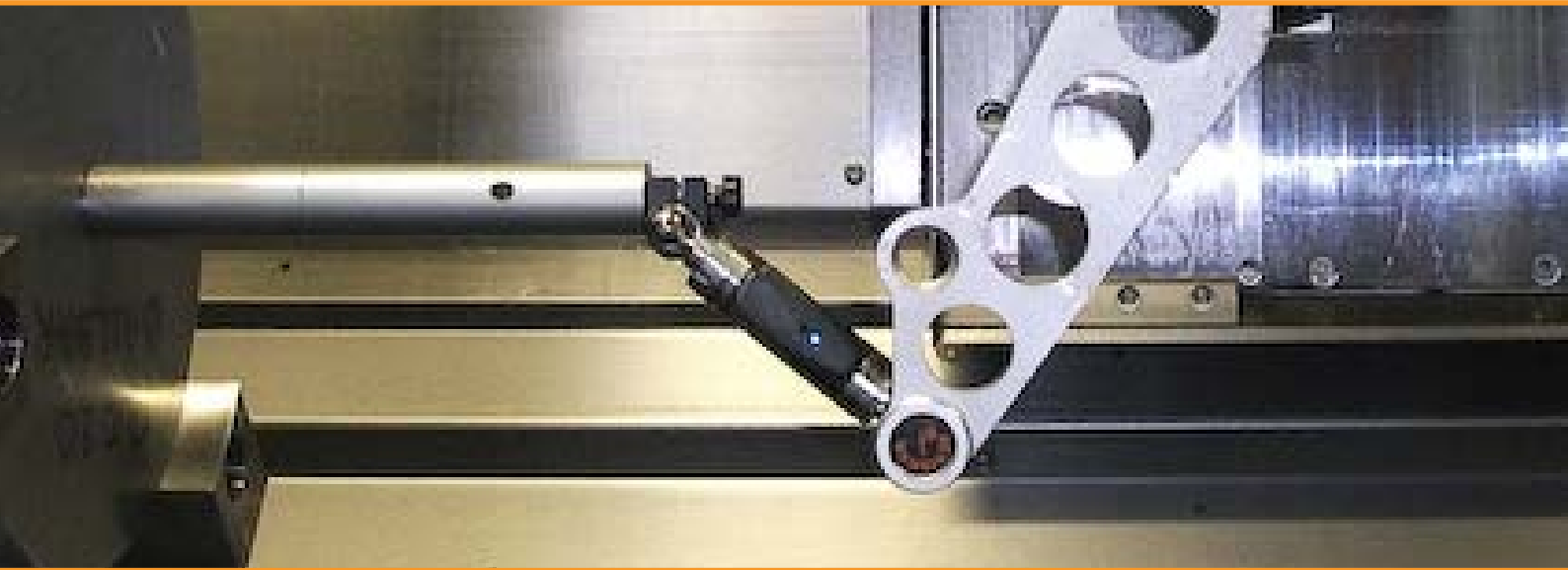


“If you are serious about CNC machine tool maintenance then using QC20-W ballbar is the only option”



Customer:

Wigmore CNC

Industry:

Precision manufacturing

Challenge:

Reduce costly repairs and deliver traceable measurement of CNC machines.

Solution:

Optimised QC20-W ballbar establishes machine performance for preventative maintenance.

Dave Wigmore, a former time-served engineer at Mazak, runs a CNC maintenance service company and considers a ballbar critical to operations. When Renishaw introduced the QC20-W telescoping ballbar system he was determined to be the first UK user.

Dave Wigmore set up his maintenance company, Wigmore CNC, in 1992 so he knows CNC machines inside out. For years he used the Renishaw QC10 ballbar to perform tests of machine performance but there has always been something that he knew could be improved – the wire. “Now I don’t have to worry about someone catching the wire and knocking the ballbar off during a test or working out how the wire will wind around. I am much more willing to do a quick test on any machine which I can do with no extra preparation; that small element of hassle has been taken away and the set-up is much faster.”

Mr Wigmore, who did indeed receive the first QC20-W ballbar to be supplied in the UK, continues, “I pushed Renishaw to supply me with a QC20-W ballbar as soon as I heard they were intending to launch a wireless version of the QC10 ballbar using Bluetooth® wireless technology. Having used a QC10 ballbar system daily for years, I know it has separated me from other CNC maintenance companies. It is an independent traceable measure of the servicing I have done, critical in the aerospace industry, where I do most of my business.

I will always perform three ballbar tests to establish the performance of the machine in the X, Y and Z axes, testing 2 planes with each check. That gives me a full analysis of up to 23 different machine errors. This is what I have always done with QC10 ballbar and I can do exactly the same with the new QC20-W ballbar. I then always put the test results on the machine, using the stickers Renishaw provide. It’s a simple visual display but it is undeniable proof the machine has been tested and is capable of producing the parts. I put the machine into a state where the customer only has to worry about the tooling, fixturing and programming.”

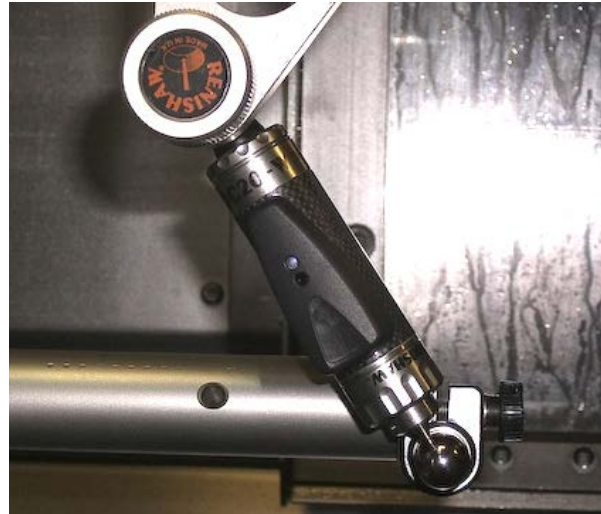
The new Ballbar 20 software, included with the QC20-W ballbar system, is backwards compatible, allowing data gathered previously with Ballbar 5 software to be compared with new QC20-W data. This is very important to many companies, allowing the historical data they have built up over months or years with QC10 ballbar to be compared like-for-like with new data.

Machine alignment errors

Mr Wigmore uses the QC20-W ballbar to pick up errors caused by multiple sources, which include machine alignment errors caused by distortion of the machine structure. The QC20-W data is analysed by the software to find machine



Dave Wigmore receiving his new QC20-W telescoping ballbar system



QC20-W in use with 360° lathe adaptor kit

errors that would normally go undetected, such as the loss of ballscrew preload, and therefore gives you the option of a repair instead of a costly ballscrew at a later date. He believes that, "If you are serious about CNC machine tool maintenance then using QC20-W ballbar is a major tool in machine tool servicing, helping to foresee costly major repairs that can be avoided with corrective maintenance."

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WIGMORE CNC
Engineering and Training Services



If you are serious about CNC machine tool maintenance then using QC20-W ballbar is a major tool in machine tool servicing, helping to foresee costly major repairs that can be avoided with corrective maintenance.



Wigmore CNC (UK)

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