

EMS Geared for success!

Electro Mechanical Systems Ltd, the miniature drives specialist, is once again expanding its UK manufacturing facility based in Poole, Dorset! Manufacturing since 1991, EMS have continued to develop and evolve the manufacturing arm of their business and are proud to report their 6th consecutive record year. To support further growth, plans are already in place to extend the current facility by a further 20% making the factory some 2000m².

Having purchased a small engineering firm back in 1991 with just 200m² of floor space and a handful of people it was hard to imagine the real growth potential. Martin Seedall, manufacturing Director picks up the story “at that time we were making remote handling equipment for the nuclear industry, and were only just turning our thoughts to design ideas for a range of gearboxes to manufacture that would complement our range of DC motors”. In the period that followed the remote handling business was expanded and alongside this the concept of a new 38mm dia. 2Nm spur gearbox was conceived. The early spur gearbox designs were aimed at applications in instrumentation and medical devices, but the technology was soon applied to more customer specific designs across a range of industries. During the 1990’s sales of these gearboxes grew, but to this day the SG38 gearbox remains the only standard product in the range. Instead EMS has evolved into a specialist company providing a unique blend of design, development and in-house manufacturing capability, committed to delivering bespoke drive solutions for a diverse range of industries.

In 1996 EMS first became involved in the design and manufacture of drive solutions for disability aids and care in the community products. This required a drive solution several times more powerful and robust than anything they had produced before, but as Martin Seedall recalls, “the challenge was great but so too was the opportunity”. As Senior Design Engineer at this time Martin relished the challenge, even if it meant the purchase of a new CNC mill to fulfil the first order. As it transpired this was to be a wise move and today EMS are equipped with 14 CNC mills and lathes. The latest addition in Nov ’08, being the most sophisticated yet; a driven tool lathe allowing several machining operations to be carried out in one set-up, significantly reducing manual handling and set-up times. Other resources include a suite of Mikron gear cutting machines, coordinate measuring machine, CNC servo press and pick and place PCB assembly.

All of EMS’s resources are dedicated to design, development and ultimately the manufacture of bespoke solutions. This philosophy also applies to the design office where three Solid Works 3D CAD stations are utilised. Senior Design Engineer Ian Williamson explains “the use of 3D CAD really has enhanced the design phase, promoting a rapid exchange of information with the customer whereby we can integrate our mechanism model directly into the customer’s own model resulting in much faster visualisation of the design concept, and ultimately reducing the time to market”.

EMS continue to distribute an extensive range of precision Miniature DC motors, stepper motors and linear actuators from some of the world’s leading manufacturers such as Faulhaber and SKF and as Sales & Marketing Director Stewart Goulding suggests, “this combination of disciplines puts us in a unique position in the market place. Not only do we have a fantastic portfolio of proprietary motors and actuators at our disposal but we are able to differentiate ourselves by adding real value for the customer. This can take the form of a simple pinion or pulley, lead-wire assembly or suppression cap, leading right up to a complete bespoke drive solution”.

Accredited to ISO9001:2000 and with successful applications in the medical, healthcare, aerospace and defence industries EMS is a British manufacturing success looking forward to the next chapter in their story.