



sensors & transducers
measurement systems & amplifiers
material &fatigue testing machines
data acquisition & logging systems
stress & strain measurement
hydro power engineering
speciality products

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## AG Measurematics Pvt. Ltd.

Roorkee • INDIA

# FIG

## AG Measurematics Pvt. Ltd.

#### INTRODUCTION

AG Meausurematics is one of the largest manufacturer of Material Testing Systems, Sensors and Data Acquisition Systems in India. Our strength lies in offering TOTAL Solution to a client's requirement. Be it Instrumentation, Mechanical Fabrication, Civil Construction, Software Development or Turnkey project, At AG Measurematics we are ready for it. We have inhouse facility to develop hardware, mechanical, software, or instrumentation.

One area where AG Measurematics excel is offering import substitute equipment. We have worked in areas like Defence, Aerospace, Research, Automation and offered products developed and made in INDIA providing better quality & functionality then the original import substitute.

AG Measurematics is the largest manufacturer of Displacement Sensors -LVDT, in INDIA with a monthly production of 500 Sensors. All the sensors are manufacturer using latest but in-house developed high speed machines. We also have our own calibration facility with systems are traceable to NPL, New Delhi. Our mechanical workshop is capable of handling any time of fabrication or metal work.

One more area where we work is Railways. Here again AG Measurematics is the largest manufacturer of Water Load Box type Diesel Engine Testing Systems in the WORLD. This is a project work involving Instrumentation, Software, Electrical, Mechanical Fabrication, Civil Construction, Room Interiors and Training. We use sophistacted inhouse developed Data Acquisition Systems to accomplish this and are tested to work continously for months.

Our work takes us to design systems which are never before made as required by some of the largest Industrial Houses, involving dedicated team work, planning and execution.

At AGMPL we value relationships and partner in YOUR GROWTH.

In the present dynamic world, rapid changes are coming up with improved business practices, upgraded Technology, and increased competition, that leads to change in the quantitative approach into qualitative one.

Understanding the need, and to keep pace with the fast moving world, a company under the name of New Engineering Enterprises was established in year 1974, with an objective to manufacture measurement and control instruments. This company successfully developed and market lots of instrumentation products such as -strip chart oscillographic recorders, dynamic strain gauge amplifiers, variable reluctance accelerometers, LVDT based displacement transducers, S/G based load cells, pressure transducers, microprocessor based Data Acquisition and Control Systems, Dynamic high speed waveform recording systems, vibrating wire sensors for geotechnical applications etc.

Having gathered sufficient experience in wide areas it was felt that another company must be launched to offer products and services in following areas:

- I. Computerized Data Acquisition and Control System for Industrial Applications.
- II. Computerized Spring Testing Machines.
- III. Displacement transducer and associated electronics.
- IV. Strain gauge based transducers such as Load Cells, Pressure Transducers etc., and associated electronics.
- V. Project Instrumentation.

Then AG Technologies was established in June 1993, which was subsequently converted into a private limited company under the name and style of AG Measurematics Pvt. Ltd.



#### **EXECUTIVE SUMMARY**

The people, it is said, are known by the company they keep. It is also logical and true that a company be known by its people. AG Measurematics Pvt. Ltd. is indeed a company that is proud of its people. Having interacted with a diversified nature of customers covering engineering colleges, process industries, defense research, space research, atomic research, aeronautics companies, heavy electricals, railways, mining... the list seems to go on and on, our staff is confident of providing total customer satisfaction.

The highly compact groups of people at AGMPL have the skill, the experience, the willingness and the commitment to understand any problem and then to provide innovative and cost effective solutions. Our team includes system designers, hardware engineers, software experts, skilled technicians and Marketing professionals. For special & specific applications requiring advanced academic back up we have the freedom and facility to draw upon the vast technical reserves of IIT Roorkee both in terms of Faculty members as well as sophisticated laboratory facilities.

#### ALOK CHANDRA GUPTA - Managing Director

Having graduated in Electrical Engineering from University of Roorkee, in 1973; he is having experience of above 35 years in designing of various electronic instruments and transducers. He excels in system designing and is presently over all incharge of AG Measurematics Pvt. Ltd. The present responsibilities include coordination of entire operations of AG Measurematics Pvt. Ltd.

**VINEET KUMAR - Director** 

B.E. Paper & Pulp Technology 1991, University of Roorkee

Handles: Finances, Government Projects and Business, Human Resource, Railway Projects

DIWAKAR GOEL - General Manager - Instrumentation

B.E. Electronics 1982.

Handles: Instrumentation, Co-Project Manager, New Product Development, Material Testing Systems

SOLOMON GEORGE - General Manager - Projects

B.E. Mechanical 1978

Handles: On-Site Project Execution, Computerized Water Load Box Manufacturing, Co-Project manager.

ALOK BHATNAGAR - General Manager - Sensors & Systems

MSC Physics -1976

Handles: Sensors, Systems and Material Management

ABHISHEIK GUPTA -Business Head - Industrial Business Group

B.E. Electrical, 2000

Handles: Business Development, Sales, Marketing, Information Technology, New Product Development, Countrywide Channel Sales, Automotive Business Group

#### EXPERIENCE

We have a combined experience of more then 163 years of engineers in the field of instrumentation & control. Our highly skilled workforce adds another 107 years giving us an advantage of designing and developing any type of instrument or equipment as per a clients requirement



#### ARFA OF BUSINESS

#### Automotive Engineering Group

Having worked with so many other pioneers in the automotive sector we have got an in-depth understanding about the procedures being followed in automotive world. The systems which we designed and developed were not only state of the art but also easy to operate for a normal shop floor operator. Right from basic stand alone operation to a fully computerized multioperational test centre we work with dedication to give you a truly unique system. Test rigs for Fighter jets and aircrafts are also being designed and developed by our Automotive Engineering group.

#### Some clients of this group

Minda Corportation
Minda Industries
Bajaj Auto Industries
Hero Honda Motor Ltd.
Asahi India Glass
Sun Steering Ltd.
Endurance Systems India Ltd.
Munjal Showa Ltd.
Punjab Tractors

Swaraj Tractors Yamaha Motors Ltd. TVS Group

Sonalika Auto

#### Railway Equipment Division

This division takes care of equipments designed and developed for Engine Testing and Testing of sub-components of Wagons and Bogies. From simple Yoke and bolster test rig to a much more complex computerized water load box for diesel loco, we have engineered a new class of testing system previously unknown to manufacturers. Following our philosophy to keep measurement simple, we take care that these systems can be operated by any operator with basic educational qualifications. Also since the environment of railway component manufacturers is very hostile we take every care to design a system to sustain in extreme conditions.

#### Some clients of this group

Diesel Locomotive Sheds

DLW Varanasi

DLS Patiala

**COFMOW** 

Sri Lankan Railways

Texmaco Ltd,

Burn & Standard

Escorts Ltd,

Gresham Ltd,

Knorr Brehmse

Stone India

Jupiter Steel & Alloys

**AD Electrosteel** 

#### Material Testing Machine Group

MTMG is one of our largest business group contributing around 23% to our annual sales. We manufacture Testing Machines like Spring Testing Machines, Endurance Testing Machines, Material Testing Machines, Torque Testing Machines, Special Purpose Machines and also upgrade older machines manufactured by Zwick, Showa, FIE etc. All our machines are fully calibrated with calibration traceability to NPL. Most of these machine are Fully Computerized Testing Systems with touch panel controlled operation. The hardware, software, mechanical and electronics is done in-house by our dedicated team of engineers.

#### Some clients of this group

Ordnance Factory Board,

Indian Air Force

BHEL Hyderabad

Ranoson Springs,

Rambal Industries,

Minda Group,

Vijay Chandra Industries etc.

Kangaroo Industries (KANIN)

**Amar Engineering** 

Naval Ship Yard, Vizag

Escorts Railway Equipment Div.

Godrej & Boyce Ltd.

**Rotomac Industries** 

#### Geotechnical Testing Systems

For testing the properties of soil, concrete, cement, and other geotechnical parameters, we manufacture various machines and systems. Our systems are being used extensively in the premier educations institutions, research establishments in India and around the world. Most of our clients are civil construction companies requiring details soil investigation. Since these systems have to be operated in open environment, we design these systems to be rugged, reliable and portable. Some of the equipments which are exclusively being manufactured by us are IS:5249 setup, Triaxial Testing Machines, Consolidation Testing Machines, Strain Measurement Systems, Weather monitoring systems and environmental sensors.

#### Some clients of this group

IIT Delhi

IIT Chennai

**IIT Roorkee** 

**IIT Kanpur** 

Central Building Research Institute Central Road Research Institute University of Western Ontario Building Research Institute, IRAN

NIT Tiruchirapalli

NIT Allahbad

**IISC Bangalore** 

#### **FACTS**

"AG Measurematics supplies equipment to 90% of Diesel Locomotive sheds in INDIA and have supplied atleast one equipment to nearly 67% of railway equipment manufacturer in the country "

#### FIGURES

There are 400 different model of displacement sensors(LVDT) manufactured by AG Measurematics per month. The smallest is 9.5mm dia and the largest is 50 mm dia. Users have a wide variety of choice to select a model closest to their applications. Over 500 LVDTs are made per month on automated machines. All sensors are calibrated on Test Rigs with traceability to National Physical Laboratory, New Delhi. We maintain our quality and thats why we give 5 years warranty on AC LVDT.



### Standard Product Range

Dynamic Strain Measurement Systems Dynamic Waveform Recording Systems

**AC LVDT Signal Conditioners** Electromagnetic Speed Pickups AC LVDTs Field Data Logger Gauging LVDTs Application Software for Data Acquisition Application software for Spring testing Geotechnical Testing Instrumentation Application Software for Test Rig Automation California Bearing Ratio Battery Performance Test System Benkelman Beam Consolidation Test Brake Pedal Force Transducers Direct Shear Test **Cable Potentiometers** Tri-axial Test Center Hole Load Cells Application Software for above tests Compression Load Cells Hand Brake Force Transducers Computerized Data Acquisition Systems High Frequency Signal Amplifiers Spring Testing Machines Computerized Instrumentation for High Resolution LVDT Indicators Test Rig for 2-Wheeler Switches High Speed Recording Systems Strain Indicator Test Rig for Aircraft Components **Industrial LVDTs** String Potentiometers Tensile Testing Machines Test Rig for Ball Stud joints Large Bore LVDTs Test Rig for Cycle Parts Load Cells calibrators Test rig For Ball Stud joint Test Rig for Distributer Valves **Testing Machines** Load cells Test Rig for HV Ceramic Insulators Load Displacement Measuring systems Test Rig for Shock Absorbers **Digital Indicators** Test Rig for Windshield Profile **LVDTs** Test Rig for Wire Ropes Load cells Test Rig for Automobile Engines Cable-Potentiometers Software Test Rig for Diesel Locomotives **Pressure Transducers Torque Transducers** Test Rig for Automobile Components Software for Computerized Operation Torsion Spring Testing machines Test Rig for tractor Components Long Range Displacement Transducers Turnkey projects Software for Test Rig Automation Long Range Position Transducers LVDT Calibration Benches Computerized Load Box Universal Load Cells Motorized water Load Box LVDT Data Acquisition Systems **UTM** Computerization Transducers for Electrical Parameters LVDT Indicators **Pressure Transducers LVDT Signal Conditioner Boxes LVDT Signal Conditioner Cards** Thermocouples **LVDT Signal Conditioner Modules Engine Speed** Digital Readout Load Ampere Shunts Software **LVDTs** Vacuum Transducers Material Testing Machines Accessories **High Current Cables** Mechanical Oscillators Vacuum Transducers Knife Switches Microprocessor Based LVDT Indicators Vibrating Wire Indicator Turnkey Projects Microprocessor Based Process Indicator **Vibration Meters** Water Level Data Logger Computerized Spring Testing Machines Microprocessor Based S/G Indicator Computerized Waveform Recording systems Microprocessor Based VW Indicators Waterproof LVDTs Data Acquisition and Control Systems Miniature LVDTs Whether Monitoring Stations. Data Logger for VW Transducers Motorized Test Stands Data Retrieval Units Multi-channel Measurement Systems Panel Mounting Digital Indicators DC-DC LVDT's Field Data Logger Digital Indicator for LVDT Data Retrieval Unit Load cell S/G Based Transducers Rainfall Transducer Torque DC LVDTs Temperature (T/C) Potentionmeteric Transducers Temperature (RTD) 4 to 20 mA Temperature (Thermister) Phase Angle Meters Pneumatically actuated LVDTs Speed Variable Capacitance (WL) Portable Data Logger Strain (SSB) Pressure Transducers Test Reports Angle (Pot) S/G Transducer Indicators LDR Set Point Controllers **Battery Charger** Pressure Set up for Determination of Dynamic Soil Masts **Differential LVDTs Properties** Shock Absorber Test Rig Digital Readout for three transducers Mechanical Oscillators Displacement Transducers DC Motors **Dynamic Strain Amplifiers** Speed Control Unit

Phase Angle Meter

Velocity Pickups Vibration Meter Accelerometers

Small Hydro-Power Station Equipment Electronic Governor for Hydro Turbines Electromagnetic Speed Pickup Toothed Wheel for Speed Pickup Guide Vane Position Transducer Hydraulic Power Pack Nozzle Movement Transducer Servo Actuator water Level Transmitter **Pressure Transducers Voltage Transducers** Frequency Transducers Strain Gauge Signal Conditioner Material Testing Machines **Torsion Testing Machines** Spring Testing Machines **Tensile Testing Machines** Universal Data Acquisition and Control Systems **Pressure Transducers** Cable Potentiometer Ambient Temperature Transducer Barometric Pressure Transducer Relative Humidity Transducer Soil Temperature Transducer Solar Radiation Transducer Wind Direction Transducer Wind Direction Transducer Application Software for Data Retrieval / Maintenance proof Battery



## Locations

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