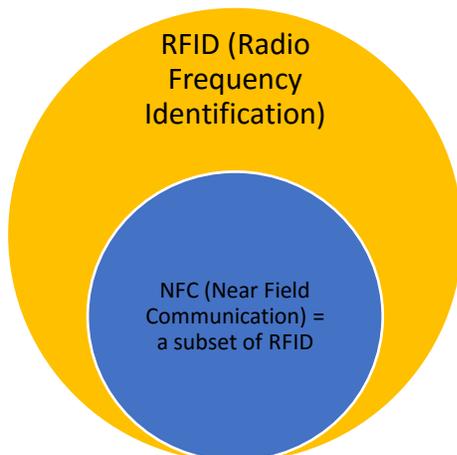


RFID (and NFC): What is it?

Executive Summary: RFID is defined and the differences between RFID and NFC are explained here. Also discussed is how they can help your company.

RFID defined. RFID stands for Radio Frequency Identification. It's a process. It is a process where items can be uniquely identified using radio waves. By taking a tag of some sort (i.e. a special label or an RFID dog tag) and attaching it to the item, the item can be identified via radio frequency. An active tag sends out a signal within a significant distance while a passive tag only works within a very small radius.

RFID signal radius. Active tags have a power source and, therefore, can transmit for hundreds of feet. Passive tags are powered only by the electromagnetic energy transmitted by the tag reader (in the case of asset labels or RFID dog tags, just the little metal coil inside the tag), and can transmit only within dozens of feet or mere centimeters.



NFC defined. NFC stands for Near Field Communication. It's the technology in your apartment FOB, your hotel key, and even in your smart phone. NFC is RFID; a subset of RFID.

How it can help your company. The most common use of RFID, and its subset technology called NFC, is for asset tracking.

RFID is use commonly during rental equipment check in and check out. A tool can have an RFID tag on it and when it leaves the yard it sends a signal to the office saying, "I'm leaving the yard!"; the same type of message gets sent when the asset returns to the yard: "I'm back in the yard!".

NFC tags are used in on-demand scanning applications such as equipment and tool tracking. A label (simply put, a sticker with a tiny wire coil in it) is put on anything from a hand tool to a large crawler crane and users can scan the label using their smart phone or other device. The scan of the asset can show nearly unlimited information, but most companies show location, date, and time at a minimum.

My Story. Runjob Software's product called Runasset, uses NFC technology in addition to QR codes (those square black and white barcodes you might see on products and advertising). Our clients like the simplicity of the technology, the ruggedness of the labels, and the ability to use labels in "dirty" applications (like concrete vibrators which historically are always covered in concrete). The concrete splatter can cover the label and, because the NFC labels work with an electromagnetic field, it signals right through the concrete splatter!

Come by Runasset.com and learn more about how our asset tracking can prevent headaches, keep your company organized, and save you thousands of dollars a year!

Scott Jennings, P.E., is the President of SJ Construction Consulting, LLC [SJCivil.com]; (808) 271-5150]. He recently owned and operated a heavy/civil construction company and now provides cost estimating, litigation support, and efficiency advice to contractors. He is the founder of Runjob Software, Inc. (RunjobSoftware.com).



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