VICIVISION | CNF PRECISION ENGINEERING

CUSTOMER STORY

Discover how CNF Precision Engineering sped up their inspection results and removed quality bottlenecks thanks to optical measurement from VICIVISION UK.

PROJECT BRIEF

CNF Precision Engineering is a leader in precision engineering and manufacturing across industries including aerospace, defence and motorsport. They provide a range of components from simple 2-axis turning, to complex 5-axis machining, providing the highest quality components for their customers.

As the business grew, so too did the pressure on its inspection processes. Traditional methods such as handheld gauges, shadowgraphs and manual CMM inspection were time-consuming and, in some cases, not accurate enough for the tiny, complex parts CNF was producing.

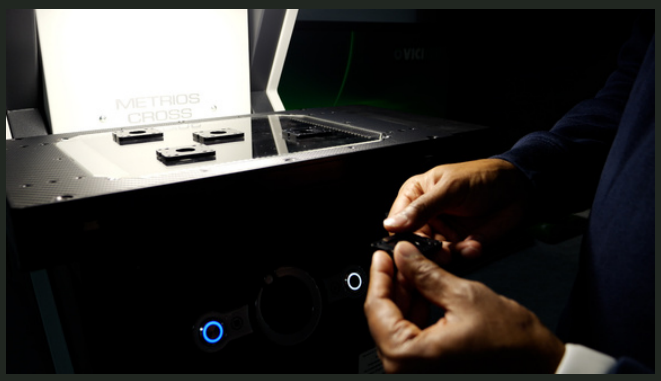
Tharshan Pancharatnam, Quality Manager, said: “We were struggling a lot with especially small parts that you can’t measure on a CMM because they’re too small.

“We had to use handheld gauges or the shadowgraph, but with the shadowgraph you can move the X and Y, so it wasn’t always accurate. We wanted something more reliable so we knew for sure the data was correct.”

At the same time, CNF’s customers were asking for more. Many required 100% inspection and full reports for every part delivered. Meeting those expectations with existing technology was becoming increasingly difficult.

Neil said: “We have many customers that we have to do a 100% inspection on 100% of the parts. We have to create a report for every part. The Metrios has been a game changer for that.”

THE SOLUTION



When it came to finding the right solution, CNF looked at several systems, including Keyence. What stood out about the Metrios Cross was its ease of use, intuitive design and speed of measurement.

Neil said: “When we first started looking at machines we had a few demonstrations. Our general feeling was the Metrios was much more user friendly.

“I think Metrios is one of the most user-friendly machines I’ve ever used,” he said.

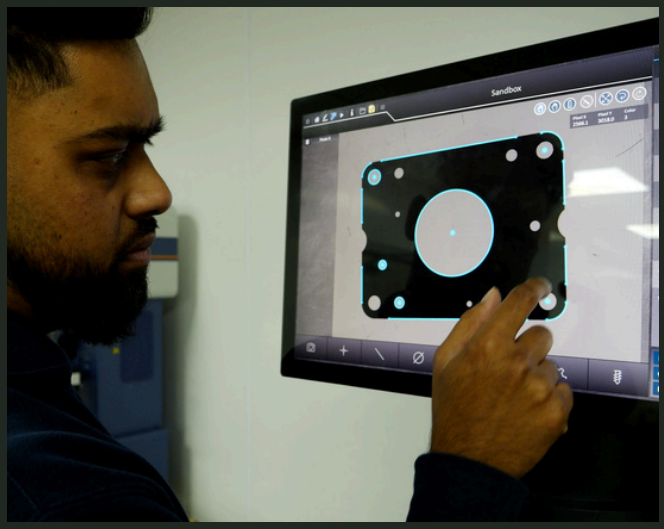
“The touchscreen capability is amazing; it’s just like using your phone. Everyone nowadays knows how to use a phone, so it’s that easy.”

It wasn’t just ease of use that made the difference. The Metrios Cross brought with it the ability to measure multiple parts in one cycle, transforming throughput.

“We check a lot of multiple parts, especially bolts and screws. We lay 10 or 20 parts in one hit. Within an hour I can check a thousand parts easily and make sure everything is good for the customer,” said Tharshan.

> **“Most of them were blown away by the ease of use and the speed.**

THE BENEFITS



Since integrating the Metrios Cross into its processes, CNF has seen major improvements in both speed and consistency. Parts that once took an hour to measure manually can now be inspected in seconds, and shopfloor staff are able to carry out checks with minimal training.

Neil said: “It was all about ease of use for us, because we knew the inspector himself wouldn’t always have the time to use it. We needed people on the shopfloor to be able to use the machine as well.

“In some cases, the machine even finds the program for us and gives us a fully comprehensive report. It’s saving us a lot of time.”

Tharshan said: “Repeatability is one of the key factors in our workplace. We want to make sure the first part and the 500th part are the same quality.

“I would definitely recommend Metrios machines to any other engineering company, they give you speed, accuracy and the ability to provide customers with comprehensive reports and confidence in what you’re making. For us, it’s been a game changer.

Neil Fearnley, Managing Director

Watch the full customer story on the VICIVISION UK YouTube channel.

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Contact us.

Get in touch to request a free, no-obligation consultation with our team

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