



For Immediate Release

## News Release

# Magellan Technology tracks diamonds for New York Diamond Merchant

*Favorite Diamond Inc. of New York, a large diamond manufacturing company with multiple factories, offices and storage facilities, uses Magellan's PJM StackTag® technology for efficient tracking of diamonds.*

### **Sydney, Australia – Thursday, April 19, 2007**

Favorite Diamond Inc., New York, a large diamond manufacturer uses an RFID system based on Magellan's PJM (Phase Jitter Technology) RFID technology to manage and control its diamond inventory. With the help of Magellan's RFID the time and effort needed to frequently inventory and count all diamonds in small envelopes has been reduced dramatically – from several days each month down to a couple of minutes using minimum labor. The Magellan RFID system was installed by Klein Brothers Computer Services, Inc. and uses PJM StackTag® RFID labels and the Small Batch Tunnel Reader MTR-1310 from Magellan Technology complying with the worldwide RFID standard ISO/IEC 18000-3 Mode 2.

Favorite Diamond Inc. has a very large inventory of many different diamonds. These diamonds have different and unique combinations of color, shape, clarity, weight and measurements. The diamonds are stored individually in small envelopes stacked tightly together in long thin trays containing approximately 100 envelopes each. Previously Favorite Diamond used a bar code system which was cumbersome, labor intensive and inaccurate to inventory its diamond stocks. The bar code process required the removal of each envelope from the tray for individual scanning. Regular inventory checks involved many people and took several days each month during which time productivity fell unacceptably. The bar code labels also became dirty and damaged due to excessive handling of the envelopes which caused the bar codes to become unreadable. As a result it became impractical to scan or properly manage the many stones as they moved within the facilities and thus counting and logging of stones was inconsistent. The inventory was also inaccurate which led in turn to sales and purchasing performance problems

Each diamond envelope is now given its own unique identifier in the form of an RFID tag based on the PJM StackTag® technology. Magellan Tunnel Readers are installed at the main storage facility and at all process points. The procedure now is that all trays of tagged envelopes are identified when they move into or out of the secure storage facility and at each processing point. As diamonds are removed from the secure area each tray is read and assigned to a responsible person. These details are recorded and tracked to provide a real time audit trail. As the diamonds move around the manufacturing and sales process they are re-read and assigned to other people as needed. At the end of the day the diamond trays are returned to the central storage facility and a report shows the location and history of all handling of the stones. A complete audit report is maintained and the stones are managed securely in real time. The time and labor required to manage this entire process is negligible as trays containing 100 envelopes can be read in less than 1 second each with 100% read accuracy every time, no matter how closely the envelopes are stacked. Only Magellan's unique PJM StackTag® technology allows tags to be stacked with zero separation and yet will still work reliably. No other existing RFID technology is able to provide this functionality or work with 100% reliability in real time in such situations.

The inventory process, which used to take days, is now accomplished in seconds and Favorite Diamond no longer shuts down operations while checking inventories. Using their own new system they can continuously track their diamond stock levels and know accurately their position at all times. They purchase with greater accuracy because they now know exactly which stone classifications are needed. Their stock levels of diamonds, and hence their financial position and liability are much more reliable and this allows them to perform their business functions with better focus, reliability, accuracy and timeliness. They have also entirely eliminated their "missing stone" problems as diamonds are now checked at each process step; the system shows the last location of all diamonds together with the name of the person responsible and misplaced stones are now a thing of the past. None of this required any significant change to their existing business processes except that an RFID tag was added to each diamond envelope and this did not impact the workflow and productivity at all.

"Only the unique stacking capability combined with the high speed read and write functionality of the PJM StackTag® is able to provide such large benefits in inventory management and control for the worldwide diamond industry," said Bodo Ischebeck, the Chief Executive Officer of Magellan Technology. "A PJM based RFID inventory control system will track many hundreds of tightly stacked individual items and continuously monitor both stock levels and locations, optimizing overall business performance."

### **About Magellan Technology**

Magellan Technology Pty Ltd, Sydney, Australia, is a technology developer; manufacturer and licensor of advanced read and write 13.56MHz RFID systems. Magellan designs and offers RFID chips, inlets and



a complete reader portfolio for Magellan's Phase Jitter Modulation (PJM) technology, which complies with the International Standard ISO/IEC 18000 Part 3 Mode 2.

The PJM technology is more than 10 times faster than other existing HF technologies. Our PJM StackTag® is unique in its capability to identify, read and write RFID tags even when they are deeply stacked together. PJM products are optimized for applications where many hundreds of tags are stacked tightly or need to be identified reliably in fast moving dynamic situations where tags are presented in all orientations.

Magellan licenses its PJM technology worldwide and welcomes enquiries from interested parties including other manufacturers and system integrators.

Further information is available at our new website [www.magellan-rfid.com](http://www.magellan-rfid.com)