

Customer Case Study: Reliance Precision Limited

Introduction

Reliance Precision is a specialist engineering company, with over 50 years' experience in providing custom-built, high reliability, precision instrumentation to customers from a diverse range of global markets.

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The understanding of metrology and test and their effective application is a core part of Reliance's company philosophy. Inspection and measurement disciplines are

embedded throughout the manufacturing processes in order to prove parts are manufactured correctly to the customers' specifications.

As an international leader in the field of precision optics, ZEISS have had quality and innovation at the heart of its company ethos for over 170 years. So when Reliance were seeking a like-minded company to partner with for measurement and inspection technology, ZEISS were the perfect fit.







Project Overview

As part of a major technology investment programme, Reliance embarked on a project to further expand its measurement and inspection facilities. When looking for a supplier to partner with, the organisation had the following aims in mind:

- To improve quality assurance and customer satisfaction
- To reduce down-time during measurement processes
- To offer a more extensive measurement service, catering for the increasingly demanding customer tolerances.

In a fully-tailored solution comprising of both equipment and software, ZEISS worked with Reliance to integrate the following into their inspection processes:

- 3 x DuraMax automated shop floor CMMs
- Enhanced accuracy PRISMO navigator bridge-type CMM
- Fully-customised CALYPSO software

The technology and software from ZEISS were by far the most superior.

David Torr holding a typical part measured on the Enhanced Accuracy PRISMO

Why partner with ZEISS?

David Torr, Head of Metrology at Reliance was in charge of leading the investment project at the company. Speaking about their investment in measurement and inspection technologies, he said:

"We were originally very committed to a specific supplier for CMMs when we embarked on this project, but we decided to spend some time looking at a range of different suppliers, with ZEISS being one of them.

What we found during the initial process was that the technology, software and build quality from ZEISS really made them stand out."

Quality

"During the buying process, one of the key considerations for us was the build quality of the machines. Compared to other suppliers, the ZEISS systems had a far superior build quality and seemed much more robust and well-built. The fact that we could also get a rotary table built into our PRISMO gave us the whole package."

Solutions

"Software was also an important factor in our decision-making process. The ZEISS CALYPSO solution was absolutely brilliant compared to what we were using at the time in terms of usability, which was key for us. The software was also much easier to train people on, as it was much more intuitive and very similar to Windows® software."

Value

"In the past we had a preconception that ZEISS is a more expensive company to buy from. However, at Reliance we too put a great deal of effort into ensuring the quality of our products, so naturally we aren't the cheapest company to buy from either. I think ZEISS is the same as us in this respect - you really do get what you pay for! We have certainly seen the added-value in paying that little bit extra."



A measurable difference

Customer Relationships

"At Reliance Precision we always like to show any new customers our shop floor. It is important to demonstrate how we are actively investing in new technologies and that we have a strong focus on quality.

Having the new DuraMax machines out on the shop floor has given us lots of positive feedback. It is also very visually impressive in the fact that we can simply take a job off, measure it on the DuraMax and put it back onto the machine if required."

Within a week of the DuraMax systems being delivered, they were already installed and being used in production.

System Integration

"Within a week of the DuraMax systems being delivered, they were installed and being used in production. The measurement programs had already been written for our existing PRISMO, so we simply transferred this to the DuraMax. This was one of the key reasons why we favour the ZEISS CALYPSO software.

The layout of the system means that everything is just an icon away, so if you need to re-qualify the probes you can easily do that yourself. The mini plans also save us lots of time; previously we had to use full programs or spend up to half a day creating a short one - which obviously added cost."

We have seen distinct advantages in bringing our measurement technologies out onto the shop floor.

Efficiency Gains

"As part of our continuous improvement programme, we are currently working towards achieving our SC21 Gold Standard in Manufacturing Excellence. The ZEISS systems we now have installed are helping us to achieve this. By bringing the measurement technologies from a traditional measuring room setup out onto the shop floor, this has allowed us to see distinct advantages such as time and efficiency gains. Also, the ability to have the same fixturing systems on the machines as we do on the CMMs allows us to streamline the process and essentially save our customers money."

Business Examples

"Since having the DuraMax systems installed, we have reduced our staff and manufacturing downtime, as there is no longer a need to stop production and walk down to the measuring room. Instead, the measurements can now be taken directly in the working environment and we can keep the machines running. The PRISMO has also become a business enabler for us, particularly with customers who have extremely demanding tolerances. On a project we are currently working on, I can confidently say that without the PRISMO, we wouldn't have won the customer's order."



One of Reliance's DuraMax CMMs located within the Milling department.

DuraMax RT CMM located in the Turning department.

The ZEISS Experience

Applications Training

"Three of our staff attended a week-long course at our premises, which was delivered by an applications specialist from ZEISS. Within a week of the training taking place, we were already up and running on the machines.

We still have the odd query from time to time, so we just call up the applications team and within a day we get a response, which is great. The support element for us is critical and was one of the key things we were looking for when we originally started this process."

Service

"The service particularly has been spot-on. For example, we recently needed some help to investigate a problem with a machine. We had done all of the tests we could do internally, so we called the help-desk and spoke to someone straight away. The next day there was already someone here on-site to take a look! They did some tests to confirm the problem and they returned the following week to adjust the machine. It was a very quick turnaround time and the machine was only down for three days, which in my opinion is very good."

Buying Process

"The process overall was very easy for us from start to finish, we had no major issues at all. From the negotiation, to invoicing, through to installation, training and service. Everything went very smoothly from our perspective.

For any minor hiccups that did occur, the way that ZEISS dealt with them has really just built our confidence further and reassured us that we have partnered with the right supplier."

Testimonial

"Having ZEISS CMM systems installed has made a difference to our business in many ways and I would definitely recommend ZEISS as a systems provider.

In fact, when our customers often ask about our experience with ZEISS as a supplier, we tell them it's been superb!"

Learn More

If you are interested in knowing more about ZEISS or Reliance Precision, please visit:

www.zeiss.co.uk/imt www.reliance.co.uk

Having ZEISS CMM systems installed has made a difference to our business in many ways

Enhanced Accuracy PRISMO located in the controlled Metrology Laboratory.

