
- GN 7937 Clutch Claw Type
- GN 7940 Clutch Conical Friction Type
- GN 7942 Clutch Multiplate Type
- GN 7945 Clutch Plate Type
- GN 7947 Coil Ignition System of an Automobile
- GN 7950 Connecting Rod
- GN 7952 Cooling System of a Automobile (With Actual Parts)
- GN 7955 Crank Shaft
- GN 7956 Distributor
- GN 7958 Electrical Fuel Pump
- GN 7960 Electronic Ignition System of an Automobile
- GN 7965 Fuel Supply System of a 4 Cylinder Diesel Engine
- GN 7970 Fuel Supply System of a Diesel Engine
- GN 7975 Fuel Supply System of a Petrol Engine
- GN 7980 Fully Automatic Battery Charger
- GN 7981 Gear Box (Actual Cut Section)
- GN 7982 Gear Box Car (Constant Mesh) Actual Cut Section
- GN 7983 Gear Box Car Automatic (Internal Gear) Actual Cut Section
- GN 7984 Gear Box Jeep (Synchronous Mesh) Actual Cut Section
- GN 7985 Gear Box with Clutch (Actual Cut Section)
- GN 7986 Gear Box with Clutch (Model)
- GN 7987 Gear Lubricating Pump
- GN 7988 Generator
- GN 7989 Hydraulic Break unit (Four Brake Drum)
- GN 7990 I.C. Injector
- GN 7991 Ignition Coil
- GN 7992 Lubrication System of an Automobile
- GN 7993 Magneto
- GN 7994 Master Cylinder
- GN 7995 Mechanical Fuel Pump
- GN 7996 Mock Layout of Car Wiring
- GN 7997 Mock Layout of Tractor Wiring
- GN 8000 Piston With Rings
- GN 8003 Power Brake (Actual Working)
- GN 8007 Power Steering of Car (Actual Working Model)
- GN 8010 Radiator
- GN 8012 Rear Axial Assembly (Actual Cut Section)
- GN 8015 Self Stater
- GN 8017 Shock Absorber
- GN 8020 Spark Plug
- GN 8025 Speedometer
- GN 8030 Water Pump

STRENGTH OF MATERIAL LAB

- UTM - Universal Testing Machine
- Brinell & Rockwell Hardness Tester
- Impact Testing Machine (Izod & Charpy)
- Torsion Testing Machine For Rod
- Torsion Testing Machine For Wires
- Spring Testing Machine
- Fatigue Testing Machine
- Column & Buckling Apparatus
- Vikers Hardness Testing
- Bend Testing Machine
- Pendulum Impact Tester
- Tensile Testing Machine



TORSION TESTING MACHINE

CEMENT & CONCRETE LAB

- Air Entrainment Meter
- Air Permeability Apparatus
- Blaine's Air Permeability Apparatus.
- Cement Mortar Permeability Apparatus
- Cement Sampler
- Channel Type Load Frame
- Compaction Factor Apparatus
- Compression Testing Machine
- Concrete Permeability Apparatus
- Concrete Test Hammer
- Cone Penetrometer For Mortar
- Pumping Unit
- Flexure Testing Machine
- Flow Table
- Gauging Trowel
- Gillmore Needle Apparatus
- Hydraulic Jacks
- Jolting Apparatus
- Kelley Ball Penetration Apparatus
- Laboratory Cement Autoclave
- Laboratory Concrete Mixer
- Laboratory Jaw Crusher
- Lateral Extensometer
- Le Chatelier Flask & Le Chatelier Mould
- Lea and Nurse Air Permeability Apparatus
- Length Comparator
- Mortar Penetrometer
- Needle Vibrator
- Permeability Apparatus
- Pillar Type Load Frame
- Pocket Concrete Penetrometer
- Ring Mould
- Roll Crusher
- Sand Absorption Cone and Tamper
- Shrinkage Bar Mould
- Slump Test Apparatus
- Southard Viscometer
- Tamping Bar and Rod
- Tensile Strength Tester
- Thickness Gauge
- Tile Abrasion Testing Machine
- Tile Flexure Testing Machine
- Trowel
- Vee Bee Consistometer
- Vibrating Table
- Vicat Needle Apparatus
- Volume Change Apparatus

SOIL LAB

- California Bearing Ratio Apparatus
- Cone Penetrometer
- Consolidation Apparatus
- Core Cutter
- Dames and Moore Sampler
- Dead Weight Type Oil Water Constant Pressure System
- Direct Shear Apparatus
- Extractor Frame Hydraulic
- Grain Size Analysis
- Heavy Compaction Test
- High Speed Stirrer
- Lateral Pressure Assembly
- Liquid Limit Device
- Load Frame
- Load Truss
- Miniature Compaction Apparatus
- Miniature Field Permeameter
- Permeability Apparatus
- Piston Sampler
- Plastic Limit Set
- Plate Bearing Test
- Pocket Penetrometer
- Pore Pressure Apparatus
- Portable Aluminium Derrick
- Posthole Type
- Proctor Needles
- Proving Ring
- Pycnometer
- Rapid Moisture Meter
- Relative Density
- Sampling Outfit
- Sand Pouring Cylinder
- Shrinkage Limit Set
- Sieve & Sieve Shaker
- Soil Hydrometer
- Split Spoon Sampler
- Standard Compaction Test
- Static Cone Penetrometer
- Triaxial Shear Test Apparatus
- Tripod
- Tripod Pulley
- Unconfined Compression Tester
- Universal Automatic Compactor



LIQUID LIMIT DEVICE



RAPID MOISTURE METER



TENSILE STRENGTH TESTER

BITUMEN LAB

- Automatic Bituminous Compactor
- Automatic Standard Penetrometer
- Benkleman Beam
- Centrifuge Extractor (Hand Operated)
- Ductility Testing Apparatus
- Marshall Stability Test Apparatus
- Ring And Ball Apparatus
- Standard Penetrometer
- Stripping Value Apparatus



DUCTILITY TESTING APPARATUS

AGGREGATE LAB

- Aggregate Crushing Value Apparatus
- Aggregate Impact Tester
- Bituminous / Asphalt Mixer
- Cylindrical Measures
- Density Basket
- Deval Attrition Tester
- Dorry Abrasion Testing Machine
- Length Gauge
- Los Angles Abrasion Testing Machine
- Metal Measures
- Pug Mill For Grinding Lime Mortar
- Riffle Sample Divider
- Specific Gravity and Water Aggregates
- Thickness Gauge



LOS ANGES ABRASION TESTING MACHINE

ASPHALT LAB

- Asphalt & Concrete Floor Saw
- Core Cutting/Core Drilling Machine
- Rock/Concrete Cutting Machine

METALLURGICAL LAB

- Abrasive Cut-Off Machine (Chop Type)
- Abrasive Disc Cut-Off Machine (Chop Type)
- Linsher Polishing Belt (Belt Sander)
- Metallurgical Mounting Press
- Polishing Stand
- Specimen Mounting Press
- Specimen Leveller

SURVEY LAB

- Total Station
- Arrow
- Telescopic Alidade
- Tangent Clinometers
- Cross Staff
- Dumpy Level
- Level Automatic
- Abney Level
- Optical Square
- Prismatic Compass
- Ranging Rod
- Aluminum Staff 5 mtr.
- Vernier Theodolite
- Digital Theodolite
- Survey Tape
- Survey Umbrella
- Plane Table



CNC / LATHE / SHAPER / DRILL & GRINDER

CNC MACHINE TRAINERS

- CNC Lathe Machine Trainer
- CNC Milling Machine Trainer



PNEUMATIC & HYDRAULIC TRAINER

- Hydraulic Trainer
- Pneumatic Trainer



LATHE MACHINE/ SHAPER MACHINE / DRILL & GRINDER

- Lathe Machine
- Capstan lathe
- Milling Machine
- Shaper Machine
- Shaping Machine (Hydraulic)
- Drilling Machine
- Double ended Pedestal Grinder
- Grinding Machine Pedestal Type
- Drill Machine Pillar Type
- Power Hacksaw



MILLING MACHINE



POWER HACKSAW



DRILLING MACHINE

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