



# Kiran Electronics

AN ISO 9001-2015 CERTIFIED ORGANISATION

**IOT (INTERNET OF THINGS)  
PLATING / COATING  
THICKNESS MEASUREMENT SYSTEM  
& ELECTROPLATING EQUIPMENT**



# PLATING THICKNESS TESTER

## Model : Advance Micro Test

Micro Test is versatile & sophisticated Thickness Tester which measures almost all electroplated metals on ferrous, non-ferrous & non-metallic substrates. Provides USB connectivity for PC software where user can run test and store/print reports with there convenience.

### Product Features:

- ◆ 32 Bit Arm Based Technology
- ◆ VB Net Base Software For Window O.S. (Operating Systems)
- ◆ Micro Controller Based
- ◆ 21 Stores Plating Base Combinations
- ◆ Controller With USB Connection Of Data Transfer To PC
- ◆ Multiple Gasket Feature
- ◆ Self Calibration Mode
- ◆ Offline Graph Plotting & Analysis Of Analog Data

PLATING	BASE
Nickel	Aluminum, Brass, Copper, Chromium, steel
Chromium	Nickel, Brass, Cadmium, Copper, Nickel, Steel, SS
Silver	Copper, Brass, Nickel, Tin, Aluminum
Tin	Brass, Copper, Nickel, Steel
Zinc	Steel, Aluminum, Brass, Copper, Nickel
Copper	Aluminum, Steel, Nickel, Non-Metals
Lead	Aluminum, Brass, Copper, Steel
Gold	Brass, Copper, Nickel
Electro less-Nickel	Steel, Aluminum



### Specifications:

Principle	Coulometric
Type	Destructive
Measuring Range	(TEST Duration 40 Min Max.At A Time)
Resolution	0.1 Microns 0.01 Microns For Thin Plating
Accuracy	± 2 % Of Reading
Measuring Surface	Minimum 3mm X 3mm Flat Surface & For Round 3 Mm Diameter
Power Supply	230V / 50Hz
(Stabilizer V-Guard)	90 To 270v Is Required To Maintain The Voltage 230v
Dimensions	240mm X 210mm X 110mm
Weight Main Unite	2.5 kg
Accessories Weight	2 kg

# PLATING THICKNESS TESTER

## Model : ADVANCE STEP TEST

Adv Step Test Is Versatile & Sophisticated Thickness Tester Which Measure Duplex & Triplex Nickel On Ferrous & Non-ferrous Substrates. Provide USB Connectivity For PC Software Where User Can Run Test & Store/Print Reports With There Convenience.

### Product Features:

- ◆ 32 Bit Arm Based Technology
- ◆ Micro Controller Based
- ◆ Offline Graph Plotting & Analysis Of Analog Data
- ◆ VB Net Base Software For Window O.S. (Operating Systems)
- ◆ Controller With USB Connection Of Data Transfer To PC
- ◆ Test Result Storage & PDF Format Report Generation

PLATING	BASE
Duplex Nickel	Steel, Copper
Triplex Nickel	Steel,Copper



### Specifications:

Principle	Coulometric
Type	Destructive
Measuring Range	(TEST Duration 40 Min Max. At A Time)
Measuring Step	Offline Graph Plotting & Analysis Of Analog Data
Accuracy	± 5 % Of Reading
Accuracy	± 10 % Of Volt
Measuring Surface Minimum	5mm X 5mm Flat Surface & For Round 6 mm Diameter
Power Supply	230V / 50Hz
(Stabilizer V-Guard)	90 To 270v Is Required To Maintain The Voltage 230v
Dimensions	240mm X 210mm X 110mm
Weight Main Unite	2.5 kg
Accessories Weight	2 kg

# PLATING THICKNESS TESTER

## Model : ADVANCE wire cell

Adv Wire Cell Test Is Versatile & Sophisticated Thickness Tester Which Measure Almost All Electroplated Metals On Ferrous, Non-ferrous & Non-metallic Substrates. Provide USB Connectivity For PC Software Where User Can Run Test & Store/Print Reports With There Convenience.

### Product Features:

- ◆ 32 Bit Arm Based Technology
- ◆ VB Net Base Software For Window O.S. (Operating Systems)
- ◆ Micro Controller Based
- ◆ Controller With USB Connection Of Data Transfer To PC
- ◆ Test Result Storage & PDF Format Report Generation
- ◆ Analysis Of Analog Data
- ◆ Refer The ISO 2177



## Wire Cell Assembly



Specifications:	
Principle	Coulometric
Type	Destructive
Measuring Range	(TEST Duration 40 Min Max. At A Time)
Measuring Wire Diameter	0.01mm up to 5 mm
Accuracy	± 10 % Of Reading
Power Supply	230V / 50Hz
(Stabilizer V-Guard)	90 To 270v Is Required To Maintain The Voltage 230v
Dimensions	240mm X 210mm X 110mm
Weight Main Unite	2.5 kg
Accessories Weight	2.300 Kg

# PLATING THICKNESS TESTER

## Model : Micro-Test

### Product Features:

- ◆ Micro Controller Based
- ◆ 21 Stored Plating / Base Combinations
- ◆ Printout Output
- ◆ Interface for RS 232 for Connection to a PC



PLATING	BASE
Nickel	Aluminum, Brass, Copper, Chromium, steel
Chromium	Nickel, Brass, Cadmium, Copper, Nickel, Steel, SS
Silver	Copper, Brass, Nickel, Tin, Aluminum
Tin	Brass, Copper, Nickel, Steel
Zinc	Steel, Aluminum, Brass, Copper, Nickel
Copper	Aluminum, Steel, Nickel, Non-Metals
Lead	Aluminum, Brass, Copper, Steel
Gold	Brass, Copper, Nickel
Electro less-Nickel	Steel, Aluminum

Specifications:	
Principle	Coulometric
Type	Destructive
Measuring Range	00.1 to 999.9 microns
Resolution	0.1micron
Accuracy	±2% of reading
Measuring Surface	3mm x 3mm flat surface for round 3mm dia
Power Supply	230V / 50Hz
Dimensions	310mm x 290mm x 80mm
Weight Main Unite	2.5 Kg.
Accessories Weight	2 kg

## PLATING THICKNESS TESTER

### Model-PTT-ECO (Destructive Type)

Is a compact and sophisticated thickness tester for the measurement of plating thickness on Ferrous, Non-Ferrous & Non-Metal substrates. It fulfils a long standing need on the market for reliable, accurate & Economical Plating Thickness Tester for all type of Plating. There is no separate cost for each PBC Plug.

**PTT ECO can measure coating thickness of following Plating / Base combination.**

PLATING	BASE
Nickel	Aluminum, Brass, Copper, Chromium, steel
Chromium	Nickel, Brass, Cadmium, Copper, Nickel, Steel, SS
Silver	Copper, Brass, Nickel, Tin, Aluminum
Tin	Brass, Copper, Nickel, Steel
Zinc	Steel, Aluminum, Brass, Copper, Nickel
Copper	Aluminum, Steel, Nickel, Non-Metals
Lead	Aluminum, Brass, Copper, Steel
Gold	Brass, Copper, Nickel
Electro less-Nickel	Steel, Aluminum



#### Specifications:

Principle	Coulometric
Type	Destructive
Measuring Range	00.1 to 99.9 microns
Resolution	0.1micron
Accuracy	±2% of reading
Measuring Surface	3mm x 3mm flat surface for round 3mm dia.
Power Supply	230V / 50Hz
Dimensions	240mm x 210mm x 110mm
Weight Main Unite	3.5 kg
Accessories Weight	2 kg

## PLATING THICKNESS TESTER

#### Measuring Surface:

For standard probe	6mm x 6mm flat surface for round 10 mm OD
Micro-Probe	2mm x 2mm & round 3mm OD
Power Supply	230V / 50Hz.
Dimensions	240mm x 210mm x 110mm
Weight Main unit	2.5 Kg.
Accessories weight	2 Kg.
Extra Accessories	Micro Probe with stand assembly for small parts

#### Specifications:

Principle	Eddy Current
Type	Non- Destructive
Measuring Range	00.1 to 30.0 microns
Resolution	0.1micron
Accuracy	±2% of reading

### Model: ZINC TEST STANDARD



Is a non-destructive thickness tester specially designed for Zinc on steel.

### Model: ZINC TEST MICRO Probe



Is a non-destructive thickness tester specially designed for fasteners Items



## MICRON GAUGE

Portable Non-Destructive Coating Thickness Testers  
For Powder Coating, Anodizing, Paint, Zinc Plating.

KE

Model: F		Model: NF	
Principle	Electromagnetic	Principle	Eddy current
Application	Powder Coating, Paint, Teflon, Zinc, Tin, Copper, Hard-Chrome, Cadmium, E-Nickel & galvanize on MS Base	Application	Powder Coating, Paint, Teflon, Anodizing on Alum, Copper, Brass & SS.
Range	0-1000um	Range	0-500um
Resolution	1 um	Resolution	2 um
Accuracy	± 1 um	Accuracy	± 1 um
Supply	9V	Supply	9V
Weight	300 gms	Weight	300 gms

FNF COMBINE THE FULL CAPABILITIES OF BOTH THE F & NF MODELS



MICRON GAUGE FNF



MICRON GAUGE FERROUS

## TABLE TOP CONDUCTIVITY METER

Digital Conductivity meter is precise and rugged instrument designed for most accurate measurement of conductance. Generally the measurement of conductance is not any harder than measuring resistance in fact conductance is the inverse of the resistance. However, most ohm meters operate from direct voltage and current if were used in a liquid it would invariably give raise some sort of electrolysis that would distort the measurement. To counter the electrolysis the meter must operate with on AC voltage or current of sufficient high frequency.



## 5 IN 1 ON LINE pH METER

### Features:

- ◆ Machine Interface up to 5 pH Probe
- ◆ pH Electrode probe wire length size 3mtr.
- ◆ 2 inch 7 seg display
- ◆ ARM based technology
- ◆ Potential meter to set Temperature
- ◆ Auto Temp. Compensation for pH
- ◆ RS 485 Communication & Data logging individually or for all channels
- ◆ PC Application to provide calibration each pH sensor
- ◆ Logging reports in excel format
- ◆ Low / High pH Indication & Low / High Alarm set point
- ◆ Each Channel Enable / Disable option

### Extra Features (optional) with Extra Charges:

- ◆ 230V Buzzer for Low / High pH
- ◆ 4 to 20 MA output for each pH probe sensor
- ◆ pH Electrode probe wire length size maximum up to 30 mtr.
- ◆ RS 485 wire as per requirement.



### Specifications:

Measuring Range	0 to 14 pH
Accuracy	± 0.02 pH
Probe	Combination pH electrode
Display	7 Segment
Power Requirement	230V AC
Unit Dimensions	L:470 x W:200 x H:212mm (Wall Mount)
Communication Box	195 x 180 x 70mm (Table Top)
Weight Approx	2.5kg

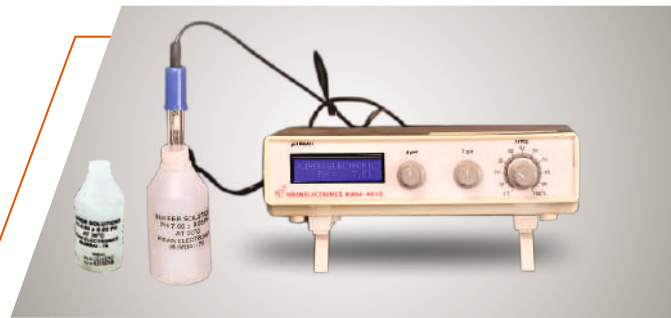
## TABLE TOP pH METER

### Application:

- ◆ Purification of drinking water
- ◆ Manufacturing of sugar, pharmaceuticals & cosmetics
- ◆ Effluent treatment plants
- ◆ Dyes and chemicals
- ◆ Biotechnology
- ◆ Electroplating

### Technical Specification pH Meter:

Range	0 to 14 pH
Accuracy	± 0.05 pH
Probe	Combination pH electrode
Display	LCD
Power Requirement	230VAC ± 10%, 50Hz.
Unit Dimensions	16cms x 23cms x 8cms
Weight	Approx.1 kg



## ON LINE pH INDICATOR

On line pH Indicator specially designed for various process control industry.

### Application:

- ◆ Purification of drinking water
- ◆ Manufacturing of sugar, pharmaceuticals & cosmetics
- ◆ Effluent treatment plants
- ◆ Dyes and chemicals
- ◆ Biotechnology
- ◆ Electroplating

### Product Features:

- ◆ Micro Controller Based
- ◆ Auto Temp. Sensing
- ◆ Buzzer for Low/High pH control
- ◆ 12 V DC output for auto dosing pump
- ◆ Flame proof
- ◆ Electrode Cable length 3/5 Meter



### Technical Specification pH Meter:

Range	0 to 14 pH
Accuracy	± 0.05 pH
Probe	Combination pH electrode
Display	LCD
Power Requirement	230VAC ± 10%, 50Hz.
Unit Dimensions	8cms x 8cms
Weight	Approx.1 kg

## ONLINE pH METER PLC

On line pH Indicator specially designed for various process control industry with Data Logger.

### Specification:

Range	0 to 14 pH
Accuracy	± 0.1 pH
Probe	Combination pH electrode
Display	LCD
Power Requirement	230VAC ± 10%, 50Hz.
Unit Dimensions	220 x 245 x 110mm
Weight	Approx.2 kg

### Product Features:

- ◆ PLC Based Controller
- ◆ Auto Temp. Sensing
- ◆ Buzzer for LOW/HIGH pH control
- ◆ Data Logging Facility
- ◆ Accessible upto electrode 10 to 15 mtr cable length



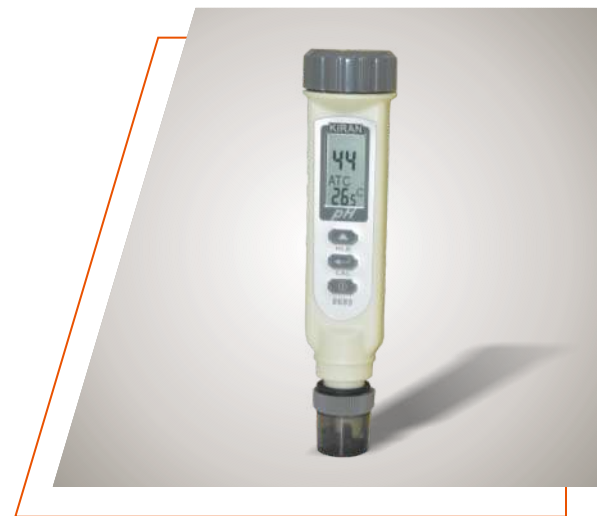
## POCKET - TYPE pH METER

### Product Features:

- ◆ Fast response combined with High Accuracy
- ◆ Impact Resistant ABS Case. Splash proof Membrane Keypad
- ◆ Electrode can be extended up to 80mm
- ◆ Manual Calibration via Screw Trim Pot
- ◆ Pocket clip Moulded on the rear of the case

### Specifications:

Measuring Range	0 to 14 pH
Accuracy	± 0.1
Resolution	0.1
Weight	75 gm
Sound Velocity	1000 ~ 9000m/s
Power	2 x 1.5 V AAA batteries
Dimensions	158 x 40 x 34mm.



## SALT SPRAY TEST CHAMBER (CONVENTIONAL STANDARD)

- ◆ The apparatus for testing consists of a closed acrylic testing chamber, where a salted solution (mainly, a solution of sodium chloride) is sprayed by means of a nozzle. This produces a corroding environment in the chamber and thus, parts in it are attacked under this severe corroding atmosphere.

### Specifications:

Chamber Size:	1) (L) 910mm x (W) 510mm x (H) 310mm 2) (L) 450mm x (W) 250mm x (H) 250mm
Chamber Construction Material:	Acrylic & PVC
Hood in acrylic	
Control Panel (Temp. Indicator/Controller, Time totalizer)	
Power Requirement :	230VAC ± 10%, 50Hz.
Extra Accessories :	Air Compressor

Acrylic



## SALT SPRAY APPARATUS (ASTM B-117 STANDARD)

The apparatus for testing consists of a closed acrylic testing chamber, This produces a corroding environment in the chamber and thus, parts in it are attacked under this severe corroding atmosphere.



Technical Data	
Name of The Chamber	: Salt Spray Chamber
Reference Standard	: ASTM B117, ISO 9227, JISZ 2371, IEC 60068-2-52
Performance	: To Carry Out Test as Per ASTM B-117
Power supply	: 230volt AC,50HZ, Single Phase 10 Amps
Made of	: PVC (Thickness 8 mm) Corrosion Resistant, Anti-
Salt Spray Size (Standard)	: 950mm X 700mm X 700mm
Working chamber size	: 900mm X 650mm X 650mm
Volume	: 450 Liters. Approx.
Control Board Display	: 7" LCD With Resistive Touch Screen
Data Logging	: Pendrive (80 Thousand Sample Logging)
Communication	: RS 485 Modbus RTU Protocol
Temperature	: 35°C
Temperature Sensor	: PT-100 (Ss316-L)
Temperature Tolerance	: $\pm 2^{\circ}\text{C}$
Temperature Resolution	: $0.1^{\circ}\text{C}$
Humidity Range	: $97\% \pm 3\text{Rh}$
Humidity Tolerance	: $\pm 3\text{ Rh}$
Temperature Control	: By Microprocessor Based Temp. Indicator & Controller
Salt Solution Tank	: 50 Ltr. (PVC)
Atomizer Tower	: 2.5 Ltr. (PVC)
Spray Nozzle	: Acrylic
Air Tube to Spray Nozzle	: Pu 8x6
Water Pipe Line	: PVC Braided Pipe

Technical Data	
Humidity Tower (Saturator)	: 15 Ltr. (S.S.316-L)
Automatic Water Leveling Sensor	: Dozing Sensor
Water Circulation Tank	: 25 Ltr. (PP)
Heater Element	: 1kw
Salt for Fallout Rate	: 1-2 ml/Hour over 80 sq.cm Horizontal average run of Area (Based in 16 hrs. Uninterrupted test- run)
Brackets for Rods Supporting Specimens	: $35^{\circ}$ Angle Slotting
Combination Drain & Exhaust	: PVC Pipe
Test Rack, Well Below Roof Area	: PVC Rod
Fog Collector	: Funnels 8 Cm Dia
Measuring flask	: Plastic Measure
Air Piping	: Made of Nylon or Poly-urethane material
Air Regulator	: Air Regulator to adjust the collection rate

### Special Features:

- ◆ Multiple-time Setup (Ex-A, B, C, D, E, Sample Job)
- ◆ Digital Air Pressure Indicator
- ◆ Auto Data Logging
- ◆ Time Backup



# SMPS BASED HULL CELL RECTIFIER

The Hull cell is a type of test cell used to qualitatively check the condition of an electroplating bath. It allows for optimization for current density range, optimization of additive concentration, recognition of impurity effects and indication of macro-throwing power capability..

The Hull cell is a type of test cell used to qualitatively check the condition of an electroplating bath. It allows for optimization for current density range, optimization of additive concentration, recognition of impurity effects and indication of macro-throwing power capability. The Hull cell replicates the plating bath on a lab scale. It is filled with a sample of the plating solution, an appropriate anode which is connected to a rectifier the "work" is replaced with a hull cell test panel that will be plated to show the "health" of the bath.

## Specifications:

Input Power Supply	230 Volts 50Hz Single Phase
Output	0-12 Volt 0-10 Amp DC
Unit Dimensions	23cms x 24.5cms x 11cms
Weight	Approx.2 kg.



## Features:

- ◆ SMPS Based
- ◆ Ripple less than 1%
- ◆ Constant Voltage
- ◆ Constant Current Timer with buzzer
- ◆ Digital Volt /Amp. Meter
- ◆ ABS Body light weight

## Hull Cell Rectifier



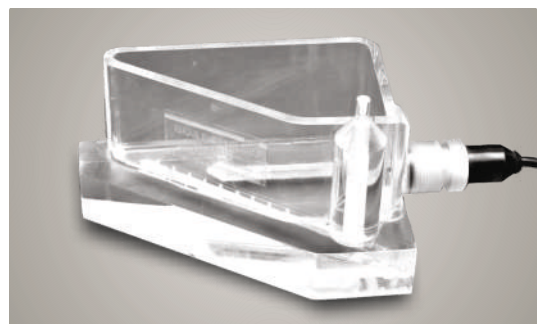
## Two in One Rectifier



## Acrylic Hull Cell Pot with Thermostate



## Acrylic Hull Cell Pot with Heater



## Hull Cell Pot Acrylic

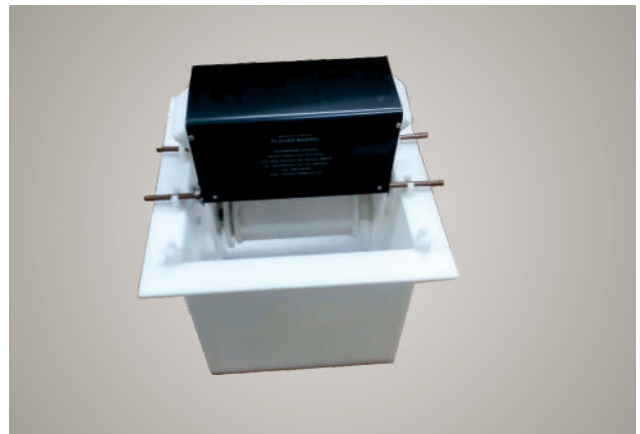


## PUC Hull Cell Pot



## PORTABLE PLATING BARREL & PORTABLE HANGING BARREL

Material loading capacity: 0.5 to 1.5 kg, 3 to 5 kg & 7 to 10 kg  
Power: 12 V/5 Amps. DC Motor  
Speed: Adjustable 3 to 12 RPM



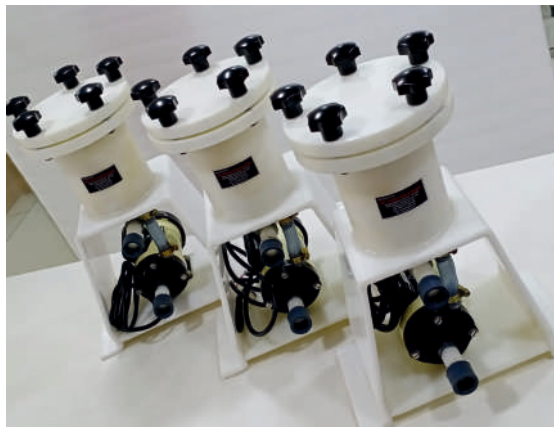


## Electro Plating Equipment

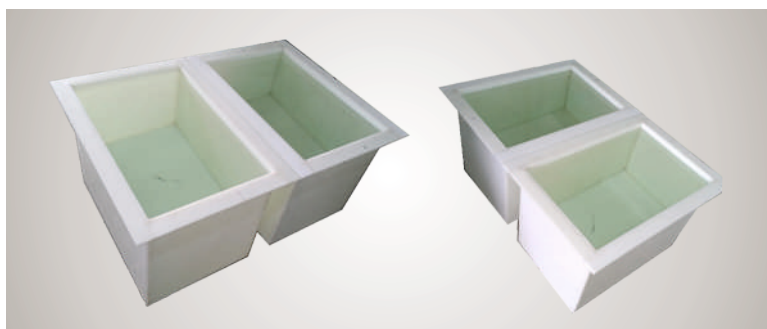
Material loading capacity: 0.5 to 1.5 kg, 3 to 5 kg & 7 to 10 kg  
Power: 12 V/5 Amps. DC Motor  
Speed: Adjustable 3 to 12 RPM



Filter Unit



Filter Unit

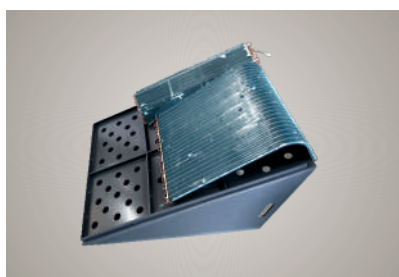


Tank



Digital Temp. Hull Cell Pot

## Electro Plating Equipment



Astm Sample Jig



Hull Cell Pot pp



Hull Cell Pot Pvc



Two in One Hull Cell Kit



Dangler



Plating Plant

# ULTRASONIC THICKNESS GAUGE



This Thickness Meter is small in size, light in weight, easy to carry. Although it is an advanced model, it is convenient to use and operate.

## Features:

The high power of emission and broadband of receiving sensitivity makes it easy to measure the rough surface, even on cast iron. Applicable to measure the thickness of many materials, e.g. Steel, Cast iron, Aluminum, Red Copper, Brass, Zinc, Quartz glass, Polyethylene, PVC, Gray Cast Iron, Modular Cast Iron etc. Automatic power off to conserve power. sensitivity makes it easy to measure the rough surface, even on cast iron. Applicable to measure the thickness of many materials, e.g. Steel, Cast iron, Aluminum, Red Copper, Brass, Zinc, Quartz glass, Polyethylene, PVC, Gray Cast Iron, Modular Cast Iron etc. Automatic power off to conserve power.



## Specifications:

Display	4 digits, 10mm LCD
Range	1.2 to 200mm.
Resolution	0.1mm / 0.001inch
Accuracy	± 0.5 %
Sound Velocity	1000 ~ 9000m/s
Power Supply	4 x 1.5V AAA battery
Operating Condition	Temp. 0 - 50° C
Humidity	< 90% RH
Size	120mm x 62mm x 30mm
Weight	260 gms

## Application:

Used for measuring thickness and corrosion of Pressure Vessels, Chemical Equipment, Boilers, Oil Storage, Tanks, etc., in industries of Petroleum, Ship building, Power Station, Machine Manufacturing etc...

## DIGITAL ELECTRONIC TIMER WITH FLASHER / BUZZER

- ◆ Digital Electronic Timer with Flasher/Buzzer with industrial
- ◆ START/STOP Switches.
- ◆ Auto cutoff provision, Selection mode for Seconds/Mints/Hrs.
- ◆ Supply: 230V AC.



## TEMPERATURE INDICATOR & CONTROLLER

- ◆ ON-OFF / T. P. Temperature Controller, Single Set Point
- ◆ Input : RTD
- ◆ Output 1 : Relay 10 A/230 VAC
- ◆ Supply : 85 to 264V AC.



Manufactured & Marketed by:

**Kiran Electronics**

AN ISO 9001-2015 CERTIFIED ORGANISATION

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