



THE BEST

The 2008 iDEA and Best Factory Awards

iDEA 2008

Sagentia Innovation & Design Excellence Award

Winner: The Technology Partnership
Sponsored by Sagentia

Product Design Innovation Award

Winner: Industrial Design Consultancy
Highly Commended: Siemens Automation & Drives
Shortlisted: The Technology Partnership, Wideblue
Sponsored by Autodesk

Breakthrough Product Award

Winner: Wideblue
Highly Commended: Brandon Medical
Sponsored by Cambridge Consultants

Design Collaboration Award

Winner: Industrial Design Consultancy
Highly Commended: The Technology Partnership
Sponsored by Eureka

Design Cycle Time Reduction Award

Winner: Pulsar Process Measurement
Shortlisted: The Technology Partnership
Sponsored by New Electronics

Best Design Consultancy

Winner: The Technology Partnership
Highly Commended: Industrial Design Consultancy
Shortlisted: Kinneir Dufort, Wideblue
Sponsored by Prototype Projects

Best Small Company

Winner: Brandon Medical
Highly Commended: Kinneir Dufort
Shortlisted: Industrial Design Consultancy, Pulsar Process Measurement, Wideblue
Sponsored by ELC

BFA 2008

Barclays Factory of the Year

Winner: Power Panels Electrical Systems

Best Process Plant

Winner: Saint-Gobain Glass UK
Highly Commended: Kodak GCG
Sponsored by SOE IPlantE

Best Engineering Plant

Winner: Gates Power Transmission
Highly Commended: Yamazaki Mazak UK
Sponsored by Works Management

Best Electronics & Electrical Plant

Winner: Power Panels Electrical Systems
Highly Commended: Siemens Traffic Controls
Sponsored by New Electronics

Best Household & General Products Plant

Winner: Aimia Foods
Highly Commended: InterfaceFLOR
Highly Commended: The Wrigley Company
Sponsored by DAK Consulting

Innovation Award

Winner: Skymark Performance Films
Highly Commended: Plexus Corp (UK)
Sponsored by Autodesk

Judges' Special Award

Winner: APPH Runcorn Landing Gears

Energy & Environment Award

Winner: InterfaceFLOR
Highly Commended: St-Gobain Glass UK
Sponsored by Siemens Automation and Drives

Health & Safety Award

Winner: Merck Sharp & Dohme
Sponsored by Unite the Union

Most Improved Plant

Winner: Merck Sharp & Dohme
Highly Commended: Bakkavör Pizza
Sponsored by TBM Consulting Group

Supply Chain Award

Winner: Plexus Corp (UK)
Highly Commended: Gates Power Transmission
Sponsored by Toyota Material Handling

Skills Development Award

Winner: Power Panels Electrical Systems
Highly Commended: St-Gobain Glass UK
Sponsored by The National Skills Academy for Manufacturing

People Management Award

Winner: Aimia Foods
Sponsored by Jimfinder

Best Small Company

Winner: Power Panels Electrical Systems
Sponsored by Grant Thornton

Power Panels points the way to our future. It is proof, at last, that low cost labour is no match for supreme skills and true dominance of the value chain

Meeting economic uncertainty with the reality of profitable manufacturing

It's not the biggest company – its total headcount is only 173. It's not the biggest money-spinner – its 2008 sales are around £20 million. And it certainly isn't a household name. But no-one with half a manufacturing brain could miss what Power Panels actually is. It's simply the best.

When Power Panels first entered BFA in 2005, it was a force to watch. It won Best Small Company, the Supply Chain Award and the Judges' Special Award. Today, it has become a company to emulate. It sets standards in quality and delivery beyond the reach of supposedly world-class companies. It turns 'adding value' into tangible, living reality. And, above all, it takes decent, hard-working, ordinary people and turns them into a committed workforce whose skills and attitude put them at the very top of the industrial tree.

So what is different today? MD Tony Hague puts it in a nutshell: "We have gone from a local supplier of control panels through a national manufacturer of electrical and electronic assemblies to an international supplier of strategic productivity solutions. Once we supplied UK based sites. Now we build complete machines for some of the world's best OEMs." This year alone, Power Panels' sales have grown by over 20%. As Hague says, "the bottom line judgement is all."

What makes customers it once supplied with simple cable assemblies now entrust it with complete high-value PLC/electro-mechanical or electro-



pneumatic assemblies of staggering complexity?

Firstly, quality: when Mazak gave Power Panels its first order in 1993, its 94% quality measure was rated as merely "the best of a poor bunch". But 'Together success' is the Mazak slogan. "We had improvement thrust at us every day of the week," recalls chairman and CE David Fox. "The result was a very intimate relationship at every level." By 1999/2000, with a score of 98%, Power Panels was Mazak's supplier of the year.

"Many deem this to be world class. We didn't," says Fox. "We recognised we had to do something more to get beyond it." That 'something' was actually three things: Six Sigma, a sustained investment in automation, and the opening of its own training school. Fox now describes that as his very best decision.

When Mazak's top Japanese management visited the company in 2001, quality was up to 99%. The verdict was simple: the student had become the master.

Winner

Barclays Factory of the Year

Winner

Best Small Company

Sponsored by Grant Thornton

Winner

Best Electronics and Electrical Plant

Sponsored by New Electronics

Winner

Skills Development Award

Sponsored by The National Skills Academy for Manufacturing

Profile

Location: Walsall
Employees: 173
Products: Strategic productivity solutions
Turnover: £20m
Highlights: True dominance of the value chain



“Mazak taught us the true value of working together,” says Fox. Today its delivered quality has reached 99.97%, measured by its customers. Case proven.

Secondly, automation: Power Panels has invested steadily to achieve guaranteed, repeatable quality. The by-product is production efficiency: “We make it faster,” says Fox. “We often use it completely outside the high volume

context it was designed for. It may be for batches of one.”

Finally, training. Two blackbelts kick started Six Sigma. Power Panels now has 15 greenbelts, including all management and team leaders, with another seven in training. And 100 of a total shopfloor of 130 have trained as yellow belts. Hague says Six Sigma has been far more than a process tool: it has been the catalyst for culture change. “Before people wanted to be told what to do. Now it’s a learning culture; people look and question and make decisions.”

That’s just the start. Power Panels recruits for attitude but trains for skills. Every employee receives at least 22 days training a year in operational, technical and continuous improvement skills like lean, 5S, SMED and practical problem solving. All classroom work is linked to real shopfloor work. Every employee can access standardised ‘how-to’ technical documentation and training material through the company intranet, Sharepoint. Pay is entirely performance related: no piecework, bonuses, overtime

or yearly pay rises. Instead, people are rewarded for being creative and proactive. Some have four pay rises annually. “Recognition should happen more than once a year,” says Hague. The skills road map gives Power Panels what it needs and it has no intention of diluting that focus. It has, however, just started external verification for NVQ qualifications in Business Improvement Techniques.

Companies who balk at either the cost or complexity of such training, please note: Fox says it doesn’t cost anything to do it; the rework saved more than offsets the cost.

It’s clear why Power Panels wins in Skills Development. But what about Factory of the Year? Just take a look at the way the entire operation is structured around one beneficiary – the customer.

The entire factory is split into customer-focused cells except for cable preparation. Cable cutting is kanban managed and completely automated. Crimping is also automated and cables emerge batched for each specific assembly. This whole process provides a ▶





huge quality improvement over previous methods, running at 99.99% accuracy. The daily schedule and bills of material are downloaded from engineering to each cell. Revisions are issued by a live link from the

engineering database. Each job features clear work instructions and detailed CAD drawings, displayed on-screen to cell members who update the electronic product records with assembly and test data at each stage. This is one of the key techniques that enables Power Panels to handle major variations in customer orders at such speed. Customer-dedicated cells give the team deep familiarity with the overall nature of that customer's work. Clear assembly information removes any uncertainty in unfamiliar configurations.

Cell members appreciate the clarity. Sylvia Billington says it makes it easier both to work herself and to train others. Incidentally, Sylvia retired three years ago but came back to Power Panels because she missed it. There's no better testimony to the company culture. Each cell has superb flexibility – all members can handle at least 80% of the tasks and in some it is 100%. As a sure sign of their skills and the trust placed in them, operators are responsible for their own testing. Power Panels does not employ a quality manager. It doesn't need one.

These methods mean that one customer, for example, can call off any one of 22 variants on a highly complex assembly in four days.

It stacks up to a remarkable proposition for the customer. Power

Panels lives and breathes 'added value'. First of all, customers get real design expertise. "Our ability to design for manufacturing is critical for our business. Some have been copied by customers' factories around the world," explains Hague. Secondly, they get true partnership. "We walk away from more business than we take," says Hague. Power Panels actually sacked a million a year customer because it couldn't create value for it.

Tony Hague says, however, that one question always clinches it for customers: "If we can help you build quicker, can you sell more product?" Power Panels helped one customer double output without any more space or people, bringing total assembly time down from four weeks to four days. OTIF is a stunning 99.7%, delivered on a JIT basis, and achieved through accurate forecasting, not buffer stock. It typically produces inventory reductions of over 40% for its customers while relieving them of the burden of multiple vendors.

With growing economic uncertainty and many UK manufacturers deeply worried about the reality of profitable manufacturing, Power Panels points the way to our future. It's proof, at last, that low cost labour is no match for supreme skills and true dominance of the value-chain.

