



# RFID

## Tool Tracking For Construction & Engineering

### Easy to implement, cost-saving, solution

*Barcoding and RFID are essential components in tool management*

On construction, demolition or reclamation sites, the number and range of tools needed presents site managers with a problem. Lost or mislaid tools result in additional project costs, wasted contractor time and can cause project slippage.

CoreRFID's Tool Tracking solution is already used by some of the UK's leading construction and civil engineering contractors. By automatically identifying tools and tracking their use, site managers can make best use of the tools available to them and reduce the costs of non-availability.

### Where is it? Who's using it?

Misplaced tools cause problems. Tasks can be delayed while tools are found. If tools aren't available, hired ones add to the project costs. Time is lost while new tools are procured or hire tools delivered. With projects running to tight deadlines, often with penalty clauses for completion over-runs, unforeseen tool shortages – real or mistaken – are an unnecessary complication for site managers.

One approach that can reduce these problems is managing the availability and use of the tools and tooling that are an essential part of every construction or civil engineering project.

With effective tool tracking it becomes possible to ensure that all tools are returned at the end of a job and that the identity of an engineer checking out certain tools is recorded. If tools themselves need checks, maintenance or calibration, this can be scheduled, monitored and audited. However, keeping track of tools with manual methods, using clipboards and forms, is both time consuming and error prone. The process of tracking becomes a problem and is seen as adding to the workload, rather than making life easier.

Automatic identification of tools, site staff and locations can overcome this. By tagging tools with barcode labels or radio frequency identifying (RFID) tags, which can be read with minimal effort and tracking system can produce schedules of which tools are used where and can highlight any tools not checked back in at the end of a job.



**Getting the right tools to the right place at the right time is a key part of keeping projects to time.**

*Tool tracking saves costs by highlighting missing tools and equipment.*

## Tool Tracking Solution

The CoreRFID Tool Tracking solution uses tags attached to tools. These tags identify each individual tool and its location. Tags can be based on barcode (low cost and simple to apply) or RFID (higher cost but more flexible) allowing identification data to be read automatically and without error. While barcodes are widely used for identifying retail goods and can also be used for tools, RFID offers the benefit of being able to scan and check multiple items with a single pass of a reader, rather than needing each individual item to be checked.



**Tracking tower crane components saves hire costs and helps health & safety.**

Whichever form of tagging is used, a simple application running on a hand held computer reads tags and reconciles the tags found with those expected for a particular site and location or for a particular job.

Handheld computers can be low cost or rugged devices depending on the working environment. Data can be transferred using wifi or GPRS transmission in real time or can be stored on the hand held computer to be transmitted back at the end of the day. The solution records the location of tools on a central database which can, in turn, be integrated with a corporate asset management system such as Ellipse or Baan if needed.

The application can be used in conjunction with unique operator identity tags and personal identity numbers in order to confirm the engineer responsible for checking out tools. It can also prompt staff for required checks or maintenance actions, ensuring tools are used safely and correctly.

Because data is collected at the point of action accuracy is improved and the need for supporting paperwork is removed. Direct entry of data and automatic collection of information from the tags reduces the risk of mistakes in transcribing information.

CoreRFID works closely with customers to select the best type of tag technology and variant for the maintenance environment, selecting barcode labels that are robust and usable in environments prone to fuel, oil or coolant spillage or RFID tags able to function on metal and in areas where radio frequency emissions may be a concern, including meeting ATEX compliant specifications for readers and tags where needed. CoreRFID adapts the Tool Tracking solution to specific customer needs, supplies and installs solutions, trains staff and provides service on its solutions.

## About CoreRFID

CoreRFID specialise in the technologies that help track, trace, audit and control; to learn more, contact us today:

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### The Benefits

Tool tracking solutions based on barcode or RFID help improve construction site operations by:

- Saving site staff time looking for tools across sites.
- Avoiding unnecessary tool hire costs.
- Reducing lost and mislaid tools.
- Reducing delays due to missing tools
- Automated report generation.