

**PROFILE**

**NAME:** Acutec Precision  
Aerospace

**LOCATION:** Meadville, PA

**FOUNDED:** 1978

**WEBSITE:**  
acutecprecision.com

**CHALLENGE**

Support a high-volume document management operation in the demanding aerospace market, to assure 100 percent traceability for raw materials and assembly, while controlling costs, dramatically reducing downtime and achieving a reliable paperless documentation process.

**SOLUTION**

The Epson® WorkForce® DS-860 delivers the TWAIN drivers Acutec needs to work with existing document management systems at an affordable price point.

## Maximum Precision

### Epson scanners help aerospace company meet demanding documentation requirements

#### The Aerospace Industry Demands Precision

Manufacturers must document every element of parts produced in order to substantiate the quality of raw materials purchased, the tolerances met and the steps taken to ensure the highest quality level has been attained. “The industry requires 100 percent traceability,” explains Greg Dederick, IT Manager for Acutec Precision Aerospace of Meadville, Pa. Depending on the part or assembly, the documentation produced can run to 100 or even 1,000 pages.

Assembling this amount of documentation can be a challenge when working to get a shipment out on time, he adds. In response, the company has mounted a massive initiative to streamline the documentation process and take it paperless. Scanners have become crucially important to this initiative since they offer a practical way to input the thousands of printed pages Acutec receives every day into their document management system.

Until last year, the company was using scanners from a market leader in document scanners but began running into trouble. Costs were high and downtime was a problem, according to Acutec.



“Now that we’ve switched to Epson, we’ve seen much higher quality and faster scans, and our documentation department’s productivity has increased as a result,” said Dederick. “Our IT department spends less time supporting these scanners, and when a new Epson is installed, it is ‘plug and play’ with our software.”

“Although we have not had a service issue, Epson offers next-day replacement as part of their warranty, virtually eliminating downtime.”

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PRECISION AEROSPACE

## Aircraft Parts and Paperwork

For more than 30 years, Acutec has manufactured precision parts for aircraft engines, rotors, and other systems, including hydraulics, avionics, actuation, landing gear, and braking. Its plants in Meadville, Pa., Saegertown, Pa. and St. Stephen, S.C. are models of precision manufacturing, with computer-guided milling, turning, honing, grinding, EDM (electronic discharge machining), and finishing able to create parts to tolerances of one ten-thousandth of an inch or finer.

Yet in aerospace, simply building the parts is not enough. Acutec must document each so that buyers and inspectors can be certain that the parts meet the required specifications.

“The first step in creating our verification packages is to document the raw materials used,” Dederick explains. “Our suppliers send paperwork listing the type of material and certify its hardness, value and the exact alloy or mixture of metals. Next, the quality of the materials is verified using tools such as Niton Analyzers to test the composition of the metals, and that process generates documentation as well. We will start to machine the materials to create the part, and may send it out for heat treating, plating, or some other type of coating that isn’t done in-house. There is documentation with every step of the process, and additional reports are generated when another group conducts quality control testing.”

In many cases, the parts roll up into a larger assembly, such as an aircraft braking or landing gear system. In these cases, Acutec must certify the individual parts as well as the assembly, and the verification package can get lengthy. “How it goes out depends on the customer,” Dederick says. “Some require a printed copy. Others have access to our document management system and can create an electronic copy of their shipment.”

To track all of this material, Acutec stores the information in their document management system. “We store everything in pdf form, together with identifying information for each document,” he explains. The inspection process produces a large volume of images and charts, so pdf is an ideal format for this material.

While the documentation department is a heavy user of scanners, he reports that Acutec uses scanners in finance, receiving, quality control, human resources, and manufacturing as well. Altogether, the two Pennsylvania plants, which are under Dederick’s IT management, have 15 scanners, including four Epson WorkForce DS-860 color document scanners and 11 older models from the previous manufacturer.



## Making the Change

Once Dederick started looking at a change in scanner companies, he reached out to Brent Gaidosh of Hagan Business Machines for his advice. “We lease all of our copiers and scanners from Hagan, and they have been great for us,” he explains. Gaidosh suggested that Epson had a number of advantages.

First, every Epson scanner includes the TWAIN drivers Acutec needs to interface with their existing document management system, and every Epson either has built-in network connectivity or can add it with a low-cost accessory. That’s important at Acutec because the scanners on the production floor are not connected to local computers.

The other option has TWAIN and networking as well, but only on their high-end models. As a result, Dederick notes he buys the WorkForce DS-860 “at considerably less than half the cost for the same capabilities.”

In addition, Dederick has Hagan handle the installations because he found that the roller and pad assemblies for the other scanner cost substantially more than Epson, need to be replaced more often and can be more difficult to replace. Between the cost of the parts and labor, he says he is saving an extremely significant amount on maintenance by switching to Epson.

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The biggest savings, however, are in downtime. “Epson scanners come with a three-year warranty which is significantly greater than competitive scanners,” he explains. If a scanner goes down for a warrantable issue, Epson ships a replacement next-day air, whereas with the other scanners, Hagan technicians have to come out to perform the repair. “Hagan does a terrific job, but they can’t stock every part, and so sometimes we have to wait it out while the part comes in.” As a result, Dederick has had to keep an extra scanner on hand to swap out if one goes down. With Epson, there’s no need to do that.

For all of those reasons, he is now replacing his older units with Epson scanners whenever he needs to buy a roller kit. “With the amount we’ve saved on kit replacements, we can get a brand-new Epson with a little more money invested.”

The scanner users are pleased as well, particularly in the documentation department. “They are most impressed with how much faster the Epson scanners scan,” Dederick says. “Given the volume of scanning they do, that’s a big win for them.”



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