



## Issues in Construction Tool & Equipment Management

With operating costs rising at unprecedented rates, careful management of all expenses is becoming vital to any business' success. In the construction industry overhead costs can be staggering and managing all aspects of the business can be mind boggling. With a substantial inventory of costly tools, equipment and consumables, your inventory is often prone to theft, loss, hoarding, stock-outs, maintenance slips and even improper usage. Keeping track of what assets you own and where they are can save you money, time and get the job done without delays. However, as

a business owner, you don't want to be spending your valuable time and energy protecting what you have, you want to be creating new possibilities. Fortunately there are proven tools available to help with these tasks to free you up to do what you really need to do.

In a recent security study by DeWALT, it was found that the top three job site concerns were replacement cost, lost time, and decreased personnel productivity. Looking at theft alone, a pervasive problem within the construction industry today, it's estimated

by The National Insurance Crime Bureau that this industry loses \$1 billion annually from equipment and tool theft, increasing on average 20 percent annually. Statistics like this prove how important it is to provide the necessary tracking of your valuable inventory.

Used effectively in companies of all sizes and industries already, a leading tool, equipment and consumable management system will help manage your inventory and decrease problems without changing the general operation of your company.

Most of the systems operate like a library, where tools and equipment are signed out to employees or job sites. Then, when the work is completed the inventory is checked back into the library. Typically, when the workers know that the inventory is being tracked and they are accountable, they are less likely to remove or hoard it.

Inventories are usually broken down into three types of items: serialized, bulk and consumable. Serialized items are usually more valuable tools and equipment that you want to track on an individual basis. An example of a serialized item would be a pneumatic grinder or even a fork lift. Bulk items are less valuable items that you still want to track, but are not tracked on an individual basis. Hammers and wrenches

would be good examples of bulk items. Consumable inventory, like work gloves and bolts, is issued but generally does not get returned to the library. Of course, depending on your organizations size and structure, your company's definition of a serialized, bulk or consumable item may be different than another's. Make sure your system is flexible enough to handle all these inventory types.

## Effective Tool & Equipment solutions

### RFID Tracking

What makes tool and equipment tracking systems work efficiently is the use of bar code labels or RFID tags to mark the tools or bins of tools. Each serialized item would have its own unique bar code or RFID tag attached to it. Bulk and consumable items would generally have a bar code attached to the bin or shelf where the items are stored. Pre-printed labels can be purchased with your company name and numbering sequence or you can print your own using specialized bar code printers. When you purchase labels, either pre-printed or blank, ensure that they are designed for the tough environment that you work in. Generally pre-printed labels are more durable due to the way they are made.

RFID tags do not need to be seen to be read. This means you can mount the tag inside most serialized inventory where the risk of damaging the label during normal use or having them removed is greatly diminished. RFID readers can also read multiple tags at a time versus only one at a time for bar codes. There are two drawbacks to RFID tags; they are more expensive than bar code labels and they tend to have problems in a metal or liquid intensive environment. The latter issue can be mitigated by using special tags designed for metal or liquid intensive environment.

### Barcode Tracking

By using a bar code or RFID scanner, the issue of an item is as simple as scanning the bar code of the person or job site taking the tool, and then scanning the item itself. A return is done in the same manner.

There are basically three types of scanners. The least expensive of these is tethered directly to the PC running the tool tracking application. These units will essentially place the scanned bar code into the current field in the program. A mobile computer incorporating a built-in scanner is generally the best option available. These devices have programs on them that prompt you through the check out / return process. You can operate these devices wirelessly using the same technology as your WiFi laptop or via cellular communications for real-time transactions and data lookup. Alternately, you can operate them in "batch" mode where the information is verified and stored on the device until it is hooked up to the PC where the data is downloaded. The third scanner available is the kiosk. This device is similar to what you might see in a store where you scan a product's bar code to find its price. Some tracking systems use these devices to allow workers to sign out and return their own tools through easy-to-use on-screen prompts.



## Off-site Equipment Tracking

The core of these systems is issue and return, but look to the other capabilities to really help your company. How about multiple locations? In this scenario, one or more central warehouses store the inventory and then transfer the inventory to one or more jobs sites. The software maintains a count of items at each location. Once the inventory is received at the job site, the items can be checked out to and returned from the workers as required. During the project more inventories can be transferred from the warehouse to the job site and vice versa as required. Finally at the end of the project the items can be transferred back to the warehouse, or another job. Make sure the system you purchase meets your needs; some systems will allow you to transfer inventories to a job site but not check them out to workers after they get there.

## Purchasing Tools

If you have problems with stock-outs or tools and equipment not being available when required, you should ensure your system has the ability to replenish or purchase your inventory. Typically, the system allows you to set minimum and maximum inventory levels for each part at each location and when the level falls below the minimum, the system notifies you that you need to reorder. Some systems will even automate the process of generating a purchase order or purchase requisition based on these values.

## Maintenance Tracking

To maximize tool life and reduce job site injuries, proper maintenance and certification of your tools and equipment is important. A maintenance module allows you to define maintenance tasks. These tasks include a description of the work to be completed and a frequency with which these tasks must be completed. For example, you could create a task to certify a come-along once every six months to make sure it meets its rating. The tasks are assigned to the various items in your inventory and the system notifies you when the task is due. Many systems can also generate work orders for overdue maintenance tasks and effectively manage both internal and external maintenance. A running record is kept of all maintenance and the cost involved. Emergency repairs can also be tracked to ensure that a complete history of work on an item is maintained.

## Equipment Rental Tracking

A great way to provide cost-recovery for your tool room is to charge rent for tool usage. Depending on your requirements and the capabilities of your software, you can charge rent

whenever a tool is checked out of the tool room, or whenever you transfer tools from the warehouse to the job site. You can even charge out consumables usage to the job. Good systems will let you set rates for multiple time periods such as hourly, daily, weekly and monthly.

## Tool Room Security

Some applications provide tool room security by using access control devices to lock and unlock doors and record when a person enters and exits the tool room. In addition, many offer the ability to maintain employee certifications and licenses within their framework. Again, duplicate entry can be avoided by using one system. This integration also provides protection for you and your workers by preventing uncertified workers from checking-out specialized tools or equipment for which they are not trained.

## Reporting

Another crucial feature for your system should be its reporting capability. Make sure that the reports that you require are available or can be built using a built in report writer. You should have reports that cover issued tools, tool and consumable usage, inventory valuation, worker list, low inventory, service due, rental charges and many more. The built-in report writer should be easy to use and walk you through the process step-by-step.

Tool, equipment and consumable management systems are available in a number of formats. An on premise system is designed for companies who want to host the system on their own servers or local area network. Alternately, some systems are cloud-based where the software is hosted on the web and available through your Internet Explorer, Firefox or other browser. The on premise version requires the user to purchase a one-time license for the software, annual maintenance and support fees and provide the infrastructure such as servers, networking, etc. A cloud model, or also known as SaaS (software as a service), provides the software, the infrastructure to host the application and all maintenance and support fees for one monthly or annual fee.

## Return on Investment

Some smaller business owners think that only the big guns need a dedicated system to track their tools and equipment. Time for a reality check! The costs associated with misplaced and hoarded assets, are estimated to be equal to the amount lost due to shrinkage, and the net effect can greatly change the profitability of your company. No matter what size your company, you are likely being affected if you are not yet taking adequate measures to manage tools and equipment. With a payback of less than one year for most companies, now is the time to invest in a tool, equipment and consumable management system.

## About ToolHound

Since 1985, ToolHound systems have been deployed by companies of all sizes across a variety of industries, including construction, power generation, chemical processing, mining and job site tool and equipment services. Specializing in personalized technical support with on-site training and installation expertise, ToolHound offers a comprehensive portfolio of tool and equipment management solutions including Cloud hosting and customer controlled hosting, SecureCrib, ToolHound Mobile, wireless, RFID and bar code technology.

For more information about **ToolHound tool and equipment tracking**, call **(800) 387-8665**, or visit the company's website at **[www.ToolHound.com](http://www.ToolHound.com)**

