

January 01 2012

# PE

PROFESSIONAL ENGINEERING

## Beat the new year blues

**Turmoil in financial markets has created widespread uncertainty, leaving many companies wary of trading conditions to come. PE talks to small firms, a bank and an influential trade association, and finds some useful advice on ways to thrive during tough times**

### Overcome skills shortages

Skills shortages continue to affect the engineering sector, to such an extent that some firms are having to recruit from abroad. That has certainly been the case at TDK-Lambda UK, a maker of power supply units and converters, which employs 300 people at its facility at Ilfracombe in Devon. The company says it has found it increasingly difficult to recruit the number of power electronics engineers that it needs, forcing it to cast its net further afield.

General manager Phil Scotcher says: "We have a requirement for high-calibre power electronics engineers, primarily for design and mechanical packaging purposes, and unfortunately these people are difficult to find.

"We now have a permanent advert on our website to attract people from all over the world. In 2011 we took on eight engineers – six came from overseas or were British citizens who had been educated overseas. We employ engineers from France, Italy, Malaysia and the Philippines. It is something that our HR manager has to work hard at."

Scotcher says that TDK-Lambda provides relocation assistance to recruits from abroad, with existing employees often offering lodgings on a short-term basis. He says that, while settling into a new role in a foreign country can be difficult, staff retention has not been a problem.

"Ilfracombe is a nice area and once staff relocate here they tend to stay with us for a long time. So that gives us a stable workforce. The disadvantage is that some people view the South West as a career cul-de-sac. But that's not true – there are a lot of world-class companies down here."

Looking forward, Scotcher doesn't expect the skills shortage to relent. He says it is a long-term problem that poses real difficulties for a company that depends on product innovation to stay ahead of the pack. "We have more ideas than we have engineers for," he says.

"All the studies show that it is innovative companies who keep delivering new products that thrive and grow. Our speed of growth is limited by the number of new products

that we can deliver. And that is potentially affected by skills shortages." Scotcher feels that the engineering industry is still failing to get its act together on skills shortages. "It's been a problem for a long time and it's related to this country's inability to get kids interested in science and technology. There are events like the Big Bang fair which shows young people what working for an innovative manufacturer is all about. But industry has to try harder to ensure that we make engineering attractive."

TDK-Lambda is trying to do its bit. It sponsors undergraduates through university and provides career support for employees. "We have had several school-leavers who have joined us in factory or test positions and have shown aptitude that are now training to become engineers. Typically they were late starters who are keen to get on the development trail, and now they are studying for degrees. It's important that we grow our own," he says.

### Find that elusive credit

According to manufacturers' organisation the EEF, there has been some improvement in availability of credit for engineering firms since the recession, but the cost of finance remains high. The Office for National Statistics has found that in 2007 90% of approaches to banks for loans were successful – but this fell to 65% in 2010.

Mike Conroy, senior manager of strategy implementation at HSBC, points out that the proliferation of cheap credit in 2006-07 was abnormal. But in the era of Gordon Brown's infamous "boom without bust" many believed the good times were sustainable. Conroy says: "We were living beyond our means, and then brought back to reality.

"If you're the guy that's slowly but surely living beyond your means it is a bit of a shock when someone eventually tells you that they're not going to let you borrow any more."

The banks had overstretched themselves and businesses counted the cost as the flow of credit dried up during the recession. Taxpayer-funded bail-outs were necessary for

Lloyds TSB, Northern Rock and the Royal Bank of Scotland. HSBC escaped this fate, says Conroy, because it self-funded its lending rather than relying on raising finance on the wholesale markets. "This meant we just continued to lend as we normally did. In 2008 we actually grew our commercial lending by 10% – there wasn't a question from our point of view of retrenchment.

"But overall the market became more cautious. There's no doubt that, for some businesses, the next time they had a meeting at the bank the bank manager was asking more questions than they had done previously. Now that's not to say there wasn't any funding available for good quality, well-run businesses. But it may have felt for some people that getting agreement to renew a facility or to extend it was a more rigorous process than it had been."

So what are the prospects for firms seeking finance in 2012? Macro-economic factors will play a big part in how cautious banks are. Public spending cuts at home and the problems in the Eurozone mean that growth is likely to be negligible. Businesses may well opt not to seek finance as they struggle to negotiate choppy economic waters.

For those looking for money, HSBC is especially receptive to companies seeking to open-up new markets overseas, says Conroy. "That's where we see the challenge in many ways, and where the opportunities lie. If you're struggling in domestic markets and demand from the US and Europe is weak, there's an opportunity in some of the emerging countries in Asia and South America."

Manufacturers, Conroy insists, are attractive to financiers. "We like manufacturers. Manufacturing is important for the UK overall. It's often very easy to see where the revenues are coming from. It is certainly a good sector for banking. Manufacturing will be vital to the recovery and is likely to grow faster than GDP this year. But it's going to be quite a long time, with these economic difficulties, before we see our way out of the storm."

### Grab export opportunities

It was trade overseas that saw manufacturing become one of the first sectors to exit recession at the end of 2009 and which led its resurgence during 2010. Most are agreed that exports offer the best growth potential for engineering firms this year, although there are worries that global financial problems could choke off demand. This may be particularly true in markets that UK firms rely on in Europe and the US.

Street Crane is one example of a manufacturer that has successfully branched out to trade with many different countries and it hopes to add more to its list of customers in 2012. Managing director Andrew Pimblett says the crane maker began to look beyond the UK in the early 1990s. "We reached a stage in the early to mid-1990s where we had 40% of the British market for complete cranes," he says.

"We realised we weren't going to be able to continue to grow without dropping our prices to stupid levels. So we had a bit of a brainstorming session over starting crane manufacturing operations around the world." But that wasn't the ideal solution, Pimblett recalls. "It would have been massively capital intensive – we would have needed to finance factories in the US, China, India and elsewhere.

"Then we hit on the idea of licensing our technology to other crane manufacturers overseas." Street Crane forms partnerships with crane manufacturers in the markets it wants to enter, providing the designs and components such as the hoist, travelling machinery and electronics. The main structure is then typically made overseas to Street Crane designs. The exclusive licensing deal means that Street Crane will not compete with its partners to secure business in the target market, and gives the indigenous manufacturer access to "world-class" crane technology.

Pimblett says: "Combined with the fact that Street has invested hugely in product development and we have a product that is considered world-class, that has given us a huge advantage. The proposition that we put to these independent manufacturers is therefore attractive. It means they can run an operation with low overheads with little or no design facility. They don't have to invest in product development, because they are riding on the back of ours."

"When we tried the concept in the late 1990s we rapidly came to the conclusion that we were on to a bit of a winner."

In India, Street has a partnership with K2, of Chennai in Tamil Nadu. The market is growing exponentially and Street expects the Indian firm to become its biggest customer. "If our projections are correct," says Pimblett, "India will be our biggest market in two years' time. The rate of growth is astonishing."

This year, Street hopes to crack markets in Central and South America. Pimblett has made two trips to Brazil and is working on securing partners in Mexico. "We're looking at employing Spanish and Portuguese-speaking sales people."

The personal touch is crucial when looking to win business in markets overseas, he says. "The number-one rule is to get out there yourself. Don't ever think that a government trade mission or consultant can do it for you. You've got to get on your bike and out there."

Finally, Pimblett advises, when the orders do come in, make sure you have protected yourself by taking out credit insurance. "As you move into new markets you will find that you are continually taking on board new customers on which you have very little information."

"Therefore, to reduce the risk of taking on a big contract with someone who's not going to pay you, the best thing to do is get in bed with a credit insurer. The insurer will provide you with a credit limit that they are prepared to insure. It might be zero if the company is no good."

"But those are the ones you probably don't want to do business with – that could be risking the crown jewels."

### **Innovate to thrive**

Surviving, not thriving – that may be the situation for many firms in 2012 but the economic outlook should not prevent companies from taking the time to innovate, says the Design Council. The council runs a programme called Designing

Demand which assists engineering companies to position design at a strategic level within the business, which should lead to a greater degree of innovation. Manufacturers that have been on the programme include Ceres Power, Gripple, and electrical systems maker Baldwin and Francis.

Ellie Runcie from the Design Council says: "It may be natural in the current climate for businesses to hunker down and protect people's jobs, but even in bad times design can be used to help determine the next chapter in the life of a business. Design can add value to your product, your service offering or your brand. It adds something that your customers weren't expecting or exceeds their expectations."

The results can be a marked improvement in financial performance, says Runcie. "Firms that are treating design as a major consideration are transforming their prospects."

But the message about design's potential to increase turnover and spur innovation may not have fully permeated the engineering industry. "Most engineering firms still see design as being something quite fluffy," she says.

Runcie adds: "Product development and design management are generally poor among small firms, but interest in what we are doing is growing among engineering businesses. We can build their capability to do design themselves after we have gone. We help them through learning by doing, identifying what the greatest needs are in terms of product development, or in product design and engineering, or user-centred testing and research."

She concludes: "You can't afford not to think about design, whether it's with us or somebody else. It's sometimes seen as being to do with the logo or the icing on the cake, making the product look pretty, but it's so much more than that. It's a way of assessing what the best thing is for a business to be doing in 10 years' time."

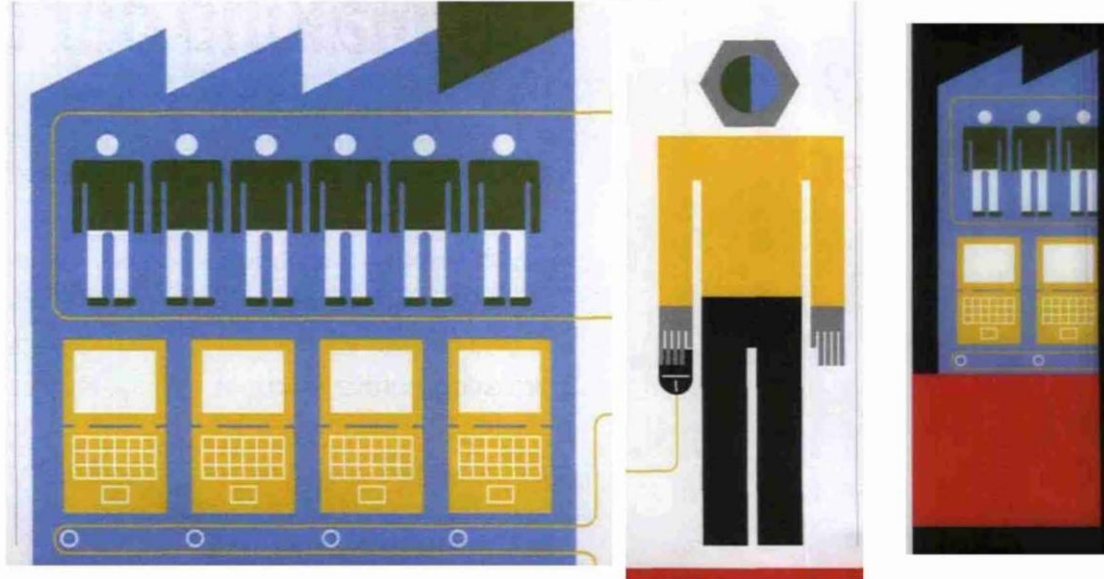
One company that fully understands the impact that

good design can have is Icus, the Northampton-based bearings and chain maker. On average it launches 80 new products a year, regardless of whether times are good or bad. This creative process has proved to be a vital way of protecting the company from economic ups and downs.

"New product development is in our DNA because we are committed to meeting our customers' needs," says Justin Leonard from Igus UK. "Product development is not something that we only do when markets are buoyant. This has proved to be a successful strategy for us – we grew during the last economic downturn in 2008, and believe it will serve us well this year too."

Igus' new products sometimes result from discussions with customers. Or they may emerge from blue-skies thinking by the company's team of engineers. An example is the new Robolink multi-axis joint for humanoid robots and lightweight automation applications.

The key to success, says Leonard, is having an agile nature. "We invest heavily in test labs and development facilities. There are high costs, but it's something we have to do if we want to be successful in the long term." □



**MANUFACTURING WILL BE VITAL TO THE RECOVERY AND IS LIKELY TO GROW FASTER THAN GDP**



**FIRMS THAT TREAT DESIGN AS A MAJOR CONSIDERATION ARE TRANSFORMING THEIR PROSPECTS**

