

COMPARE LIKE-FOR-LIKE BIDS FROM SUPPLIERS

Dean Palmer talks to a specialist motion control supplier that believes systems integrators need to consider the 'hidden' integration costs of a system before choosing a supplier

“Aerotech’s philosophy has always been to be as fair as possible with customers,” claims Simon Smith, managing director at motion control specialist Aerotech. “That means if we believe there’s a technology that could do the job better than ours, such as an AC synchronous motor and gearbox, we will advise the client accordingly and walk away if necessary.” It’s a bold statement but one that Smith firmly believes in.

He continues: “Think about the costs of getting the technology for the application wrong? Many of our competitors don’t do this.” And then, he says, is the important matter of relationship building, mutual trust and ensuring clients keep coming back.

Aerotech, based in Aldermaston, Berkshire, designs and manufactures a range of motion control and positioning equipment, including: linear motors; amplifiers; DC servomotors; brushless servomotors; actuators; motion controllers; linear stages; rotary stages; linear air bearings and encoders. But the company prides itself, says Smith, on providing engineered solutions to clients backed up by a first class technical support service and on-site capability.

Smith: “As far as price competition is concerned, we can provide boxed component solutions for customers, if that is what they need. But this isn’t what the company is renowned for. We prefer to work closely with the customer to find out more about the application: what accuracy levels are required; the load characteristics; controller configurations

such as home locations and direction for positive moves, etc. If we get this information, we can supply the client with an engineered solution that only requires ‘plugging in’ when it arrives. Every detail is added to the configuration file allowing the system to be moved as soon as power is supplied, as per customer requirements.”

Smith did some research two months ago that supports these views. The survey involved a total of 80 interviews

user a 10% faster, more reliable throughput or perhaps cut maintenance costs, were usually rejected on the grounds of price. Why? “Because they want to make a margin, it’s a short term view of the world,” argues Smith.

At this point, he claims that Aerotech has always been about providing solutions that give customers higher

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Simon Smith, MD, Aerotech

with existing Aerotech customers, prospects and ‘dead’ clients. The results showed that 80-85% of Aerotech’s clients were systems integrators, 15% end users. “The problem with this,” explains Smith, “is that the bulk of our clients [systems integrators] are not familiar with ‘cost of ownership’ and the benefits this could bring to their end user customers.”

He goes on to say that most systems integrators were more than content to carry on fulfilling order requirements and providing end users with solutions that conformed to the specification. Solutions from firms such as Aerotech which, for example, might offer the end



performance, better accuracy, faster throughput and faster production cycles, “but this often gets ignored by the systems integrator. We have to get the message to these firms that Aerotech can actually help them win more business.

He explains: “Many systems integrators get a kit of parts that they have to integrate into a machine or system for the end user. We can offer the these clients faster start-up times. Rather than the systems integrator having to buy all the motion control equipment from several suppliers, then trying integrate it all and make it work the way it is supposed to, Aerotech can take over this role and ensure the complete system is ready to ‘plug in’ when it arrives. All the testing, system accuracy, performance checks and interferometer plots have

already been done, even the cable management is taken care of.

“The systems integrator wants to know that the complete system can perform the task it is supposed to do. The problem is that many of these firms [and end users] no longer have the required skills and training when it comes to motion and positioning systems. That’s why it is critical that when they receive a machine or system it is ready to be plugged in.” And, according to Smith, Aerotech’s ethos is all about going that extra yard for the customer, ensuring that the systems integrator can get his product to market that bit faster.

But what about cost of ownership? Smith says buyers of motion and positioning systems don’t always appreciate how long it takes to integrate

a perfectly matched system that works, and the level of expertise required. “I’ve seen clients who have opted to buy standard systems from vendors which, when integrated, didn’t do the job they were supposed to do, or wasn’t what the customer asked for. But what really hurts me,” says Smith, “is that the end user usually tries to work around the problem, spending more time and money correcting the mistakes of the supplier.”

The cost of delays

He offers a real life example. “We had an application problem to solve for a UK-based firm that makes tyre simulation and testing machines for Formula One customers. This client required a very accurate, precise system to measure the Young’s Modulus of tyres but had originally bought equipment from one of our competitors, a drive and gearbox arrangement for £5k. But it didn’t do the job it was supposed to do and resulted in higher development costs and a longer time-to-market for the machine.”

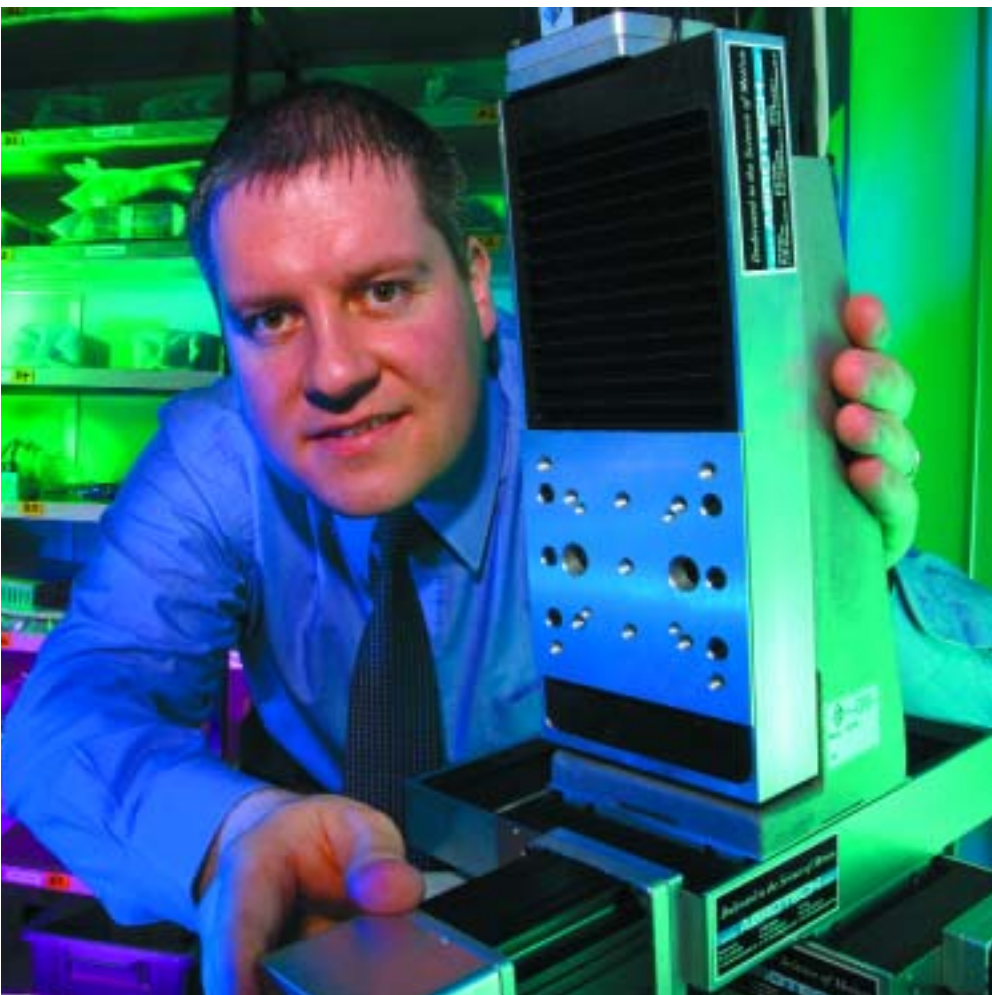
Smith says the client then looked for an alternative solution and purchased a system from another supplier. This didn’t work either, but at least the company was offered its money back this time.

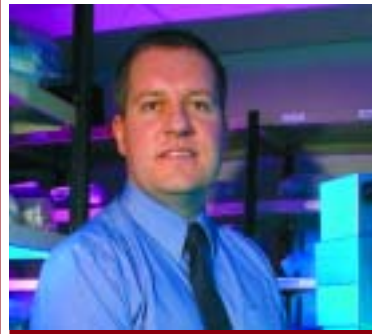
“Then Aerotech was invited to show the client what it could do,” says Smith. “We engineered a solution for the customer that was essentially an integrated standard motor, amplifier, encoder and motion controller. It worked perfectly, it wasn’t rocket science, but the system needed to be matched perfectly and that’s what we did.”

Since supplying to this customer, Aerotech has secured more business from another manufacturer of tyre testing machines, proof that a good reputation in a market is priceless when it comes to securing future business.

Low lifecycle costs

Smith reckons only 2.5% of Aerotech’s annual revenue is ‘services’ revenue, which seems very small compared to most of Aerotech’s competitors. Why?





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“Because we rarely have to go back to our customers to service or repair the equipment once it has been installed,” explains Smith. “It's back to the plug-and-play concept. The system is already tested and ready to operate. We provide a complete set of drawings, wiring diagrams and all the information usually included in the machine manual.”

So the message, says Smith, is that cheapest is rarely ever the best option when it comes to systems integrators selecting motion control or positioning systems. He says Aerotech has even given competitive advantage to end users that end users didn't even anticipate, by simply asking, ‘What is a 10% faster throughput worth to you?’ Smith adds that, “Typically, many of our customers have achieved more than this.”

Systems integrators may be guilty of falling into the ‘cheapest is best’ syndrome, but Smith warns these firms that, although their machine price or tender may be 10% cheaper as a result, the poor performance of the system may mean a loss of reputation with the end user and the market, resulting in a loss of business in the future.

“I would like people to consider the total cost or price of an integrated motion control system. Typically, this total machine cost is made up of: software costs; vision system; motion control system; panel costs; labour costs of building and integrating the system; and some profit for the systems integrator.

“What's the point of a systems integrator trying to save 2% of the cost of the motion control system if the machine doesn't do what it's supposed to do for the end user? The inferior motion control system may be slightly cheaper but could add, say, 7% to the cost of the overall machine in extra, hidden integration costs and the machine arrives at the end user two weeks late.”

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Products

Since 1970, Aerotech has designed and manufactured the highest performance motion control and positioning systems for customers in industry, government, science and research institutions around the world. Aerotech's precision motion control products provide the critical enabling technology for today's demanding applications in markets such as: medical device and life sciences, semiconductor and flat panel, photonics, automotive, data storage, laser processing, military/aerospace, electronic manufacturing and test, assembly, R&D and others requiring high precision, high throughput motion solutions.

