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**AEROSPACE ULTRA-PRECISION
METROLOGY INSTRUMENT
SUPPLIER OF THE YEAR
2025**

Pratt & Whitney Measurement Systems

Shapes Aerospace Industry through Innovation and Trust



Daniel Tycz,
Product Manager

For more than 165 years, Pratt & Whitney has been a trusted name in metrology, creating instruments that help industries measure and manufacture with astonishing precision.

From aerospace and defense to automotive and medical fields, the company's ultra-precision instruments have become the backbone of quality control in over 100 industries worldwide. What sets Pratt & Whitney apart is not just the sophistication of its technology but also the philosophy driving its work: a deep commitment to solving customer challenges and simplifying advanced measurement.

"We operate to meet the needs of our customers," says Daniel Tycz, Product Manager at Pratt & Whitney Measurement Systems. "Our instruments are designed to achieve the greatest accuracy possible while being easy to use by anyone."

The company's clarity of purpose means it anticipates market demands, continually refining its products and services to keep pace with even the most demanding applications.

Collaboration Is the Key to Success

At Pratt & Whitney, the customer is always at the center of the story. Every product begins as a response to a specific need, often involving unique challenges that demand creative solutions.

Take, for example, the case of a client who needed to measure steel rules and tape measures accurately. Standard tools fell short, so Pratt & Whitney's engineers designed custom clamps to secure the rules perfectly and paired them with a digital microscope, enabling users to align the measurement probe with pinpoint precision. What began as a tailored solution for one company has become a widely used accessory, helping many others achieve the same level of precision.

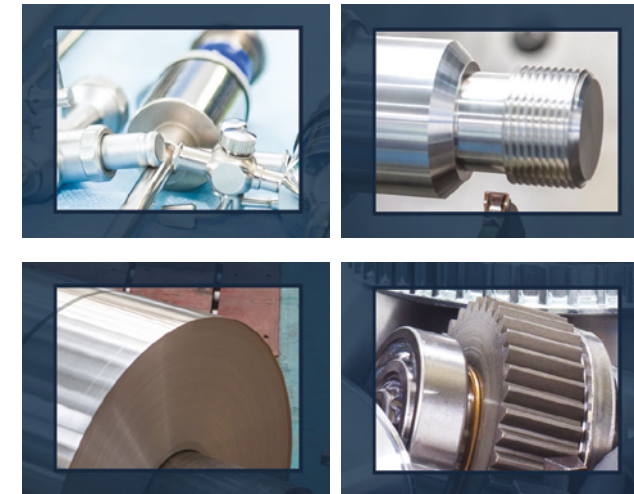
This collaborative approach extends beyond the tools themselves. In one instance, a global client purchased Pratt & Whitney's advanced measurement systems for multiple locations. Instead of sending trainers to each site, Pratt & Whitney invited the customer's team to their headquarters for hands-on sessions. Over two waves of training, dozens of employees not only learned to operate the instruments but also gained deeper insights into metrology principles. Weeks later, others from the same company sought advanced guidance, turning a training session into an ongoing partnership that enriched their understanding and use of the tools.

A Legacy of Trust and Quality

What makes Pratt & Whitney a global leader is its reputation for reliability. The company's instruments are renowned for delivering the highest resolution and repeatability in the industry, with installations spanning the globe—including U.S. military facilities in Europe and Asia.

"Our instruments are the best—not just because they're technically advanced, but because they're designed with the user in mind," says Tycz.

This technical expertise is backed by an unwavering commitment to quality. Pratt & Whitney's operations meet the stringent requirements of ISO/IEC 17025:2017. From routine inspections by the American Association for Laboratory Accreditation (A2LA) to regular intra-laboratory proficiency tests, every detail is scrutinized to ensure precision.



Solutions That Evolve with Customers

Innovation at Pratt & Whitney isn't confined to the lab—it's a dynamic, ongoing dialogue with customers. As industries evolve, so do their measurement needs, and Pratt & Whitney excels at keeping pace.

One striking example is the company's work with customers measuring long-length artifacts, such as those used in aerospace. Its LabMaster Universal Model 175, with a 7-inch direct measurement range, was already an industry favorite. As demand grew for longer measurements, the company introduced two new models with ranges of up to 40 inches. For even greater lengths, Pratt & Whitney developed probes and supports that extend the capacity to a staggering 120 inches.

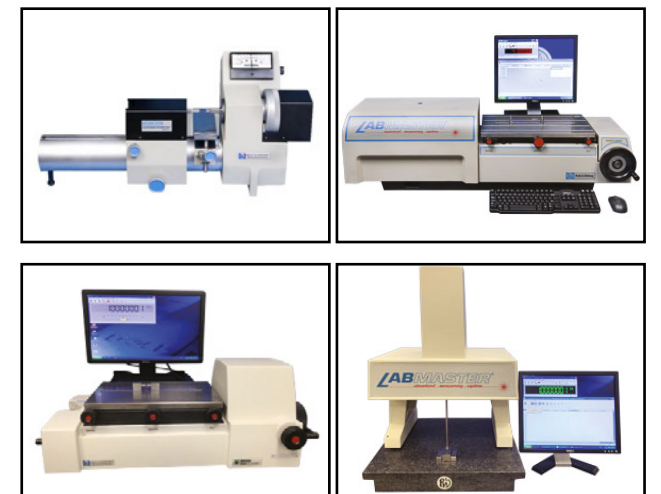
Temperature variations, which can distort long measurements, posed another challenge. Pratt & Whitney responded with an environmental data logger that monitors factors like air temperature, barometric pressure, and humidity. By accounting for these variables, users can achieve unparalleled accuracy, even in less-than-ideal conditions.

Precision Built on Experience

What makes Pratt & Whitney exceptional is its ability to solve problems and the depth of experience it brings to every interaction. With over a century and a half of history, the company has amassed a wealth of knowledge about metrology across diverse industries. Its instruments have evolved alongside customers, becoming more capable and versatile with each passing decade.

“We operate to meet the needs of our customers. Our instruments are designed to achieve the greatest accuracy possible while being easy to use by anyone”

For instance, when a customer needed to measure thousands of small spheres daily, Pratt & Whitney designed a “corner cube anvil” to securely hold spheres as small as 0.020 inches in place. What might have been a tedious, error-prone process became efficient and reliable. This ability to turn complex measurement problems into simple, elegant solutions is a hallmark of the company's work.



For Pratt & Whitney, precision isn't just a technical achievement—it's a promise to customers, built on decades of trust and a relentless pursuit of excellence. With every innovation, the company continues to honor that promise, shaping the future of measurement one solution at a time. **AD**