

## Invention Machine Streamlines Manufacturing Process for Major Aerospace & Defense Company

Business has been booming for this US Defense Contractor. In fact, the company was winning business at such a healthy rate, that the aerospace and defense manufacturer could not keep up with the demand - requiring a rate of delivery in excess of current capacity. What's more, antiquated manufacturing systems and processes, developed over 20 years ago, were put into place when the company's operations were largely all performed by operators.

The result: cycle times to manufacture the electronic system were in excess of 80 hours, per unit - and the company could not keep up with customer demand.



To improve its fulfillment capabilities, the company decided to move forward with an investment in a new manufacturing system costing hundreds of thousands of dollars, ongoing additional labor to support an extra production line, and maintenance costs - all of which would considerably erode the profit margin for the product line. However, upon engaging Invention Machine and utilizing the Goldfire™ solution, the company was able to identify areas for possible process improvement.

Using Goldfire, the company's engineers "functionally analyzed" their existing manufacturing process for the delivery of the units in question. Through the development of the function model, it was discovered that many of the operations originally being performed by operators were, in fact, now being performed by computers. However, even with the addition of computerized operations, the actual manufacturing process was being performed in a serial manner - and therefore failing to take advantage of the computers' ability to perform multiple tasks simultaneously.

Using Goldfire's optimization capabilities, the company was able to identify an eight-hour reduction in cycle time - per part. These new efficiencies eliminated the need for a costly capital investment in a new manufacturing system.

What's more, the resulting, more efficient processes provides the company with additional production cost savings and increased capacity to deliver products to market in a timely manner - making the aerospace and defense contractor more profitable and more competitive.

### About Invention Machine

Invention Machine is the leading provider of enterprise Innovation Process software and services to the Global 2000. Invention Machine solutions enable organizations to increase their product pipeline through proven automation and development methods and disciplines, while cutting costs through process efficiencies impacting the entire product lifecycle process.

Serving a broad range of R&D rich industries, Invention Machine has over 1000 clients worldwide including Shell, Northrop Grumman, Delphi, Saipem, NASA, Procter&Gamble, DaimlerChrysler, Honda, Samsung, Boeing, and Roche. Headquartered in Boston, Massachusetts, Invention Machine has development facilities in Minsk, Belarus, and offices in France, Italy, and the United Kingdom. [www.invention-machine.com](http://www.invention-machine.com)