

New machinery brings CNC advantages to Classical Doors

Three years ago Scott Wilkins saw the potential offered by Tauranga's Classical Doors, and was quick to invest, starting by upgrading the company's production machinery. First was a Weinig Cube which replaced a buzzer and thicknesser, and door production took a step forward. The next step to modernising production and refining processes was a considerably bigger one, involving a total change of production for some of the company's key products. But with good planning, a new building and new staff then in 2017 Classical Doors received a new Format-4 H200 CNC, from Austria's Felder Group.

Making the move to digital design and production of Classical Doors' product range required more than just a new machine. For a start, a CNC with a working bed of 3300 x 1280mm takes up a lot of space, so Scott's growth plans included taking over the neighbouring building. New technology needs someone who knows how to use it too, so Scott and his new CNC operator spent two days in Jacks' Auckland meeting room to learn how to make doors in a completely new way, with the balance of training taking place onsite.

Today Classical Doors works out of two buildings. In one, qualified joiners are working on a constantly changing set of quality doors for jobs all over the North Island. But walk past the traditional machines and workbenches and into the new unit next door, and it's here that the H200 is setting the standard for door production.

After the first CNC operator didn't work out, Scott found himself as the only person trained in programming and operating the CNC. Given the specialist nature



Scott Wilkins (right) and CNC operator Murray de Lues.

of their work then finding a new operator around Tauranga wasn't so easy. But in March 2017 Scott found another Murray (in addition to long-standing Foreman Murray Carling), and the use of the H200 really started to ramp up.

"Murray has two hobby CNCs at home, and a keen interest in woodworking, so we weren't starting from scratch," says Scott. Murray's IT background was very helpful learning the programming side of CNC door production. (For the practical elements of door joinery then there is a workshop full of joiners to help.) Murray was a quick learner, and his balance of programming and practical skill is demonstrated by the jigs he's developed on the pods that hold the workpiece. They're built not only to provide a reference stop for smaller workpieces, but to allow processing on the edge that would usually be inaccessible. They're constructed with a radius so the jig can be aligned perfectly, no matter what the workpiece dimension.

Murray has a stack of door rails being worked through the CNC – with each getting three precise mortice slots, taking about two minutes per rail. But machine time isn't significant on the CNC. As Murray explains, programming time is still a good chunk of the work he does. "We don't do doors

for stock. All of our doors are bespoke so I'm writing any new programmes parametrically. This means a particular process can be quickly recalled and reused for different sized profiles. You just change the profile dimensions required and the machine adjusts sizes, tooling offsets and selects the appropriate tool according to the result required."

This style of programming takes longer, but during the process Classical Doors are creating a library of templates. This means as similar jobs come in then new programming isn't required. Murray gestures towards some large, half-circular MDF templates that slot together perfectly. "We needed to create a round window. The programming for this job took about 5 hours, while the machining time was about 5 minutes. But next time we get a job like this then programming is already done."

Scott acknowledges that the step by step process of integrating the Format-4 H200 into production has felt slow at times, but points to the company's results as evidence of the value of his careful approach. "We've nearly tripled our turnover in three years, and we've added five new staff" he says proudly. "We're doing much the same work. We're just doing a lot more of it."

The main reason for this is the H200. "Our production time on many of our core door styles has halved" explains Scott. "While the running time on our CNC is still measured in hours not days per week (and Murray has the graphs to prove it), the speed at which we can produce regular components means the CNC has paid for itself already."

What's more, Classical Doors' reputation for quality has remained consistent throughout the period they've been changing their production methods. "We have the same customers as when we started this period of growth. And they're happy," says Scott. It helps that at the core of the workshop are qualified joiners continuing to work with care and craft. And the 'walk don't run' philosophy Scott has applied during their CNC learning period means Classical Doors' growth has been both manageable and sustainable.

Looking ahead, Scott is planning to further integrate their Woodman quoting software with their H200 CNC. He's also looking at some new aggregates and tooling that would extend the H200's capability into profiling work that is currently only possible by hand. Scott is acutely aware of the value of the correct mix of traditional skill, and modern efficiency.

"No job we get is the same" he says, pointing to a huge, double entrance door about to be shipped to a large new build north of Auckland. "For a one-off door such as this then a skilled joiner is undoubtedly faster than a CNC. But when we get multiples of the same door then the CNC gives us the edge. Then we're fast, accurate and provide our customers with exactly what they want."



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