Can I Get A Witness?

Our thanks to Sturtevant Richmont for allowing us to reprint the following article.

Safety is of paramount importance when it comes to anything associated with aircraft. The concern for risk mitigation has resulted in a remarkable aircraft safety record.

The witness program was created to help mitigate risk and ensure accuracy in fastening for aircraft. Think about why that program was put in place. The witness program was created because people have variable performance. They all have good days. They all have bad days. Even on a good day they can have bad moments. Unfortunately it only takes one fastener improperly tightened to create a problem.

The solution was simple: put 2 people on the task, one to execute the task and one to verify that the task was properly executed. At that point you have mitigated risk and improved safety.

Even with the witness system and everyone's best efforts, things still happen. If there were a way to improve upon the witness system, what would it be?

Let's go back to the basis for the witness program to find that answer. The witness program was created because people and their performance are variable. The goal is to eliminate variability. Having a witness is one way to eliminate variability. What might be another way?

What if the worker is equipped with an RF torque wrench that connects with an automated torque controller that pulls down job specifications and then sends those specifications to the wrench? The wrench identifies the job at hand, dictates the parameters, and then provides feedback to the user ensuring the work was done properly.

The wrench then gathers all the work data, sends it to the controller, and the controller in turn sends it to the manufacturing system via Ethernet. If a bolt was missed, the system will not let the worker proceed to the next task is until the current task is completed properly.

With both audio and visual feedback, the worker knows exactly how they are doing.

All work data is captured and documented. All the data is readable. There are no questions as to if a handwritten digit is an 8 or a 6.

With the Wireless RF torque wrench system, when the time comes for an audit, everything is organized, legible, and ready to go at moment's notice. What could be easier? What could be more accurate?

Management can rest assured that the work was done properly, and completely. Auditors can rest assured that the work logs are accurate, complete, and legible.

Would using such a torque system improve the quality of the work? It would certainly be more effective in eliminating variables. Would using a torque controller system mitigate the need for a witness? It certainly does the job as effectively, if not more so.

If that witness wasn't tied up in documenting someone's work, what could that person be doing to add value elsewhere? What does that witness cost over the course of a year? What if the witness calls in sick, goes on vacation, or is otherwise absent? The wrench or controller are not vacationing types. These intelligent tools are intuitive, accurate, and reliable.

This almost sounds like the future doesn't it? It isn't. A few years ago when industry bloggers were talking about wireless digital wrenches as the next step in torque, Sturtevant Richmont was launching the Global 8 Torque Management System and the Exacta Wireless Wrench series.

Equipped with a robust 2.4 GHz transceiver and Ethernet capabilities; the system is extremely versatile. Both Torque Controller and wrenches are built by the same company that builds torque tools for NASA, the international space station, and use anywhere that tool failure is not an option. That company is Sturtevant Richmont.

Sturtevant Richmont has a long history of innovation in the torque world. Sturtevant was part of the first torque wrench, the first torque tester, and many of the features that are the basis for the torque world today. Sturtevant

history goes back to the very root of the torque tool industry.

Although Sturtevant was the first torque tool company, our focus has never been to be the biggest. We have only sought to be the company that creates the most reliable, durable, and accurate tools for industry. Our patents over the years show the real innovation that was started when our company was started. We carry on the values and the traditions and the quest to produce the highest quality tools.

Sturtevant Richmont®

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