



Success Story

Sparks Success at F1 Supplier

When Glen Tavender and Dave Moore acquired subcontract wire and spark erosion company Erode All over 12 years ago, the small business was dedicated to serving the mould & die industry with press tooling...



ERODE ALL

Over the last ten years Erode All has evolved into one of the UK's leading F1 motor sport component manufacturers. Considerable investment in both plant and personnel has been made to establish the state of the art precision wire erosion and engineering facility in High Wycombe, Buckinghamshire.

> www.erode-all.co.uk/

...The 'have-a-go' attitude of the company's partners saw the business shift from the declining press tooling market to encompass more flexible general machining.

From subbing out work, the company acquired a number of three axis machine tools that rapidly brought a shift in workload and in particular a lucky break with an F1 team to produce a component. The successful project brought additional F1 work and the incestuous industry soon noted Erode All working with a number of F1 teams. The Erode All workload is now 80% F1 focused and 20% dedicated to medical work with the business supplying virtually every team on the F1 starting grid.

The success has arrived credit to employee dedication and investment in a series of high end DMG machine tools, with the latest acquisition a 10-pallet Mikron UCP600 machining centre arriving in November. This investment in 5-axis technology started 3 years ago and was a necessity for machining the extremely complex F1 components. However, such investment demands CAD/CAM software that is also of the highest quality and capability. For this, the High Wycombe based company invested in the *hyperMILL*® CAD/CAM package from OPEN MIND Technologies.

The best package

As company partner Mr Glen Tavender says: "We were taking on complex work that our 3-axis software was finding difficult to cope with. Moreover, if we had difficulties with particular parts the vendor wasn't interested in supporting us. Knowing the situation couldn't continue, we started to look at what other packages were available. We have some first class competitors making extremely difficult parts and they were all using OPEN MIND's *hyperMILL*®. We also investigated our customers – the F1 teams, and some of them were also using *hyperMILL*®. Despite this feedback we still compared the available packages and found for ourselves that *hyperMILL*® was the best package available for our company."

"We cannot feasibly quantify the benefits of the system, however it was installed in October 2007 and following the bedding in period we had our four best months of business ever from January to April 2008. Our business grew by 25%. More than just a coincidence, we knew the *hyperMILL*® package played a major part in this," says Mr Tavender.

"The *hyperMILL*® system is considerably faster than its predecessor with programming time reduced through the user friendly

“We are now confident that any job we program will be 100% right first time with excellent component quality.”

Glen Tavender, Company partner



interface. It is also faster getting the program to the machine tool and with a workload that is all rapid turnaround, these time savings are essential to our business.”

Important support

With F1 in the closed season, Erode All is running lights-out production to ensure it meets the turnaround times of F1 work that can sometimes be less than 24 hours. With the majority of work being development or one to 10 off batches, the Erode All response time has to be first class. The work complexity and turnaround times are increasingly demanding at present as the F1 teams are now testing the Kinetic Energy Recovery System (KERS) that is allowed in Formula One from 2009.

“This is the time of year that F1 teams do all their preparations for 2009 and luckily for us, our investment in high technology machine tools and CAD/CAM software positions us well for anything that is thrown at us.”

“The OPEN MIND package has not only improved our ‘drawing to machine’ times but it has exceptional routines and strategies that have improved the surface finishes and tolerances of our workpieces. We are now confident that any job we program will be 100% right first time with excellent component quality. What is more important is the support of OPEN MIND. If we ever have any difficulties with particular parts, an OPEN MIND engineer is always available on the phone or to visit us to solve our issues. This support gives us confidence to tackle just about anything.”

Superior to anything

Looking forward, the business is planning to invest in an additional two seats of *hyperMILL*[®] to support the growing workload. As Mr Tavender states: “I have been programming for over 20 years and *hyperMILL*[®] is superior to anything I’ve ever seen. Virtually all the F1 teams use *hyperMILL*[®]. When teams visit our facility and realise we use *hyperMILL*[®], they immediately recognise that we have invested in the leading F1 CAD/



The investment in 5-axis technology started 2005 and was a necessity for machining the extremely complex components.



CAM package. This immediately highlights the fact that we can deliver outstanding quality – and fast. It gives the racing teams confidence that they have selected a professional and competent supplier.”

“If the combination of machine tools and our *hyperMILL*® package can make customers so comfortable with our capabilities,

I have no reservations in purchasing more seats. Another positive for us when buying additional seats is that we can cost effectively acquire the basic version of *hyperMILL*®. We already have the add-on modules required for our business. OPEN MIND makes these modules easily transferable to the other seats, so capability is maximised and cost is minimised,” concludes Mr. Tavender. ■

About OPEN MIND Technologies AG

OPEN MIND is one of the world’s most sought-after developers of powerful CAM solutions for machine and controller-independent programming.

OPEN MIND designs optimized CAM solutions that include a high number of innovative features not available elsewhere to deliver significantly higher performance in both programming and machining. Strategies such as 2D, 3D as well as 5axis milling/mill turning, and machining operations like HSC and HPC are efficiently built into the *hyperMILL*® CAM system. *hyperMILL*® provides the maximum possible benefits to customers thanks to its full compatibility with all current CAD solutions and extensive programming automation.

OPEN MIND strives to be the best and most innovative CAM/CAD manufacturer in the world, helping it become one of the top five in the CAM/CAD industry according to the NC Market Analysis Report 2015 compiled by CIMdata. The CAM/CAD solutions of OPEN MIND fulfil the highest demands in the automotive, tool and mould manufacturing, production machining, medical, job shops, energy and aerospace industries. OPEN MIND is represented in all key markets in Asia, Europe and America, and is a Mensch und Maschine company.



We push machining to the limit

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