

Vitrek Breakthrough: Time-Saving MTI “Trim Balance Wizard” Now Available for Mid-Frame Jet Engine MROs

Innovative Trim Balance Wizard Enables Fast Turbine Balancing by Novice Technicians.



Lockport, IL—November 5, 2025 — Vitrek, LLC, a maker of high-precision measurement equipment, has integrated the MTI Trim Balance Wizard, an advanced guided-balancing interface into its PBS eXpress turbine vibration and balancing system for smaller frame jet engines. The Trim Balance Wizard functionality was previously only available to large jet makers and MROs as part of the standard PBS product line.

Now incorporated into the PBS eXpress this same labor-saving technology is available for regional and business jet MRO's.

Pre-programmed with parameters for most common business jet engines, the Trim Balance Wizard automates data collection, phase analysis, and correction computations. The net result is a 50% improvement in overall balancing time and improved usability across technician skill levels.

“Our goal was to merge precision metrology with intuitive automation,” said Ken Ameika, VP Global Sales of Vitrek. “The Trim Balance Wizard embeds decades of field-proven balancing expertise into software logic that calculates, validates, and verifies each correction in real time—bringing consistent, high-quality results to any maintenance team.”

Key technical capabilities:

- Automated vibration acquisition and FFT-based phase analysis
- Dynamic trim weight computation with closed-loop verification
- Real-time residual vibration feedback and correction tracking
- Graphical interface with precise weight placement visualization

Backed by the PBS platform's track record of over 100,000 successful balancing operations, the system supports both single- and dual-plane balancing across turbine models from Honeywell, GE, Williams, Pratt & Whitney Canada, and Rolls-Royce—providing MROs, military depots, and industrial operators with a portable, high-accuracy solution for vibration diagnostics and correction.

About Vitrek, LLC and the MTI Instruments Line of Engine Balancing Products

Vitrek, LLC makes and sells a variety of precision tools under the MTI Instruments brand. The MTI Instruments PBS line of products has set the performance bar for both portable and rack-mount turbine engine balancing worldwide. The MTI Instruments line semiconductor wafer measurement products offer best-in-class precision and value.

The Vitrek product portfolio also includes the popular Vitrek high-voltage test and safety compliance testers as well as GaGe brand of high-speed digitizer cards.

The Vitrek company headquarters is located in Lockport, Illinois. All of its products are designed and built in the United States.