**JEWEＬRΥ MANAGEMENT SYＳTEM**

**What is Jewelry Management System?**

Jewelry items are tagged with discrete, RFID tags with unique identification numbers that link to the full details of the item. The retailer then needs to scan the items with a small reader, and the details will be transmitted to the management application, which runs on a standard PC in the retail outlet.

Compared to physically handled stock checks that take hours to complete and can only be performed infrequently, a stock check with application takes minutes.

The system enables –

- The reduction of inventory errors
- Improved stock visibility
- Electronic Article Surveillance
- Gives the retailer a clearer view of turnover.

The following Hardware modules are required for a jewelry tracking system.

- **Handheld or Portable Readers** - Handheld readers which is carried by the sales person are battery powered. With this we can take care of our inventory very easily as many times as we require. This is also cost effective and least complex system. But it requires person to carry it in order to capture the product item list for inventory

- **Tray Readers** - These readers gives us the most exact inventory. By placing any jewelry item on the tray reader we can get the complete information of the item on a PC. And the same Tray reader can also be useful for bulk reads at the time of stock check.

- **Fixed Readers** - The jewelry movements can be monitored when the item pass through given point within the store. The item movements in and out of the vault can be read. At point of sale the reader reads all the jewelry items on the tray whenever they are taken in and out of the vault. The jeweler can track how often the jewelry item was taken and shown to the customer by his sales person. The trays are having separate antennas which spread throughout the stores. These discrete readers will take a note only when the RFID tagged items are passing through their respective read points.
Why Jewelry Management System is required?

Tracking jewelry inventory is uniquely suited to the use of RFID for several reasons:

- The high value of the jewelry items makes the loss of even one item potentially very expensive, thereby making it easy to quickly recognize an ROI.

- Since jewelry displays are set up daily and then stored in safes in the evenings, there is ample opportunity for loss of product.

- Due to the fluctuation in jewelry value as the price of gold fluctuates; the insurance costs of inventory can vary. It is critical to maintain accurate inventory in order to maintain accurate insurance records.

- For some stores, the jewelry inventory can be consigned inventory. Again, it is critical to maintain clear records of inventory as the value of the jewelry fluctuates.

- Jewelry sales require one-on-one attention of the jewelry sales person who tends to be highly specialized. Any time a sales associate is not working on mundane tasks such as inventory tracking is time they have freed up to spend working with their customers.
Functional details of Jewelry Management System.
**Benefits of Jewelry Management System**

**Better Inventory Management**

Accurate Stock Checking lowers inventory costs at high level  
Saves time by avoiding redundant stock checking  
Increased visibility over the Stock  
Reduced out of stock conditions

**Guard your Assets**

It provides maximum security for expensive jewels.

**Increased Efficiency**

Multiple items can be tracked and scanned at the same time enabling fast billing at POS counter  
It reduces crowd at billing terminal.  
Retailers will be able to quickly and easily carry out inventory control twice a day using desktop scanners.  
Wholesale customers will also be able to offer enhanced finance and more cost effective insurance solutions to their retail partners.  
It facilitates automatic and multiple object identification, accounting, stock-taking all of which tremendously improves the efficiency of the process.

**It provides speedier data collection.**

RFID empowers the retail business with detail knowledge of customer shopping behavior within your stores.  
Jewelry Tagging gives you quick access to a detailed inventory with information about which items are selling best
**System Components of Jewelry Management System.**

1. Jewelry Tag: HF Hard tag (Re-usable)
2. Inventory Wand: Hip-mount portable terminal with hand-held wand antenna.
3. Inventory Tray: Flat-bed tray reader with Ethernet (TCP/IP) at couple of transfer points
4. Counter Reader: Single item desktop reader for item information display (connected a PC).
5. Tagging Station: Single item desktop reader / writer with built-in camera for tag writing (connected to a PC).
7. Server: Server with Linux OS license and RAID
8. Software:
   a. Middleware
   b. ERP
   c. Business Intelligence