

MAG technology used for F-35 Joint Strike Fighter

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A new, faster titanium metal cutting technology brought to market by MAG IAS, the Erlanger-based machine tool company, has been approved for use in the U.S. government's most expensive weapons program, the Lockheed Martin F-35 Joint Strike Fighter.

The technology, which uses liquid nitrogen flowing through the metal-cutting tool spindle, increases cutting tool life dramatically and doubles the material removal rate in some applications, officials said.

The technology known as low-flow cryogenic titanium machining could lower the cost and improve the efficiency of producing the next-generation F-35 fighter. The Pentagon is projected to spend more than \$380 billion to buy more than 2,400 of the multi-role fighters over a period of years.

"This is one of the greatest breakthroughs in the history of metalworking," said Michael Judge, vice president of cryogenic business development at MAG.

The cryogenic titanium machining process has been developed over a number of years by a team including Creare Inc. in New Hampshire, H.M. Dunn Co. in Texas, MAG, Lockheed Martin, the Navy's Small Business Innovation Research office and the F-35 Joint Program Office.

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