QIT meets growing demands with Mitutoyo CMMs

by Jerry Cook

Business has been picking up in recent years for Beamsville, ON-based Quality Inspection Technologies (QIT), and the continuing trend amongst automotive OEMs to outsource inspection and measuring work ensures that the company should continue to be busy in the future.

"What is happening in a lot of cases is that many of the larger companies are downloading their inspection work downstream," says Wayne Jordan, general manager with QIT.

Continues Jordan, "For example, previously Ford would inspect everything that they did. Now, Ford is downloading inspection work to the Tier One suppliers and the Tier One suppliers are downloading that inspection work to Tier Two suppliers.

"However, what is happening is that sometimes this work is being downloaded to smaller companies who don't have this type of measurement and inspection equipment and it isn't practical for them to buy this type of equipment.

"If a machine shop is going to spend $150,000 on equipment they don't want to buy a CMM they would rather purchase a mill."

That's where QIT comes in. "Instead, the automotive-related companies are coming to people like us who have the capabilities and offer these inspection services," says Jordan.

Bill Reilly, quality assurance technical manager and Jordan's business partner in QIT, agrees with Jordan.

"The thing is these companies may know a great deal about their own business and what they are making, but that doesn't mean they know how to inspect it properly," says Reilly

Adds Jordan, "A CMM is a tool like any other tool, but you have to know how to use it. Anyone can measure a part on a CMM and get a number, but whether that number is correct or not is a whole different story."

QIT, which began operations in 2000, provides third party contract inspection services to a variety of customers in various industries including, automotive, aerospace, military, defense, die casting, plastics, forgings, mould and pattern makers, tool and die, precision machining, foundries, medical and more. The firm is ISO/IEC 17025 accredited.

QIT, which has four employees, at its 2,000 sq. ft. facility, also provides services such as calibration of gauges and hand tools as well as reverse engineering.

Approximately 80% of QIT's business involves contract inspection and reverse engineering with the remaining 20% comprising hand tools and gauge calibration.

Some of the contract inspection services that the firm provides include first article inspection, prototype inspection, lot inspection, capability studies, inspection to CAD data, gauge certification, and digitizing.

The company has an extensive array of inspection and measuring equipment including three Mitutoyo CMMs-a Bright Apex 910, a Bright Apex 504, and a Crysta Apex 910.

QIT also has a Mitutoyo PH 3500 profile projector capable of 10x, 20x, and 50x magnification.

Both Mitutoyo 910 CMMs have a measuring range of 40 in. x 36 in. x 24 in.

The Mitutoyo 910 machines offer a resolution of .000004 in. and a maximum measuring speed of 8mm/s (CNC mode).

The measuring table on both the Bright Apex 910 and Crysta Apex 910 CMMs is granite stone and accommodates a maximum workpiece height of 31.49 in.

All of the Mitutoyo equipment was supplied by Mississauga, ON-based Mitutoyo Canada (mitutoyo.ca). Other inspection equipment at QIT includes a Faro Gold Arm portable CMM which offers accuracies within 0.002 in. The arm can accommodate parts eight ft. and larger.

When QIT began operations and Jordan and Reilly were in the process of selecting the CMMs to be installed, it was a fairly simple decision to purchase Mitutoyo CMMs. Both Jordan and Reilly had previous experience using Mitutoyo CMMs and were already familiar with and impressed by their capabilities.

QIT provides third party contract inspection services to a variety of industries including automotive and aerospace.

"Bill has run Mitutoyo machines for quite a few years," says Jordan. "As a result, one advantage with Mitutoyo was that there was no training involved."

Reilly also feels that his previous experience with Mitutoyo machines (Reilly has worked with Mitutoyo CMMs for approximately 10 years) was an advantage.

"I had already been using Mitutoyo CMMs and when we decided to open QIT it just made sense to stay with Mitutoyo. Also, Mitutoyo is very good to deal with, especially for service," says Reilly. QIT isn't about to stand still either. Looking ahead, one possible market niche that the company is tentatively looking at becoming involved in is gauge block calibration. "However, we don't want to diversify too quickly. We want to stick with what we know for now."

Story as seen in Metalworking, Production and Purchasing November 2004