Quality propells a Canadian aerospace company to a prominent and successful global position

“Our quality management system is an essential part of our business and is absolutely critical to our success. We have a great working relationship with BSI Canada and the internal audits provide us with great input so that we are continually improving, which enhances the quality of our products.”

Dr. Iain Christie
President, Neptec Design Group Ltd.

Customer needs
- ISO 9001 certification was a customer requirement
- Ability to demonstrate a commitment to continual improvement
- A structured framework for quality process is fundamental and crucial for aerospace

Customer benefits
- ISO 9001 certification provided visibility of a quality management system (QMS) to major customer, NASA
- Strong QMS required for continual improvement in internal processes
- Provided competitive advantage
- QMS proved to be a big differentiator for a smaller company

...making excellence a habit.”
Customer Background:

Neptec Design Group Ltd. is a privately owned Canadian company, headquartered in Ottawa, Ontario, with an office, NeptecUSA, in Houston, Texas. Neptec specializes in the design, development, implementation and operation of intelligent 3D machine vision systems and is comfortable and experienced in working in high quality, mission critical environments.

Neptec has been a NASA prime contractor since 1995 and in that capacity, has achieved multiple awards and the highest possible annual contractor performance rating four years in a row (2007 to 2010). Neptec has delivered space-certified flight machine vision systems on three different NASA programs and has supported over 40 Space Shuttle missions with more than 30,000 hours logged in Mission Control.

Neptec develops technologies for space, defence and industry and maintains complete R&D, engineering design, and management capabilities. The company employs 94 people in Ottawa and another 6 in Houston with an annual revenue of $20 million CDN. Neptec’s target market is government agencies or large prime contractors.

Neptec core values are aligned with the solutions provided to its customers. These include:
- Accuracy, completeness and attention to detail
- Innovation, creativity, and patience
- Diligence, transparency, honesty, and integrity

Implementation:

Quality control and accuracy is critical in the aerospace industry so an effective QMS is vital to the success of any organization. Customers demand first-rate quality and continual improvement.

The National Aeronautics and Space Administration (NASA) is the agency of the US government that is responsible for the nation’s civilian space program and for aeronautics and aerospace research. As prime contractors to NASA, Neptec was required to have an effective, productive, and fully transparent QMS in place. Neptec selected ISO 9001, which is an internationally utilized and recognized quality management system.
Neptec’s approach to quality has evolved over a number of years and there has been full commitment to the system, from senior management through to the entire team. Internal audits have ensured traceability for everything company does, so that any non-conformities or inconsistencies can be uncovered and corrected through root-cause analysis. Having a quality system in place is a big differentiator and has provided Neptec with a competitive advantage that a smaller company would not typically enjoy, versus larger players in the industry.

Neptec enjoys a global reach and works with a number of large organizations, including Canadian and American government agencies, Lockheed Martin, Orbital Sciences Corporation, and EADS Astrium.

ISO 9001 is an integral part of the Neptec way of working. It’s a component of the solution it offers to customers. It provides confidence to shareholders and brings contracts to Neptec, which in turn provides jobs to employees.

**Benefits of working with BSI:**

“We have a great working relationship with BSI Canada,” says Dr. Christie. “Our audits are well conducted and we receive great input from our BSI Client Managers, which promotes continual improvement.”

The implementation of the ISO 9001 certification is an evolving process, but it is an integral part of day to day business at Neptec. The certification has been a factor in the success that Neptec has enjoyed. The company has worked with the Canadian Space Agency and NASA to deliver high quality space exploration products for over 15 years. Neptec is the only non-U.S. company to be awarded NASA’s Prestigious George M. Low Award, which was presented in February 2011, putting the company at the forefront of global innovation in space exploration and robotics.
Other benefits of the ISO 9001 Certification include:

- Market access – there is an absolute need for a QMS in the aerospace industry and Neptec could not be competitive without it.
- Compliance – this is a requirement of a contractual relationship with NASA.
- Risk reduction – there is high risk in the space industry and the QMS system must be rigorous in order to maintain safety.
- Stakeholder outcomes – the QMS and ISO certification provides credibility to shareholders and allows Neptec to grow its business.
- Brand reputation – Neptec’s approach to quality is very much a part of its brand processes and enhances brand equity.

“We have a well developed approach to quality,” says Dr. Christie. “Our quality system differentiates from others in the industry and is a true competitive advantage. The space industry requires a very careful approach to quality and ISO certification provides the foundation for an effective framework that has been instrumental in our success.”

Why BSI?

Since its foundation in 1901, the BSI Group has grown into a leading global independent business services organization providing standard-based solutions in more than 140 countries. BSI facilitates the development of private, national and international standards; it provides certification to certifies management system standards and testing and certification of products and services; it provides training and information on standards as well as supply chain and management system software solutions.