

Case Study



ANSYS[®]

+ Mohyi Labs

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John Mohyi

Mohyi Labs CEO and Bladeless Drone Inventor

Before ANSYS, design optimization required a considerable degree of detective work.

When Mohyi Labs set out to do the impossible, ANSYS recognized a worthy challenge.

Mohyi Labs set out to make a Bladeless Drone and in the process pioneered Ducted Counter-Vortex Radial Impeller Propulsion technology. Recognizing a diamond in the rough, ANSYS, through its startup accelerator program, provided Mohyi Labs with both the tools and technical support to unlock the power of the worlds most advanced simulation tools.

According to Mohyi Labs CEO and Bladeless Drone Inventor John Mohyi, “ANSYS simulation tools have pushed Mohyi Labs Bladeless Drone development to new heights. Using the CFX turbomachinery module, for the first time we have been able to directly observe and measure how well our counter-vortex geometry influences the airflow. ANSYS has eliminated the guesswork in our design iteration process.”

Before ANSYS, design optimization required a considerable degree of detective work. Mohyi heavily relied on indirect methods to deduce the characteristics of the invisible forces at work. Though successful in the early stages, this approach was time consuming and significantly multiplied difficulty level and development costs. To achieve the level of precision engineering required, Mohyi recognized early on that advanced physics simulations would be required. It wasn't until ANSYS invited Mohyi Labs to join their startup accelerator program that these advanced physics simulations, which until recently were exclusive to large corporations, academic, and military users, were finally in reach.

Thanks to the ANSYS startup accelerator program, Mohyi Labs now has more freedom to experiment and can run through multiple design iterations in a fraction of the time and effort it took to print and assemble a single prototype.

