



### Currency Counting Machine Training Programme

A Training programme for Currency Counting Machines was conducted at Head Office on 12th Dec 2015.

Service personals from

following dealers participated in this Training Session.

Sihau Enterprise - Mumbai, Data security - Ahmednagar,

Vardhman Pipes - Shirdhon, Shivshankar Enterprise - Beed,

Nextstep Technology - Ratnagiri, Jinal Plastic - Palghar,

Prime Digitech Corporation - Solapur

Also our representatives from Dhule and Rajasthan attended the programme.

Mr. Anant Khimnar conducted the session and Ajay Sir provided guidance.



SAJAY GAWANDE - 98225 49150

### NITIRAJ ENGINEERS LTD.

HEAD OFFICE : BEHIND GURUDWARA, MUMBAI AGRA ROAD, DHULE - 424 001 (M.S.) INDIA.

TEL. : + 91-2562-239080, 239331. FAX: + 91-2562-239332, 239781, 239470.

E-mail: [response@nitiraj.net](mailto:response@nitiraj.net) Web site : [www.nitiraj.net](http://www.nitiraj.net)

Published by Swati Samant for Nitiraj Engineers Ltd. at Nitiraj House, Dhule.

PHOENIX®



ISO 9001 : 2008

## NITIRAJ ENGINEERS LTD. News Letter

VOL- 16 ISSUE - 1

April- 2016

# The Story Of Meter



Weights & Measures

Part - 3

From the desk of  
CEO.....

Dear Friends,

**"You will never find a Rainbow  
if you are looking down."**

Charlie Chaplin

Even on a darkest night  
you watch the sky - Galaxy,  
and you will find some thing  
to be blissful about.

Cheer yourself and  
the whole world will be cheerful.



  
Rajesh Bhatwal

**Quality Policy**

We at Nitiraj Engineers Ltd. are committed to Design, Develop, Manufacture and Service Electronic Weighing Scales, Currency Counting Machines, Auto Fare Meters, and Electronic Systems to meet Customers Requirement and Satisfaction.

This we shall achieve through the process of continual improvements in Product performance, Customer Satisfaction, Development of employees and implementing Quality Management System in all the areas of organisation to achieve Market leadership

This policy shall be reviewed for continuing suitability and shall be revised if needed

  
Rajesh Bhatwal  
CEO

Date : 1 July 2015

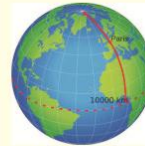
**PHOENIX**

## Weights & Measures

Part - 3

Salvi P.K

### The Story Of Meter

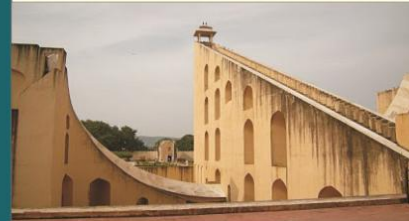


The first standardized system of measurement, based on the decimal was proposed in France about 1670. However it was not until 1791 that such a system was developed. It was called the 'Metric' system, based on the French word for measurements.

The driving force was the growing importance of weight in the science and especially chemistry. At that time, every country had their own system of weight and measure. England had three different systems just with it's own borders.

On May 20, 1875 delegates of 17 countries signed the Meter Convention. It was amended in 1921 and today more than 48 countries are signatories of the same.

The Modern metric system was renamed 'International System of Units' and is denoted by the letter SI (System International). SI was established in 1960 at the General Conference on Weight & Measures. It was then that units, definitions & symbols were revised and simplified.



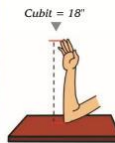
*The largest Sundial exist  
at 'Jantar Mantar'  
in Jaipur, India.  
This device can be used  
to measure time,  
predict eclipse and  
track star location.*

# Weights & Measures

Part - 3

There are three major parts of the metric systems :1) the **seven base units**, 2) the **prefix** and 3) **units built up from the base units**. There is a list of the base units which make up the metric system

Prefix were also agreed in 1791. The set from kilo-to milli - was developed in 1958, the International Committee on weight & measures added **Mega, Giga and Tera** to the multipliers and **Micro - Nano and Pica** to the fraction. In 1960 at the 11th General Conference on Weights & Measure everything was officially adopted. Since that time additional prefix have been added as the need arise. Typically, as scientific instruments get better and better, smaller and smaller



## Length Measure

- Measure of length is Gaj.
- In Bengal it is 36', in Bombay - 27', in Madras - 33' and average Government length was - 33'.
- Angul = width of 3 finger = 1 Girah = 2.25"
- 8 Girah = 1 Hath = Elbow to Middle finger = 18"
- Full Hand = Shoulder to Middle finger = 36"
- The Lathi Gaj of Akbar's time was = 34"

quantities can be detected. So new fractioned prefixes need to be added.

## The meter has most interesting story

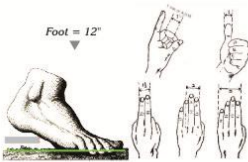
The Metric system gets all it's measurements from Earth and Water while following the simplicity of 10 fingers and the decimal number system

The word decimal from Latin meaning "of a tenth". A tithe was traditionally one tenth of income, so deci meant one tenth.

Equator to North Pole the distance is 100,00,000 meters = 10,000 kilometers By dividing a distance from Equator to North Pole by 10 million, a convenient length was defined. It was little longer than a yard and the name would be from Greek word *Metron*, meaning to measure.

Every one has access to the Earth, so this new system was based on the size of earth.

For example, if the angle of the star changed by 10 degrees they knew that they had traveled one ninth of the distance of the Equator to the North Pole, because that is 90 degrees. Four times that would give them the circumference of the Earth.



They also knew that some else in the world could confirm their measurement by doing similar survey in their part of the world. In other words, the foundation of measurement should be based on something we all share - the Earth.

Then French scientists made a bar of 90% platinum 10% iridium and put mark on it to signify the meter distance. This particular alloy was used because



it resisted expansion due to temperature very well and could take very high polish. By the way using a particular wave length of light as a standard for measurement was made as early as 1829. It took almost 80 years for the Technology of measurement to become exact enough for use as an International standard.

**The Metric system is preferable in many cases** because the units are much easier to work with and convert among units of different size.

Example - English system

1 Mile = 528 feet and 1 foot = 12 inches

Now how many inches in a Mile ?

1 Kilometer = 1000 meter

1 Meter = 100 Centimeter

How many centimeter in 1 Kilometer ?

Do and decide which is a faster.

The circumference of the Earth at the Equator is 40075 kilometers (24901 miles). The Earth's diameter is also wider at the Equator, creating a phenomenon called an Equatorial bulge.

The definition again changed once in 1983 to the following - the meter is a length of path traveled by light in vacuum during a time interval of 1/299,792,458 of a second.

A survey team was suppose to measure the distance between Barcelona, Spain going through Paris and up to the English Chanel.



With this the distance and the measurements of the change of the angle when viewing the stars, they could calculate the circumference of the Earth more accurately than had been done before.

**And here the meter journey was over.**

## Fathom

A Fathom is a unit of length measurement in the imperial system. It is equal to 1.8288 meters or 6 feet. It is commonly used to measure the depth of the water.

## The seven base units in the International system of units

Physical quantity	SI (Base) Unit	Symbol
1) Length	Meter	m
2) Mass	kilogram	kg
3) Time	second	s
4) Electric current	ampere	A
5) Temperature	kelvin	k
6) Amount of substance	mole	mol
7) Luminous intensity	candela	cd



## Sale in March 2016

### FIVE TOP BRANCHES

Jeypore  
Balangir  
Berhampur  
Sambalpur  
Raigarh

### TOP ZONAL MANAGER

**Dillip Kumar Panigrahi**  
- Jeypore, Sambalpur & Balangir

### TOP RM / AREA SALES MANAGER

**Dileshwar Majhi (RM)**,  
- Berhampur

### TOP FIVE SALES EXECUTIVE

Sales Executive	Branch
Yudhistir Badgichhia	Balangir
Rabindra Kumar Behera	Berhampur
Aswini Kumar Kar	Jeypore
Neela Madhab Sahu	Berhampur
Praveen Soni	Raigarh

### TOP SERVICE ENGINEERS

Ser. Engineers	Branch
Singh Santosh	Bilaspur
Kali Santosh Totaram	Jalgaon
Bhanu Pratap Choudhari	Raigarh



## Circulars -

### No. Date Subject

Circular No.13 NEPL - 350 New Motherboard in our 1/4/2016 standard models  
Circular No.14 Sales & Service Revenue Incentive 1/4/2016 Scheme for the Period 01/04/2016 to 30/04/2016.



## Dealer Desk

### Appointments:

- Shambhu Kumar Baidyanath Prasad**  
Joined as Area Sales Manager, Bihar & Jharkhand
- Dahiya Vipi**  
Joined as Area Sales Manager, Reva (M.P)
- Dhurandhar Vijay**  
Joined as Area Sales Manager, Bhopal (M.P)
- Ranjit Kumar Gauranga**  
Joined as Service Engineer, (PLNC) Orissa
- Dighe Durgesh Prahlad**  
Joined as Sales Executive, (HDPOS) Buldhana



## Dealer Desk

### New Dealers Appointments :

- Shree Samarth Mobile Shoppe(CCM)**<sup>Mandrup (M.S.)</sup>
- Soham Digital Media (CCM)** - Latur (M.S.)
- Shree Bansal Steel Home** - Paratwada (M.S.)
- Shri Vinayaka Electronics & Weighing Systems**  
- Kalyandurga (Simandhra)
- Gupta Sales Corporation (CCM)** - Raipur (C.G.)
- Shri Katawala Enterprises** - Narayanpur (C.G.)
- Charan Weighing systems** - Nellore (Simandhra)
- Divya Technical Services (CCM)**<sup>Nani Daman (D&D)</sup>
- Shri Markandeya Enterprises** - Karimnagar (Telangana)
- Somya Enterprises** - Udaipur (Rajasthan)
- All In One Electronics** - Guna (M.P)
- Khusbu Electronics (CCM)** - Kantabariji (Orissa)
- Rahul Metal House (CCM)** - Jaspur (C.G.)
- A.K.Enterprises** - Muzaffarpur (Bihar)
- Sri Ram Enterprises** - Begusaral (Bihar)
- Shankar Enterprises** - Narasanapeta (Simandhra)



## Focus of the month

Now we are providing NBW machines with **Batch Memory function**.

NBW machines with Memory feature have Auto Memory addition and Bag counting function. This type of scales are used in Grain merchant segment where Grains are measured and packed in Bags. After packing bags, this Bag counting function is useful while loading in Trucks. This feature is available in all capacities and accuracies for NBW. We can provide this model in Red and Green Display as per Requirement



## R & D Updates

### NPC model with 36 key keyboard Software upgraded

Important features included in the latest software are as:

**Hot Key Feature:** We can assign 1 to 9 numbers to frequently sold items.

We can recall desired item by pressing number key little longer.

**Single item billing:** Recall the item and press print after weighing. (Useful in meat shop)

**Auto memory clear function:** Automatically clears memory of bill after printing.

(\*No need press MC key)

**Auto M+:** Select the A2 mode for auto M+ . Which add transaction automatically in memory.

**PLU Capacity increased to 1000 Item data:** Total 1000 items can be stored

Unit price, item code, name, expiry days & wt/qty in memory.

**Capacity of each invoice increased to 200 items:** In each bill 200 items can

be stored. i.e. we can bill maximum 200 items in single bill.

**Expiry date feature:** We can input item wise Expiry date for bar code printing.

**Barcode sticker design:** We can select bar code parameter to be printed at customer end.

On the basis of number of selected parameters to be printed, the minimum size of label

will be defined by machine. You may select as per availability of labels for printing.

Following 9 parameters are selectable: ■ Shop name : 20 characters maximum.

■ Item Name : 12 characters maximum. ■ Barcode : ■ Barcode data - Item measured

in terms of weight or pieces. Unit price – Total price -- Packing Date -- Expiry Date.

**We can select Bar code types as per availability of**

**Bar code Reader Gun & sensing distance.**

Code 39 Small :- Sensing distance up to 8 cm

Code 39 Medium :- Sensing distance up to 15 cm

Code 128 Small :- Sensing distance up to 8cm

Code 128 Medium :- sensing distance up to 15 cm

Printing mode can be changed when the scale is in weighing mode.

We can bill two customers at a time using feature of "A" Memory & "B" Memory