

# Abrasive Waterjet Automation Cuts Production Time and Scrappage Rates



Diamond Stainless specialise in manufacturing commercial kitchens, domestic benches, outdoor BBQ areas, wall panelling and cover panels, all manufactured in stainless steel. Using traditional sheet metal production practises, the highly skilled fabricators were producing everything by hand. With their client base growing and production requirements increasing, the company realised this method of manufacturing was too time consuming. With an extensive range of customers including St Vincent's Hospital and the PappaRich restaurant franchise, they had to explore new solutions to meet increasing business demands and client expectations.

After an intense consideration of the options available, in December 2016, Diamond Stainless installed a MAXIEM 1530 abrasive waterjet by OMAX and has been delighted with the results ever since.

"Our waterjet has absolutely transformed the business," explains Managing Director Andrew Kent. "Our production process was to mark out and cut everything by hand and we can't believe how much time we're now saving. Before the introduction of our MAXIEM waterjet it would take us at least an hour to cut each part. It now takes a matter of minutes. We can now go from design concept to the finished part quickly and accurately. The systems software has been incredibly easy to learn and with the machine telling us exactly how long each part will take, we can easily schedule and manage our workflow. The nature of the software also means that while the system is cutting, we can prepare other jobs, which means we're always one step ahead in the process."

Operations Manager Mark Tapley says, "The software is second to none. It's one of the best I've ever used; it's so user-friendly and makes programming so much easier. The cleaning function is especially handy as it's so quick and easy now to receive and process our customers' drawings. The intuitive layout and simple commands means it's also

been straightforward for other members of our production team to pick up."

The waterjet has brought increased precision and accuracy to the work at Diamond Stainless. It has also reduced production time and scrappage rates. The machine is capable of cutting through several sheets of stacked material, producing multiple parts in one cut. Since there's no heat used in waterjet cutting, there's no risk of distorting materials, and often no need for secondary finishing operations because parts come off the waterjet with a clean edge. The automation process means parts turn out right the first time. All this means significantly lower production costs for Diamond Stainless and superior quality parts for their customers.



Mark has found yet another advantage to having the MAXIEM system. "We have also been able to use the waterjet to modify existing press brake and punch tooling, which means not only do we have huge savings in our manufacturing and tooling costs, but this also enables us to react quickly and efficiently to our customers' needs."

"Installing the waterjet means that we've got a much safer, cleaner working environment," says Andrew. "Our working processes are smoother, as cutting is no longer done manually."