

Connecting with the future

“To succeed, get the conveyor belt running; change everything, keep adapting and develop what you do constantly.” LEMO UK’s MD Peter Dent talks to **Neil Tyler**.

Appointed managing director of LEMO UK in 2015, Peter Dent joined the designer and manufacturer of precision custom connectors after more than 25 years with Smiths Connectors, where he held several senior engineering and business development roles.

“Why the move? LEMO has a great heritage going back many years and is well known for delivering high quality but also innovative solutions. The company’s values and ethos are very much aligned with my own beliefs,” explains Dent.

He reinforces this by quoting a phrase borrowed from a friend: “Profit by all means, but not by any means.”

With its headquarters in Switzerland, LEMO has been designing connectors for 70 years and serves thousands of customers around the world. The company’s founder Leon Mouttet created the push-pull connector.

“It’s privately owned and able to take a ‘long term view’, untroubled by shareholders,” he explains.

“When I joined the UK business, it had already established a close working relationship with a number of specialist customers – from broadcasters to Formula One – and LEMO had invested £10million in a state of the art facility in Worthing, capable of providing a fully qualified

connector cable and assembly service.

“My brief on joining was simple – ‘keep the factory full’ and develop the business in line with the needs of UK manufacturing,” says Dent.

“Over the past two years, I’ve initiated changes with the intention of creating a sense of momentum. I want the business to focus on generating higher levels of sustainable sales growth by winning both additional value added activities and higher levels of long-term new business,” he explains.

Dent has introduced a culture of continuous improvement, which is about gaining a competitive advantage through the ‘aggregation of marginal gains’.

According to Dent, being competitive in today’s market requires businesses to be ‘agile’ and ‘adaptable’.

“We work in a business environment that is changing continually,” he says, using Brexit to prove his point. “Whatever your position, Brexit is an opportunity for a further evolutionary step. Those who embrace it in a positive fashion will gain a competitive advantage.”

According to Dent, companies will only succeed when they become ‘an extension of their customer’s own technical team and part of an

extended support structure’. “We’re creating an open team at LEMO that has the flexibility to become part of a bigger team to optimise processes. It’s about constant refinement and being capable of adapting to changing requirements.”

When a business is culturally aligned with that of a customer’s, then it’s much easier to act in partnership, Dent asserts.

“It’s crucial that you seek to build a long-term relationship. When we go to market, we’re offering a cross functional team that provides a multi-layered relationship, capable of helping our customers to develop their expertise.

“We’re working to remove departmental barriers. We are one team and I want to end the ‘throwing it over the wall’ mentality.”

Empowering the local team without a hierarchy of approval is critical on that journey and Dent says this is helped by LEMO attaching less importance to achieving short term profits.

State-of-the-art factories

Few connectors are manufactured in the UK, however; LEMO operates three massive, state-of-the-art factories in Switzerland employing advanced manufacturing techniques.

“We import connectors and then provide the value add and the engineering to meet local customer requirements.

“Brexit has pushed up our costs by 15 to 20%; we can’t pass that on, so we’re looking to increase what we do locally.

“From our perspective, that’s looking at the labour element, which means supporting local customers by offering quick turnaround on specially configured connectors,” Dent explains.

“I believe that where labour is used to configure connectors then we could see more work return to the UK by offering increased service levels through development, value-

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add and service provision during the development phase.

“We’re developing our capabilities in the UK and our intention is to move further up the supply chain. The challenge for manufacturers is to move from being a components supplier to providing solutions and delivering sub-systems.”

Dent says the days of being a straightforward supplier of components is fast coming to an end.

“If you want to compete, then you have to differentiate your offering and be willing to adapt. Our customers want choice, so that’s where the ability to configure connectors locally comes into play.”

Partners not suppliers

Across its key markets, Dent recognises that nearly all its customers are now looking for solutions.

“They are looking for partners, not suppliers,” he contends. “They want industry knowledge and to tap into our expertise.

“Part of that expertise is derived from the fact that we serve some very diverse, but very sophisticated markets. The knowledge that provides enables us to offer cross fertilisation of ideas between industries, bringing solutions and innovations developed to serve one market to others.”

Dent uses the example of work done in avionic architectures to demonstrate the concept of cross-fertilisation.

“Avionics architectures have to be packaged into a tight space, but also have to be accessible and serviceable. That experience has been used to develop the electronic packaging deployed in fighting vehicles.

“As more electronics were added to these vehicles to improve both their survivability and lethality, design engineers had to address the problem of putting more electronics in a confined space but without adding too much additional weight



Peter Dent

Dent joined LEMO from Smiths Connectors having worked within their interconnect division for the past 27 years. During his time at Smiths’ he held various senior engineering and business development functions within the European division and went on the lead both their Mil /Aero and Industrial business units based in the UK and Germany respectively.

Below: LEMO UK’s facility in Worthing



– previous designs didn’t have to take into account weight and space constrictions, so the industry turned to how avionics had addressed the problem.

“An architecture originally developed for avionics was adapted and deployed in an entirely new environment and LEMO is part of that cross-fertilisation trend,” Dent explains.

Modern engineered solutions for the commercial world are now influencing designs, even in the military and medical markets that LEMO serves. Dent concedes: “While we are under pressure to design lighter, smaller and faster connectors, when you’re dealing with miniaturisation, how do you ensure reliability? That’s not an optional requirement for our customers.”

While LEMO is looking at new materials, a key challenge for connector manufacturers is thermal management.

“Many of the connectors being used today were first designed in the 1950s,” says Dent. “While designers have succeeded in refining their electrical performance, the next big challenge is how do you manage thermal conditions?

“Traditional designs, using brass and copper, address electrical insulation effectively, but also insulate the heat source. We need to address this and the next generation of high current connectors will need to take thermal properties into account.”

According to Dent, new software tools and more simulation will make it easier to manage the future design process, push the boundaries of materials and provide rapid prototyping in a matter of hours, rather than months.

“With more tools to complement CAD simulation tools, we will be able to offer a much faster design process, one attuned to specific customer requirements and able to optimise designs,” Dent concludes.