

# Automated Material Tracking for Construction Projects



## SiteSense® Options

### MOBILE

#### INFRASTRUCTURE

Reduce RFID reader infrastructure cost and increase coverage area by using mobile reader stations for personnel and vehicles.

### RUGGED RFID TAGS

Track thousands of pieces of construction materials and equipment during receiving, storage and installation.

### RUGGED GPS TAGS

Track the position of project critical materials and equipment anywhere in the world regardless of the form of transportation.

### VISUAL ASSURANCE

Remote control cameras track visual progress of tagged materials and equipment. Log into cameras from anywhere in the world to view progress in real-time.



SiteSense® Solar Powered Gate Receiving Station

- Know the exact location of materials, tools and equipment *anytime* and *anywhere* in the world
- Avoid costly delays caused by teams searching for construction materials, tools, and equipment
- Real-time automated material receiving
- Eliminate on-site delivery errors
- Get the right material to the workforce faster
- Automate construction progress monitoring

In today's world of rising labour costs and labour shortages, Intelliwave utilizes advanced wireless technologies to automate material handling processes and improve efficiencies. SiteSense® was developed from the ground up for industrial construction projects with the main goal in mind to improve the construction process and reduce costs. SiteSense® takes the guesswork out of determining the physical location of the materials, tools and equipment. Let SiteSense® do the work for you.

SiteSense® integrates with engineering and construction material and progressing software systems to provide automated reports for material receiving, locating and progressing. Material handlers can quickly find the actual location of tagged material by using a rugged handheld computer with a built-in map and Geiger counter functionality that isolates the material. Now material handlers can pick out the exact material in a laydown mixed in with hundreds of other identical looking pieces or even under the cover of snow.



SiteSense® Rugged Handheld Computers

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## TURNKEY SOLUTIONS

Intelliwave provides end-to-end services, including consultation, system design, installation, training, QC and service.

## PROJECT MANAGEMENT

Intelliwave deploys an on-site project manager to every project to assure smooth operations from system installation to training to daily use.

## INTEGRATION

SiteSense® integrates with many project tools including Primavera®, AutoCAD®, Spoolgen® and more. Progress data collected and analyzed from RFID and GPS tags can be compared with project schedule tools such as Primavera.

For more information on any of our products or services please visit us on the Web at:  
[www.intelliwavetechnologies.com](http://www.intelliwavetechnologies.com)

## Save Project Costs

### Reduce manpower for receiving materials

Materials tagged with RFID can be read automatically via RFID gate stations. Received materials are compared in SiteSense® to electronic packing lists and bill of ladings.

### Reduce manpower for locating and pulling materials

Materials tagged with RFID can be tracked to their exact position anywhere on the project site using the SiteSense® mobile reader infrastructure. If material moves, the new position will be known in SiteSense®. Material handlers can quickly find the position of the material using the SiteSense® site map and the handheld's built-in Geiger counter to direct them to the right material.

### Reduce manpower for identifying available material, tools, equipment and assigning it to a work package

Since all material and tagged equipment have RFID tags, they all have known locations in SiteSense®. There's no questioning what material is available for construction use as all tags are decommissioned after being used for construction.

## SiteSense® System

- SiteSense® Rugged Active RFID Tags for Construction
  - Long range, non line-of-sight
  - Extreme cold temperature operation range
  - Durable, robust, easy to mount tag enclosure
- SiteSense® Solar Powered Gate Stations for Receiving
  - No installation or configuration
- SiteSense® Mobile Reader Stations
  - Personnel and vehicle versions
- SiteSense® Web-based and Handheld Software
  - Easy to use software packages
- SiteSense® Visual Assurance
  - Remote control camera option
- SiteSense® Training and Integration Services

## Improve Work Flows

With material handlers and construction managers knowing exactly what materials, tools, and equipment are on-site and where they are located, they can ultimately get the material, tools and equipment faster to the work face. By reducing delays at the workplace, the construction crew can be more efficient and increase their total productive time.

## Increase Reporting Accuracy

Manual reporting of materials during receiving can lead to reporting errors. With less human intervention in material handling, data accuracy can be improved, thus saving time in error correction and ultimately in manpower.

Progress reporting can be improved by integrating RFID tag status with construction progress. Once RFID tags are decommissioned then installation can be tracked with automated reports.



SiteSense® Mobile Location Software