

MANUFACTURING YOU CAN COUNT ON

Quality and compliance are of the utmost importance at Fidelity and are part of every stage of our project workflow. We leave no room for error or deviation, and take great pride in delivering with confidence.

CERTIFICATIONS

Fidelity utilizes state-of-the-art equipment, and follows comprehensive procedures to meet or exceed all of our certification and customer requirements. We are proud to hold the following certifications and meet the regulatory compliance programs listed below:



The AS9100 certification is a quality management standard specifically designed for aerospace organizations, emphasizing rigorous quality control, risk management, and continuous improvement.

Achieving AS9100 certification requires ongoing commitment to meeting and exceeding stringent aerospace industry standards, ensuring the production of reliable, high-quality components. This certification covers various aspects such as production, installation, and servicing, fostering a comprehensive approach to quality management.



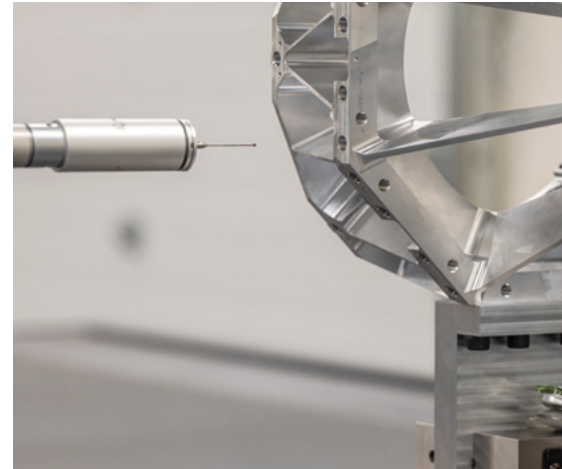
The Controlled Goods Program (CGP) is a compulsory registration and compliance initiative mandated by the Canadian government.

This program oversees the inspection, possession, and transfer of controlled goods, and encompasses items subject to the United States International Traffic in Arms Regulations (ITAR). Participants in the program have the authority to examine, possess, and transfer controlled goods and/or technology within Canada. These controlled goods are classified under the Canadian Defence Production Act as having military or national security importance, with the term "goods" encompassing components and technology irrespective of their place of manufacture.



The International Traffic in Arms Regulations (ITAR) are a set of United States government regulations that control the export and import of defense-related articles and services on the United States Munitions List.

This program is administered and enforced by the Directorate of Defense Trade Controls (DDTC) within the U.S. Department of State, and aims to safeguard national security interests through stringent compliance measures and licensing procedures. Once ITAR controlled technology or products are transferred to — or manufactured in — Canada, they become governed by the Controlled Goods Program (CGP) and must be safeguarded from unauthorized transfer, possession, or examination.



CERTIFICATIONS CONT.



The Export Administration Regulations (EAR) constitute a collection of U.S. government guidelines, governing export restrictions on sensitive goods and technology.

Administered and enforced by the Bureau of Industry and Security (BIS) within the United States Department of Commerce, this program regulates the transfer and manufacturing of EAR-controlled technology or products in Canada. Although not subject to the Controlled Goods Program (CGP), these items must be safeguarded similarly, aligning with U.S. regulations to prevent unauthorized disclosure.



The ISO 9001:2015 certification is the globally recognized standard for quality management systems (QMS) across all aspects of operations.

ISO 9001:2015 provides a comprehensive framework for delivering products or services that meet customer expectations while adhering to relevant statutory and regulatory requirements. The certification process involves a rigorous assessment of an organization's QMS by an accredited third-party certification body.

MANUFACTURING FOR HIGH-RELIABILITY

Beyond our certifications, we have extensive experience working with customers that require **manufacturing of high-reliability components** for aerospace projects. These additional measures include:

- Enhanced requirements for materials and special processes.
- “Cradle to Grave” traceability of material sources, from the mill all the way to Fidelity.
- Use of NADCAP-certified special process vendors when required.
- Enhanced QA/QC checks and procedures.
- Adhering to the stringent cleanliness and contamination control standards (FOD Control) required for space technology.

ADAPTABILITY & CUSTOMIZATION

Fidelity's dedicated quality management department enables us to tailor a quality program to match the unique requirements of our clients.

QUALITY CONTROL PROCEDURES

Quality and compliance procedures are ingrained in every aspect of our operations and are of the utmost importance at Fidelity. These procedures include:

REQUIREMENT VERIFICATION

- Verification of drawing details to create a custom inspection plan for each part/assembly.
- Confirmation of AQL inspection requirements for product acceptance.
- Material requirement verification and testing.

IN-PROCESS INSPECTION

- First Article and First Piece inspections conducted as needed to ensure any potential issues are found as early as possible and to mitigate risk.
- Machine tool probing for efficient measurement during the machining process.
- Continuous feedback quality control monitoring.
- Multiple CMM machines for fast and accurate GD&T verification during the machining process.

FINAL INSPECTION

- Comprehensive inspection reports.
- Measurement accuracy to 1.7 microns on CMM machines.
- Facilitation of source inspections.
- Calibrated measurement tools used for product acceptance and traceable back to NIST standards.
- Product release cannot occur until a QA manager has inspected and approved that the scope of work is complete, and fully meets the customer's standards.

TRACEABILITY

- Comprehensive traceability system, from purchasing to final inspection.
- High reliability (Hi-Rel) traceability practices.
- Complete QA document package to prove traceability and requirements are met.

SITE SECURITY & CYBERSECURITY

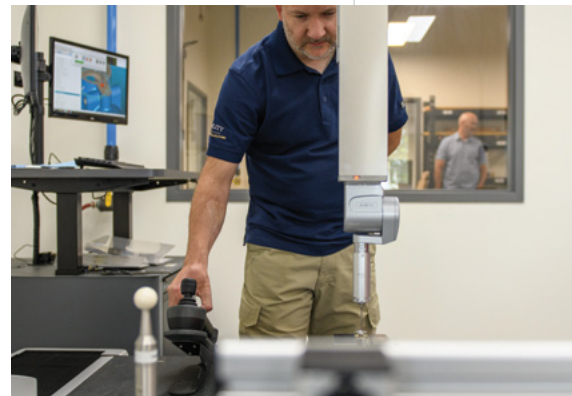
- Stringent site security.
- Site access control procedures – governed by Controlled Goods.
- Compliance with US Federal NIST SP 800-171 cybersecurity standards.

CERTIFIED SUPPLIER NETWORK

- We have a stringent vetting process for new vendors, followed by continuous vendor performance tracking.
- We use NADCAP-certified vendors as required.

CONTINUOUS IMPROVEMENT

- A trained and dedicated team regularly performs process audits to ensure conformity to all internal and external requirements.
- Employees are enabled by Fidelity's core values to ensure a customer-focused, quality-centric manufacturing framework.
- Fidelity's CAR (Corrective Action Request) system is designed to engage all employees to make contributions to continuous improvement and quality through opportunities for improvement, corrective, and preventative actions.



ABOUT OUR QUALITY TEAM

Fidelity's quality control procedures are managed by a dedicated quality control department, allowing us to handle comprehensive quality programs and high-volume projects. Our quality team is comprised of:

QA MANAGEMENT

Provides final inspection, and is dedicated to ensuring compliance with the AS9100 Quality Management System and other standards.

QA TECHNICIANS

Conduct inspections and CMM measurements.
Maintain Stringent Tool Calibration

QA AUDITORS & INSPECTORS

Continually validate and verify that in-process manufacturing controls are adequate.

Quality department staff regularly undergo advanced training to enhance their skills and ensure compliance with the latest regulations.

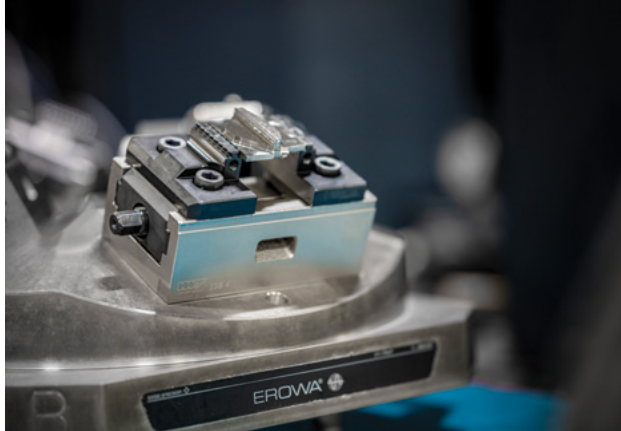
MACHINES & TECHNOLOGY

Our manufacturing facility features a dedicated quality control area governed by an additional layer of site access control. The quality department features:

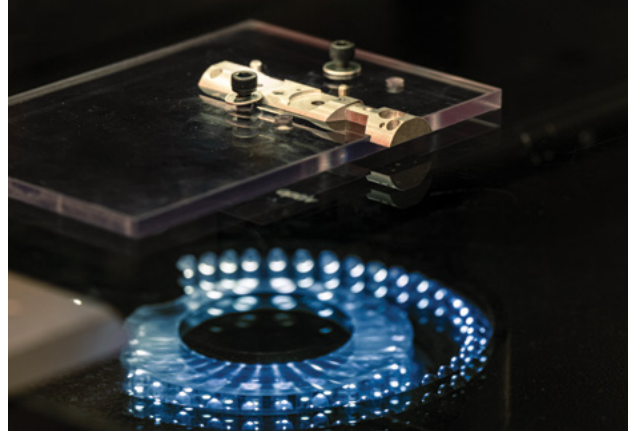
EQUIPMENT	CAPABILITIES AND MAXIMUM SIZE ENVELOPE
Hexagon Global S CMM	X:1200mm, Y: 2200mm, Z: 1000mm
Hexagon Global Performance CMM	X: 900mm, Y: 1200mm, Z: 800mm
Hexagon Optiv Performance 443 Dual Z Vision+ Multisensor CMM	X: 400mm, Y: 400mm, Z: 300mm
Creaform Handyscan Laser Scanner	Accuracy: 0.025 mm (0.0009 in) Part size range: 0.05 – 4 m (0.15 –13 ft)

All our CMM machines are calibrated yearly at a minimum to ISO 10360 standard of accuracy. We utilize Hexagon PC-DMIS CAD ++, and all software is continuously updated to the latest versions to ensure accuracy.

OUR QUALITY DEPARTMENT HAS BEEN DESIGNED TO INTEGRATE SEAMLESSLY INTO OUR MACHINE AND MANUFACTURING WORKFLOW. THIS INCLUDES:



A custom pallet system which allows our CMM machines to be cross-functional with our 5-axis mills, and allows for detailed in-process validation of complex milled parts.



In-process 3D laser scanning of oddly shaped parts to quickly verify geometry requirements before completion.



Fidelity maintains L3Harris's highest Diamond quality rating, which is based on a combination of on-time delivery and maintaining high-quality standards.