

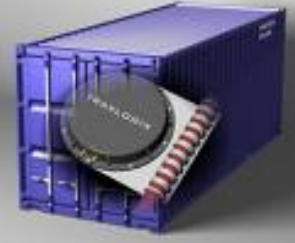


# Trace and Track Solutions for SECURITY AND LOGISTICS

Harveer Sahni  
Ceo

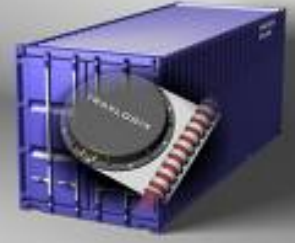
Weldon Celloplast Limited  
[www.weldoncelloplast.com](http://www.weldoncelloplast.com)

Ph: 01244378363



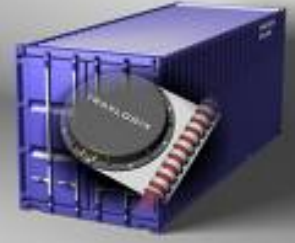
- The need to trace and track has been felt by almost all at some point of time
- If suddenly your cell phone went missing, immediately you would reach for nearest available phone and dial your own mobile number.
- You are trying to TRACK AND TRACE IT

# INTRODUCTION



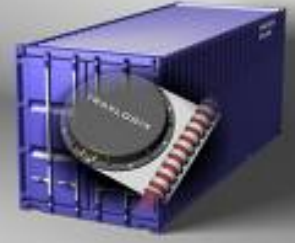
- Process of recording the path traversed
- Solves the need of the industries
  - Just in time delivery
  - Pace and performance
  - Information on the movement of vehicles
  - Security
  - Authentication
  - Identification

## What is Track and Trace



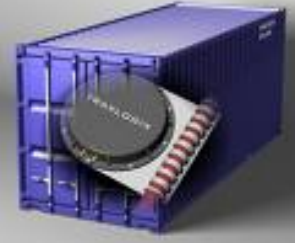
- Increasing incidents of cargo theft
- Changing regulations and requirements of information
- Theft is a headache that has troubled both the transporters and the brand owners
  - Transporters: Hurt their reputation
  - Brand Owners: Losses in Supply Chain and tarnishing company reputation
- Cargo Theft In US: 60 BILLION USD
- Cargo Theft in India: 6700 CR.

## Why Track and Trace?



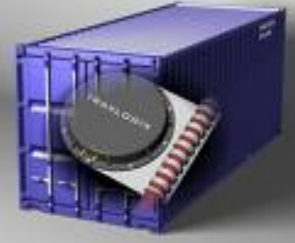
- Barcodes: These contain a whole lot data in them which is in the form of an optical representation that is machine readable
- Comes In 1D and 2D Formats
- Widespread acceptance in supermarkets
- Barcodes can be read by scanners

## Track and Trace Solutions



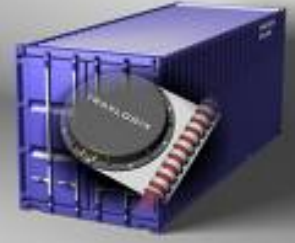
- Labels that are tamper evident with either security cuts or security features built in them
- Security Cuts: Anyway you try to remove, these labels would tear off
- Security Features: When the label is removed, the words VOID appear in the substrate as well in the residual layer left back

## Barcode With Security



- TRACED to have its roots in World War II radar systems
- Has come a long way to be the most important supply chain information technology.
- RFID uses the same concept, where in a passive system the transponder reflects a signal back while in an active system it broadcasts a signal.

## RFID



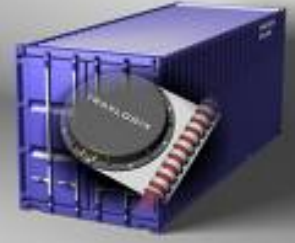
- RFID tags are now used for
  - Billing,
  - Inventory management,
  - Packaging,
  - Anti theft systems,
  - Office security,
  - Payment at tolls,
  - The list could go on
- PFIZER tracks VIAGRA
- Insurance Companies track CATTLE

# RFID



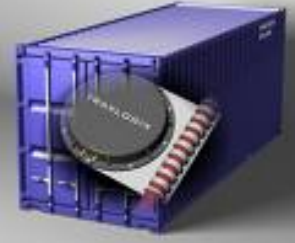
- Global Positioning System (GPS) is a satellite-based navigation system made up of a network of 24 satellites placed into orbit by the U.S. Department of Defense.
- President Ronald Reagan issued a directive that guaranteed that GPS signals would be available at no charge to the world
- GPS came into public awareness during the Persian Gulf War in 1991.

# GPS



- GPS works in any weather conditions, anywhere in the world, 24 hours a day.
- GPS has become a mainstay of transportation systems worldwide
- Container and vehicle tracking is widely possible because of usage of this system.

# GPS



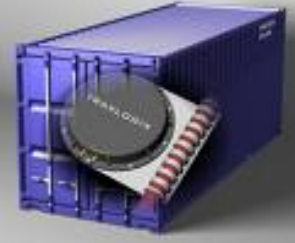
- These are microscopic pieces of multilayered colored plastics added to the product to track its source.
- Microtaggant brand Identification Particles are a microscopic, traceable and anti-counterfeit technology
- Various "energy sensitive" taggant technologies are now built into the particles that act as a code within a code

## Microtaggants



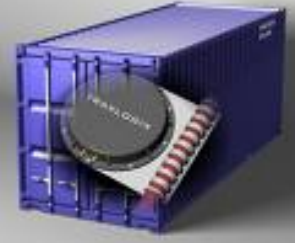
- DPM is a process that can permanently mark a product such that it can withstand the harshest of environments and processes.
- In today's time examples of direct part marking include engraving, Laser etching, numbering, molding, Videojet printing, casting, stamping, etc.

**DPM**



- A magnetic stripe card is a type of card capable of storing data by modifying the magnetism of tiny iron-based magnetic particles on a band of magnetic material on the card.
- Magnetic stripe cards are commonly used in credit cards, identity cards, and transportation tickets

## Magnetic Stripe



- Hotel Check in
- Employee Movement
- Visitor Movement
- Goods Movement
- Airport Security
- Remote access and monitoring
- Brand Authentication
- Insurance
- The List is Endless

## Applications of Track & Trace



It may now be possible for a suspecting wife to be indulgent enough to employ a track and trace device to check on her Spouse's movement.



**Thank You!**