PRESS RELEASE

“Mauritius” is the offshore answer for Hymec

When a West Country-based engineering group decided to create a low-cost offering for its aerospace customers it didn’t follow the conventional route of adding a sourcing operation to its manufacturing activities. The group, which includes Hymec Precision Engineering, Hymec Aerospace Fasteners and Harbourne Design, decided to form its own low-cost manufacturing company. But again, rather than following the path others had taken of setting up a subsidiary in India or China, it chose to base the new company in Mauritius. To help make this a success, it worked in partnership with machine tool supplier Matchmaker M/C and aerospace alloy supplier Metalweb.

As Richard Elliott, Director of Hymec CNC Mauritius explains, “When we thought about setting up a low-cost operation we thought – Do we go to India? Do we go to China? Do we go to Dubai? But Mauritius was as good an option as anywhere. Although it is more commonly thought of as a holiday destination, it does have some advantages as the base for an engineering company. It certainly offers a low cost base, with little competition from local companies.

“We see Mauritius as being able to offer a twenty to twenty-five percent cost down on current pricing structures for components made onshore, and as expectations rise in China and India, so will pay and overhead rates. People will then start looking elsewhere – particularly Africa, most of which has yet to see any significant industrial development.

“Mauritius is strategically placed off the coast of Africa, and because there is very limited demand for engineers and engineering there I believe that our pay scales and structures will stay relatively low in relation to the rest of the world.”

Yet, as he points out, Mauritius has one of the largest engineering training facilities in the region – with around 100 students at any one time – giving the perfect combination of location, wage structure and a pool of trained potential employees.

“A lot of aerospace OEMs are looking for low-cost production, particularly where high volumes are concerned, and are venturing to the four corners of the earth. By creating a low-cost environment that is built on our knowledge and experience of supplying these customers we can offer them something that our competitors can’t offer and provide the basis for solid long-term partnerships.”

Having decided to create a company in Mauritius, the group first of all negotiated a sole supply agreement for the supply of aluminium with Metalweb, which supported that by providing an automatic saw for the new facility. It

then started looking for a machine tool partner for the project.

"We spoke to various machine tool companies and decided to create an alliance with Matchmaker M/C to be our sole supplier of machine tools for Hymec CNC Mauritius," says Richard Elliott. " In our dealings with Matchmaker in the UK we always found them to be a proactive rather than a reactive company – looking at our needs rather than theirs – and they have been very flexible in the financial packages they offer."

The core competence of Hymec CNC Mauritius is the CNC machining of aluminium, primarily for components such as light rail chassis for the Airbus A380 and A320, and other interior components for galleys, seats, toilets and so on. The operation currently has just received ISO 9000 accreditation and has about 25 employees.

As Richard Elliott explains, the manufacturing strategy and choice of machine tools was based on the lessons learnt in the UK.

"Over the past five years we have purchased a number of machines from Matchmaker including Mitsubishi MK5 horizontal machining centres, Kiwa five-pallet horizontal machining centres and eight of Matchmaker's own VMC 800 vertical machining centres. We have found these to be reliable, high quality and relatively fast machines at a good price. And on the basis that we had run them successfully for three or four years in the UK we decided to purchase twelve of them for Mauritius.

"The Matchmaker VMC 800 offers a 820 by 520 by 510 working envelope with a 8,000 rpm 7.5 or 11 kW BT 40 spindle and a Fanuc OiMC control. Rapid traverse speeds in X, Y and Z are 20m/min and the automatic toolchanger holds 20 tools with a maximum tool diameter of 100mm and a maximum tool length of 300mm.

"We wanted to have a fairly simple set of machine tools in Mauritius to begin with," says Richard Elliott. "With common programs so that we can put any part on any machine. That gives us complete flexibility in terms of which machines we use and the quantities we can make at any one time. We currently program the components in the UK, fine-tune the programs and the setups until we have a stable process, and then ship all of that to Mauritius for them to take over the volume manufacturing."

He says that, in the longer term though, his aim is to expand to maybe 70 employees in a 26,000 square foot factory offering CNC milling, turning, fabrication, assembly and treatments, and the partnership with Matchmaker will facilitate this growth.

"The evolution of Hymec CNC Mauritius has been very much a partnership with Matchmaker M/C and Metalweb. We will almost certainly bring in other types of equipment in there– maybe even in the long term including five-axis machining – and Matchmaker has the range of equipment to support that from a single supplier."