

Recent M2M Project

Enginasion developed the internet integration for M2M communication with RFID Tags for remote monitoring of machine activity and maintenance.

Reed Machinery relied on Enginasion for imagination, creativity and an outside-the-box approach to problem solving.

PROJECT

Encapsulated Radio Frequency Identification (RFID) “tags” for remote monitoring

OVERVIEW

Reed Machinery Inc. in Worcester, MA. developed a Smart Machine Tool System that uses small, glass encapsulated radio frequency identification “tags” like the one in the picture to store and/or report on machine tool life.

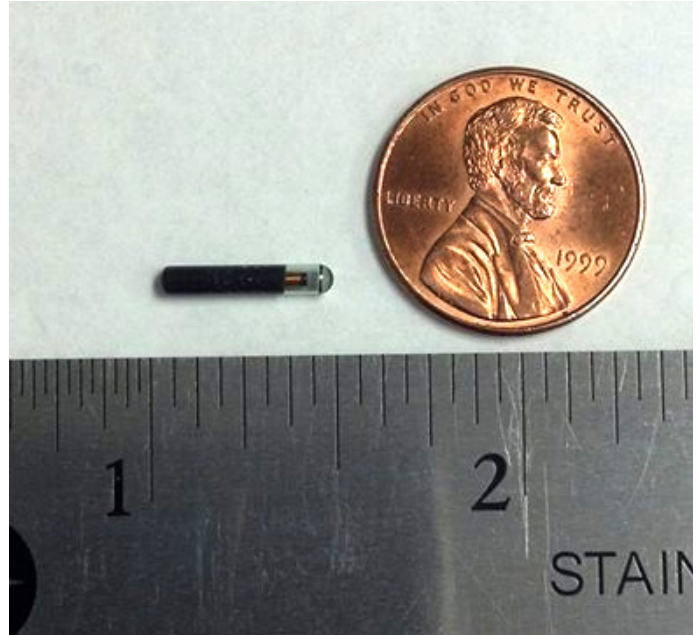
The special RFID tags are embedded in the steel tooling used in our thread rolling machines. In addition to containing the “ID” of the tooling the tags can be used more proactively.

When the tooling is put in a machine with the system activated, the machine sends a wireless signal to the tiny device in the tooling. The signal has enough radio frequency energy to “boot up” the device and start communication with the machine’s computer.

In use, the machine can tell the operator what tooling is installed and how much wear it has experienced. Like a tiny flash drive, data is stored on the tag.

Outside of the machine, the tooling can be interrogated with a small hand-held computer.

The invention is covered by patent number US6947800.



ENGINASION SOLUTION

Enginasion developed the reader/writer electronics, internet integration for remote monitoring as well as the RFID read/write antennas for the system.

A sci fi note: These tags can be sterilized and implanted under the skin!

Machine-to-Machine (M2M) Solutions

We have developed the platform that we use as part of our technology tools, combined with our experience, to solve complex M2M problems. We can take your instrument and make it M2M or we can develop an instrument with M2M in it.

**ENGINASION**
Engineers with Imagination

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