



COMMON FACILITIES SERVICES

DIESEL ENGINE TESTING

ACCREDITATION AND APPROVALS

- NABL (ISO / IEC 17025) • Bureau of Indian Standards

INDIAN STANDARD AVAILABLE FOR TESTING :

- IS 7347:1974 - Constant Speed Spark Ignition Engine for general and agricultural purpose up to 20 KW
- IS :11170:1985 - Constant Speed Diesel Engine for Agricultural Purpose up to 20 KW
- IS :10002:1981 - Constant Speed Diesel Engine for General purpose (above 20 KW)
- IS 10001:1981 - Constant Speed Diesel Engine for General Purpose (up to 20 KW)
- IS 13018:1990 - Method of Test for Pressure Charged Engine

Our lab capacity is up to 150 KW engine testing with 10 nos test beds with majority of them with eddy current dynamometer with latest technology .

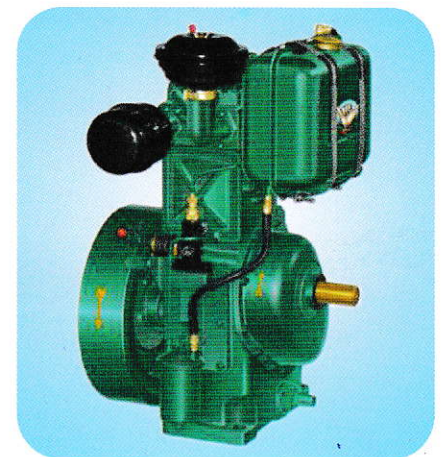
MAJOR TESTING EQUIPMENT

Engine Test Dyno

Test Bed	Equipment Description
1	AG150 Eddy Current Dynamometer capacity up to 150 kw
2	E125 Eddy Current Dynamometer capacity up to 75 kw
3	ATE 60-Spring Hydraulic Dynamometer capacity up to 36 kw
4	ATE 16-Load cell Hydraulic Dynamometer capacity up to 10 kw
5	AG10 Eddy Current Dynamometer capacity up to 8 kw
6	ATE 60-Load cell Hydraulic Dynamometer capacity up to 36 kw
7	AG5 Eddy Current Dynamometer capacity up to 4 kw
8	Rope Dynamometer capacity up to 10 kw
9	E-15 Eddy Current Dynamometer capacity up to 9 kw
10	Rope Dynamometer capacity up to 10 kw



Major Customers :



PUMP AND MOTOR TESTING

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INDIAN STANDARD AVAILABLE FOR TESTING :

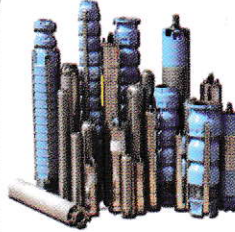
• Centrifugal pumps	IS-6595	Up to 20 KW
• Submersible pumps	IS-8034	Up to 100 KW
• Open well submersible pumps	IS-14220	Up to 100 KW
• Mono block Pumps	IS-9079	Up to 20 KW
• Engine Mono set	IS-11501	Up to 20 KW
• Regenerative Self priming Pump	IS-8472	Up to 2.2 KW
• Submersible Motors	IS-9283	Up to 100 KW
• Induction Motors	IS-325	Up to 100 KW
• Vertical Turbine Pump	IS-1710	Up to 26 KW
• Foot valves,	IS-10805	Up to 2"
• Single-phase a.c. industrial motors	IS-996	Up to 26 KW



Centrifugal Pump
Up to 20 kw



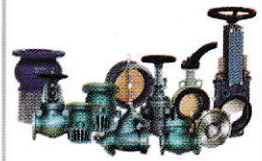
Submersible Pump Set
Up to 100 kw



Submersible Motor
Up to 100 kw



Engine Mono Set
Up to 20 kw



Foot Valve
Above 2"



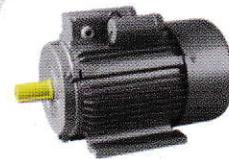
Three Phase
Induction Motor
Up to 30 kw



Regenerative Pump
Up to 2 kw



Openwell Submersible
Pump Set
Up to 100 kw

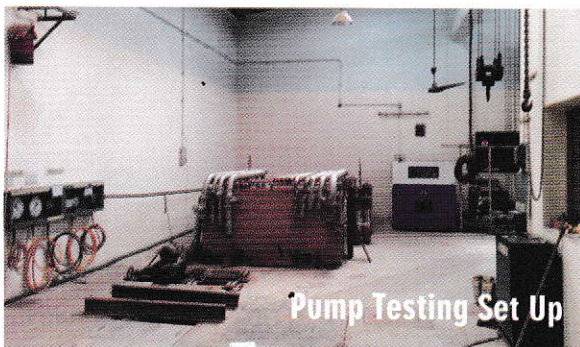


Single Phase AC
Induction Motor
Up to 26 kw

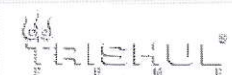


Electric
Monoblock Pump
Up to 100 kw

Major Testing Equipment



Major Customers :



PLASTIC TESTING

ACCREDITATION AND APPROVALS

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- | | | | |
|---|----------|--|----------|
| • Irrigation Equipment Emitting Pipe Systems | IS 13488 | • Irrigation Equipment - Quick coupled Polyethylene Pipes pipes & fittings for Sprinkler Irrigation System | IS 17425 |
| • HDPE Pipe for Water Supply | IS 4984 | • UPVC Pipe for Soil & Water Discharge fitting | IS 14735 |
| • Irrigation Equipment Polyethylene Pipes For Irrigation Laterals | IS 12876 | • UPVC Pipe for Soil and Water Discharge System | IS 13592 |
| • Unplasticized PVC Pipes for Water Supplies | IS 4985 | | |
| • UPVC Screen and Casing Pipe for bore/tube well | IS 12818 | | |
| • Chlorinated polyvinyl chloride CPVC fittings for potable hot and cold water distribution supplies | IS 17546 | | |
| • CPVC pipe for portable hot and cold water distribution supply | IS 15778 | | |
| • Injection molded PVC socket fittings with Solvent cement joints for water supplies | IS 7834 | | |

Major Customer :



Solar Water Pump Testing Laboratory

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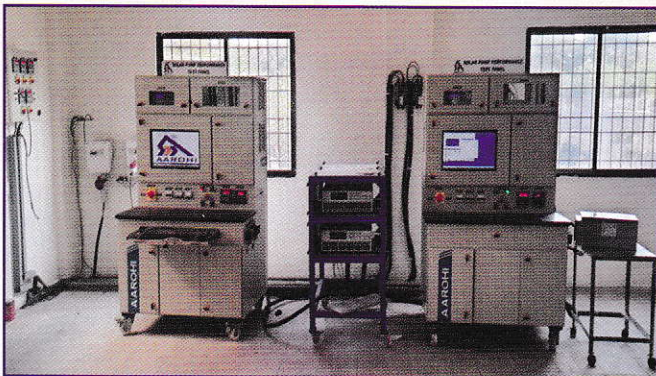
FEATURES :

1. Fully automatic solar pump testing set up with real time data acquisition.
2. Test facility as per MNRE/BIS Standard - 17018.
3. Testing Range : 1hp to 15hp solar pumps
4. Type of Pump to be tested : Submersible pump, Mono block.
5. Facility to test 2 pump at a time.
6. Test Covered :
 - I. Facility for realistic test setup
 - II. Facility for simulated profile (Hot & Cold)

Major Customer :



CONTROL ROOM



PUMP ROOM WITH UNDERGROUND TANK



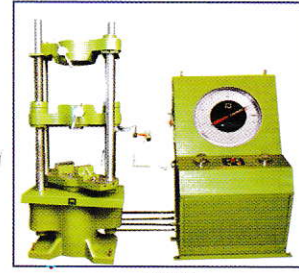
MATERIAL TESTING

ACCREDITATION AND APPROVALS

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- **Testing for Chemical Properties**

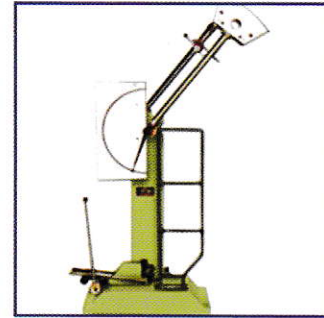
- o Elemental Analysis of ferrous and non ferrous metals
- o Elemental Analysis of cement & Foundry Materials
- o Testing of Ceramics and refractory materials
- o Ores and minerals
- o Fuels liquid and solids
- o Testing of paints, Coatings, & corrosion Resistant.
- o Water and Waste Water
- o Solid Waste and Hazardous Waste



UTM

- **Testing for Mechanical Properties**

- o Tensile Strength
- o Yield Stress
- o Elongation
- o % Reduction Area
- o Compressive Test
- o Flattening Test
- o Proof load Test
- o Breaking load Test
- o Bend and Re-bend Test
- o Welder Re-Qualifying Test
- o Cupping Test
- o Hardness Test



Izod Impact Test

- **Testing for Metallurgical Properties**

- o Micro structure of Metals
- o De-carburization and case depth
- o Spheroidization, Carbide banding, & segregations



Optical Emission Spectrometer

Major Customers :



For Further Details Please Contact at following



National Small Industries Corporation Ltd.

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