

## Jewelry Industry DIAMOND TRACKING at its premises in Mumbai



*A leading manufacturer of high-end polished diamonds required a secure system of tracking the flow of diamonds into and out of the premises, and in storage. RFID tracking provides such a solution through instant information and enhanced security.*

### Company:

Venus Jewel, Mumbai, India

**Facility:** Office premises

### Challenge:

- The business utilizes the services of agents who take diamonds in sorted packets from the premises to retail jewelers for approval/sale and bring back unsold packets to the premises. This requires extreme alertness in monitoring of inward and outward movement.
- High-value gems that are stored in boxes in a storage area need 24x7 security monitoring to prevent unauthorized handling and movement.



### Proposed Solution:

- Each diamond packet is RFID tagged before it leaves the premises. Inward and outward tracking is done through the Xtenna™ Reader/Antenna that is mounted at the entry/exit counter of the premises.
- Essen RFID's Jewelry Tracking System monitors data in real-time, providing instant knowledge of inward/outward packet movement and agent-wise distribution of packets.
- Xtenna™ mounted in the storage area tracks RFID tags affixed on boxes of high-value gems through a security grid format. An alarm is immediately sounded if the box is moved outside its designated grid area within the strongroom.

### Realised Benefits:

- Real-time tracking
- Remotely controlled 24x7 monitoring
- Enhanced security

### TECHNOLOGY

#### Solution:

EPC Gen2 compliant asset tracking system

#### Tag Type:

Paper Tag UHF Passive

#### Reader/Antenna:

Xtenna™ Long Range

#### Read Range:

17 metres (50 feet)

#### Method:

Multiple Tracking via Integrated Reader/Antenna modules

**Number of modules:** 2

#### Integration Platform:

**RFID Middleware:** Xtenna™ Studio

**Application:** Essen RFID's Jewelry Tracking System

**Database:** SQL Server 2005 Exp. ed.

#### Tag Manufacturer/Supplier:

Essen RFID

#### Reader/Antenna Manufacturer:

Essen RFID

#### Systems Integrator:

Essen RFID

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