

Aerospace Fabrications of Georgia

“Because of our Mastercam®-driven 5-axis capabilities and our high-quality/on-time record, Boeing asked us to bid for the window project.”

— Adam Grizzle, President
Aerospace Fabrications of Georgia
Dallas, GA

5-Axis Power Drives Boeing Supplier Higher

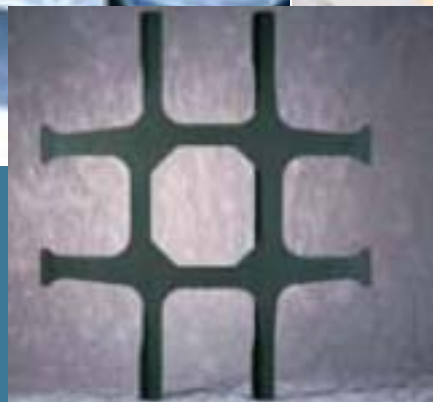
A Window on a Productive Future

In July of 2001 AFG became a Bronze Level Certified Supplier to the Boeing Corporation -- among the top 700 of more than 16,000 Boeing suppliers worldwide. Of the hundreds of Boeing part numbers AFG has produced, among the most complex is an aluminum window frame for the Air Force's C17 Globemaster III transport. Mastercam 5-axis toolpathing was a must; the frame -- surfaces, undercuts, attachment points and rivet holes -- conforms to the C17's fore-to-aft curve and its asymmetrical cross-section.

AFG easily takes customers' Mastercam files, but Boeing sent a blueprint for the window. AFG president Adam Grizzle painstakingly created a wireframe model from the print, trimmed the surfaces back to profile, projected the outside surface onto the wireframe and trimmed to it. In the end, rough cutting the entire part required 105 toolpaths, most of them in 5-axis, and most of them resulting in quality satisfactory to spec for finish surfaces.

Boeing's CAD model of the part was sent to AFG three months after the first production piece was shipped. The changes to AFG's wireframe tightened up tolerances just a bit, but AFG designers and programmers still brag about how they and Mastercam met Boeing's tolerances after only one trial run without a customer-supplied CAD file.

Mastercam is the major tool of AFG's business growth and innovation. “The level of drive between (Director of Technical Services) Jim Kelly and me sometimes crackles,” says Mr. Grizzle. “It's Mastercam that converts our dreams into practical reality. The program has kept pace with us every step along the way and neither AFG nor Mastercam shows any sign of slowing down.”



Mastercam®