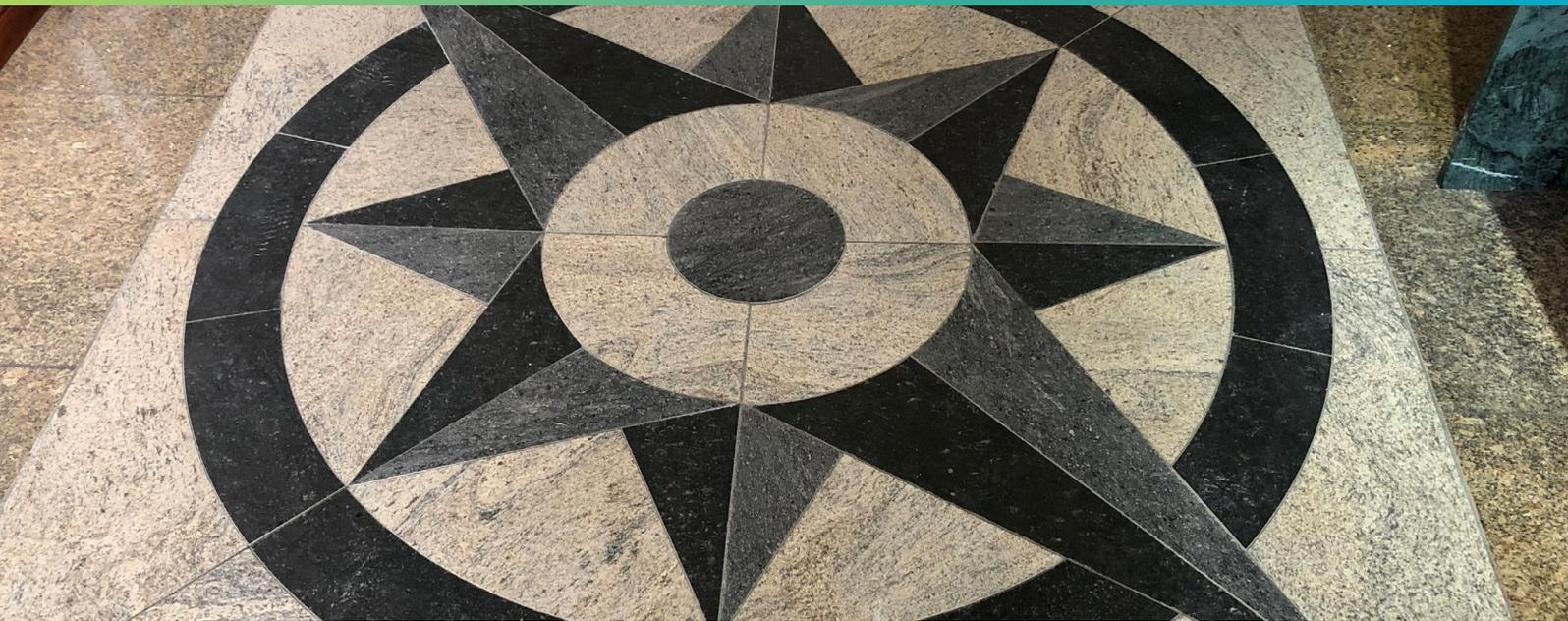


## ALPHACAM and Digitiser Combination

Experienced stonemasons “amazed” at Toffolo’s accuracy with no onsite cutting



### Toffolo Stirling

A Scottish stone specialist uses ALPHACAM software in two unusual ways as an essential part of its manufacturing and marketing processes for stone worktops and floors. It links directly to a digitiser, ensuring that measurements are 100 per cent accurate – and, secondly, clients watch the onscreen simulation showing exactly how the stone will be cut.

“Clients love seeing that,” says Kenny Turnbull, Managing Director of Toffolo Stirling. “The words I use to them are: ‘If it works on the screen, it’ll work on the machine.’ ALPHACAM’S simulation functionality, shows them exactly how their worktops will be made – how the tools move in and what they’ll do.

“The simulation may be vital to show us that our toolpaths are accurate and there won’t be any collisions on the CNC machine, but it’s also a great marketing tool, as it’s a really nice thing to show the customer.”

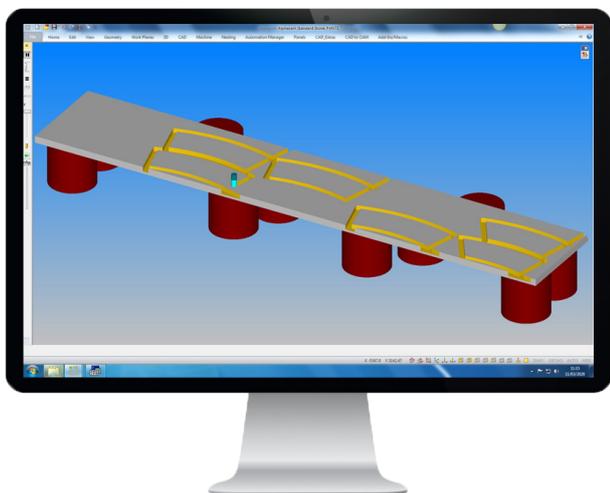
Positioned at the very top end of the stone market, the company specialises in marble and granite, along with limestone, slate and a variety of man-made quartz such as Caesarstone, Silestone and Zodiaq. Around 90 per cent of their time is spent producing and installing marble and granite work surfaces and floors. They work in around 20 hotels a year, and a number of large houses, where they may be doing five bathrooms, the kitchen, flooring and staircases.

The company philosophy has always been to put considerable work in at the design and drawing stage. “We take the same approach, whether it’s a small job, or part of a £6m package at a mansion house. Everything is pre-cut and sent to site in sequence, to be put together like a jigsaw puzzle, meaning we spend as little time as possible at the customer’s premises.”

He says their Prodim Proliner digitiser has been a “great investment” for that, completely changing the way they operate both with worktops and flooring. And linking it to ALPHACAM speeds up the final processes – in some cases they can start manufacturing worktops in the factory before the surveyor has even left the customer’s site.

Customers choose from an extensive range of large stone slabs in the well-stocked yard at their Stirling-based showroom...not from a small sample. “They come to us when a kitchen company has already designed the full layout, so we’re able to give an accurate price based on that. When the base units are installed we go on site to take the final detailed measurements for the worktops, which is the information we use to manufacture them.”

And that’s where the digitiser comes in. CNC Programmer Gary McCool explains. “It takes points of measurement of the kitchen bases, creating a visual on the built-in screen where we can do any editing that’s necessary, including changing offsets. The digitiser has a dongle, so the finished DWG file can be emailed back to me from the site, and I can start fabricating immediately if required.”



He imports the file into ALPHACAM where it takes just a few moments to create the design using the software’s CAD functionality, along with the cutlists and the NC code. From there, it’s straight into fabrication on their Brembana Speed 3 CNC machine with a 24-tool station interchange.

“It’s extremely important both to us and our customers, that everything’s 100 per cent accurate, and the digitiser working in conjunction with the ALPHACAM Stone software ensures it is.”

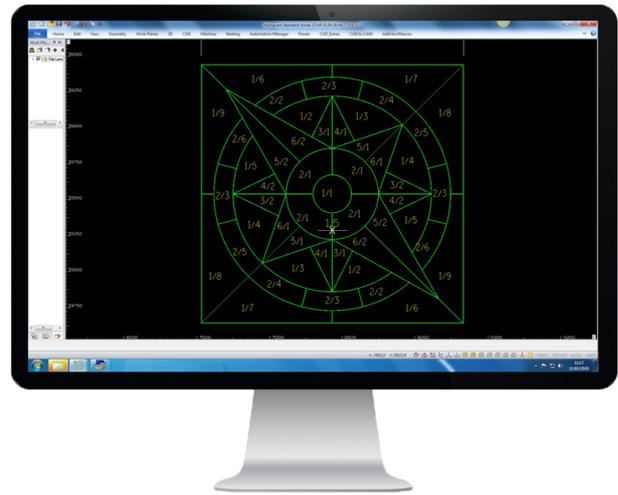
For flooring, the digitiser can be used at an earlier stage, enabling the company to play more of an advisory role. Kenny Turnbull says: “We digitise the whole room and then draw up the stone patterns, which is particularly good for architects.

“If they’ve chosen a 600 mm x 300 mm tile, for example, they may not know the most effective way to lay it out... so we can advise on that; especially at the thresholds and how it’ll relate to other rooms. Once they approve the accurate ALPHACAM designs we create from the digitiser’s file, we cut everything in the workshop and simply go in



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**Kenny Turnbull,**  
Managing Director, Toffolo Stirling



and install it. It's obviously far more accurate cutting with a CNC machine on the shopfloor than it is using an angle grinder on site.

"Even stonemasons who've been working in the industry for 25 years are amazed when we install floors which assemble together perfectly without any site cutting, because they've never experienced that before."

He originally invested in ALPHACAM to overcome what he describes as the "trials and tribulations" of proprietary software which came with their first CNC machine tool. "All our issues disappeared once we were running ALPHACAM. If I were buying a new machine tomorrow I'd insist that it came with ALPHACAM pre-installed. We need the right software to optimise the machine to do exactly what we want."

Concluding, he says ALPHACAM is an essential part of their philosophy of being a little old fashioned but keeping ahead of the game. "We're old fashioned where it counts – in our personal relationship with customers – but using state-of-the-art technology to ensure 100 per cent accuracy and complete customer satisfaction with their long-lasting stone worksurfaces and floors."

## Case Study Summary

**Company name:** Toffolo Stirling

**Website:** [www.stirlingstone.co.uk/toffolo](http://www.stirlingstone.co.uk/toffolo)

**Business:** Stone Specialist

### Key benefits achieved

- Links with measurement digitiser for quick and accurate specification – manufacturing can start even before the surveyor has left the customer's premises
- Marketing tool to impress customers
- Ended the "trials and tribulations" caused by their previous software





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