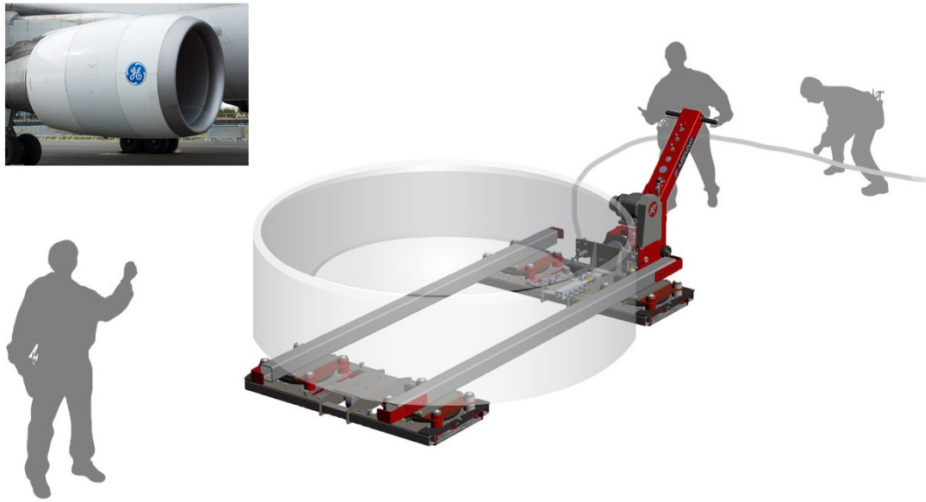


Jet Engine Manufacturing



Situation

GE Aviation manufactures advanced carbon fiber components for its new GENx jet engine at its Batesville, Miss., factory. Workers there routinely move bulky parts containers and tooling fixtures weighing up to 12,000 lbs. around the 300,000-sq.-foot facility. Management was looking for a way of moving and positioning fixtures that did not involve traditional wheeled carts and ride-on tuggers, which are difficult to maneuver in confined spaces and take a toll on concrete floors.

Solution

GE partnered with Airfloat to create a custom air-bearing platform that literally “floats” the fixtures on a film of compressed air. The system is comprised of four Lift Glide air skids, an adjustable frame and a pneumatic Power Tugger.

First, workers adjust the width of the Airfloat platform to accommodate the load they’d like to move. Then, using the steerable tugger, the operator slides the platform beneath the fixture or container. The Lift Glides’ air springs are deployed, lifting the load off the ground. Then the air to the air bearings (or “air casters”) is turned on. Now the load is floating virtually friction free and ready to be moved to the desired location using the pneumatic tugger.

Result

GE Aviation now moves and positions bulky loads 85% faster than before, with fewer workers, while preventing wear and tear on its floors. Moves that once took approximately 45 minutes are now accomplished in five minutes or less.

Safety has been improved as well. Loads are easily maneuvered around sensitive electrical cabinets and building columns, a feat far harder to accomplish with wheeled carts and ride-on tuggers.

Further evidence of success: GE, after testing the Airfloat system for three months, liked it so much they promptly ordered two more.