



## William Marsh Improves Operational Efficiency with RFID-Enabled Warehouse Management System



WILLIAM MARSH & COMPANY.

### Company Profile

William Marsh & Company Limited is a Hong Kong-based global supply chain firm providing strategic operating solutions to the construction sectors. All the planning and logistics operations are directed from their center of operations located in Marsh Engineering Center in Hangzhou, China.

### Challenges

William Marsh has expanded its product portfolio for provision of ceramic sanitary ware, counter tops, bathroom accessories, faucets, plumbing fittings and construction components. To cope with business expansion, William Marsh needed to modernize its warehouse operation and implement FIFO (First In, First Out) inventory management system for quality assurance and greater efficiency.

**“We are pleased to partner with PCCW Solutions to implement our first RFID-enabled warehouse management system. The automated system streamlined our workflow to distribute products in high quality and customer satisfaction. The total RFID solution delivers great value to improve our operational efficiency, safety and accuracy.”**

- Jason Ho, CTO, William Marsh & Company Limited

### Challenges

- Lack of quality assurance
- Manual warehouse operation
- Unable to attain “first in, first out” inventory control

### Solutions

- RFID-enabled forklift and mobile device solutions
- RFID automation in warehouse operation cycle
- Total RFID solution from hardware, software to onsite RFID system setup and tuning

### Value Created

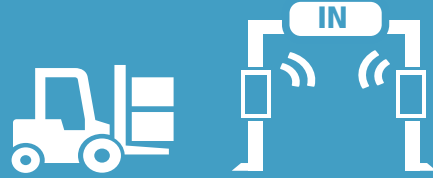
- Improve operational efficiency and effectiveness
- Increase track-and-trace capabilities and visibility of products real-time
- Flexible and scalable to support business growth



## STOCK-IN



RFID Handheld Management System  
for Item Mapping



RFID Middleware and Fixed Reader Gateway



RFID Forklift Reader Application for  
Products Allocation



RFID Middleware and Fixed Reader Gateway

## STOCK-OUT

### Comprehensive Technology-centric Warehouse System

PCCW Solutions was appointed to build the comprehensive warehouse management system for William Marsh. The solutions were implemented to build the world-class sanitary ware quality assurance center in Hangzhou, with 15,000m<sup>2</sup> for handling over 20,000 pieces of item per month. With the RFID-enabled storage and inventory management solution developed for ceramic-tile products, William Marsh's warehouse is now equipped with the means to automatically and effectively pick good-quality items in FIFO manner for shipment.

The right hardware was first identified and sourced for building up a technology-centric warehouse management system which included

RFID-enabled pallets, handheld devices, forklift readers and gateway readers. Several RFID systems, such as a tag registration system, an item-mapping system, forklift warehouse system and gateway system for location-transfer monitoring, were also implemented.

### Deploying RFID Forklift Solutions

Through RFID-enabled forklifts and mobile handheld solutions, product safety has been enhanced significantly with high level of quality checking. The company's warehouse staff can now pick the right items efficiently and promptly, at the right locations. With the unique identification and multi-readability of RFID technology, each tagged item can be automatically detected and monitored when it passes through the RFID gateway. It can greatly improve the visibility of item management and

track-and-trace in real-time manner. The highly scalable and flexible system can well address William Marsh's future extension of new functions, enhancement and further expansion.

### About PCCW Solutions

PCCW Solutions is a leading IT services company in Hong Kong and mainland China. We adopt the latest technology to help clients create business value and success in the ever-changing economic environment. We offer a wide range of services including digital solutions, IT and business process outsourcing, cloud computing, system development and solutions integration, data center hosting and managed services, e-commerce and IoT solutions. PCCW Solutions is committed to meeting customer needs to help them achieve business goals and transform digitally.