

Ricardo helps Isansys scale up production of the Patient Status Engine

Ricardo is a global strategic, engineering and environmental consultancy that specialises in the transport, energy and scarce resources sectors. However, in a new era of medical technology and wearable monitoring devices, its teams' knowledge and deep technical expertise bears no limits.

The company is now working with Isansys on its supply chain analysis to scale up production of the Patient Status Engine, a complete, scalable and simple-to-use advanced patient monitoring platform. "Our work extends across a range of market sectors – including passenger cars, commercial vehicles, rail, defence, motorsport, energy and environment – and we are uniquely positioned to handle our clients' toughest strategic and operational challenges, with assignments that have included strategy development, cost reduction, safety management, regulatory compliance and environmental impact assessments. Across everything we do we ensure we maximise efficiency and eliminate waste and working with Isansys is no different," said Simon Arbuthnot, Regional Director at Ricardo.

"Isansys approached us to see if it was feasible to bring automotive and low volume manufacturing expertise to bear on a completely different sector, which was high value medical devices; and we knew our competencies and skillset in manufacturing, quality improvement and supply management would be absolutely relevant."

Ricardo started working with Isansys to scale up in order for the company to meet the immediate demand for the PSE, as well as help plan for future expansion.

"It is a three-step process"

Francisco Siro, Principal Ricardo

"First we had to explore the optimization of Isansys' manufacturing processes, including considerations of design for manufacture and assembly and supply chain development and management. Here we already identified areas of improvement and were able to replicate some of the outputs and analysis from the automotive industry. The medical device industry is highly regulated in terms of certification but irrespective of the industry and the complications around certification, there is still a manufacturing process which is set out, so whether you're manufacturing remote monitors or making cars, the process is still the same - you take the process engineering approach to breaking down the individual steps, find all the waste and then put it all back together again. We are convinced that this is applicable to multiple industries and this is where the partnership with Isansys has been successful and will continue to be successful as we venture into other areas to work together."

Simon added: "Whether you're building a medical device to save someone's life or a car, both involve complex steps involving high accuracy and repeatability of process steps. Our team are experts in looking at that process and seeing where these are repeated, where there are too many steps in the process, or where the process isn't repeatable which will reduce efficiencies and could possibly lead to quality failures. We have applied this approach very successfully to our partnership with Isansys."

Francisco said: "The next steps will be to look at the future growth of Isansys and the holistic view of the company, and then, once Isansys decides it is ready, we can help set up an external supply chain based on the recommendations."



Ricardo is made up of a team of 3,500 people but they believe they understand what it is like to be a smaller company. "Being focussed on performance products we are very nimble, responsive and are a very customer focussed organisation and so are able to react more quickly than others, just like that of a smaller company," said Simon. "Currently Isansys is a smaller team but it is growing rapidly and we are working closely with everyone to identify significant opportunities for improvement in the manufacturing process and to work out how we can really help them to ramp up production and grow as quickly and efficiently and as low cost as possible. This is a fantastic opportunity for us to work with a new client optimizing its manufacturing operations and the supply chain development; a new company developing a life-saving product with an enormous vision and this is really exciting for us all."